

Self-harm: longer-term management

Self-harm: longer-term management in adults, children and young people

National Clinical Guideline Number X

**National Collaborating Centre for Mental Health
Commissioned by the
National Institute for Health and Clinical Excellence**

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4

1 PREFACE

This guideline has been developed to advise on the long term management of self-harm and follows on from '*Self-harm: The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care*' (NICE, 2004). The short term management guideline includes guidance for the treatment of self-harm within the first 48 hours of an incident. The current guideline is concerned with the longer term psychological treatment of both single and recurrent episodes of self-harm, and does not include recommendations for the physical treatment of self-harm or for psychosocial management in emergency departments (these can be found in NICE clinical guideline 16).

The guideline recommendations have been developed by a multidisciplinary team of healthcare professionals, people who self-harm, their carers and guideline methodologists after careful consideration of the best available evidence. It is intended that the guideline will be useful to clinicians and service commissioners in providing and planning high-quality care for people who self-harm while also emphasising the importance of the experience of care for people who self-harm and their carers (see Appendix 1 for more details on the scope of the guideline).

Although the evidence base is rapidly expanding there are a number of major gaps, and future revisions of this guideline will incorporate new scientific evidence as it develops. The guideline makes a number of research recommendations specifically to address gaps in the evidence base. In the meantime, it is hoped that the guideline will assist clinicians, people who self-harm and their carers by identifying the merits of particular treatment approaches where the evidence from research and clinical experience exists.

1.1 NATIONAL CLINICAL GUIDELINES

1.1.1 What are clinical guidelines?

Clinical guidelines are 'systematically developed statements that assist clinicians and patients in making decisions about appropriate treatment for specific conditions' (Mann, 1996). They are derived from the best available research evidence, using predetermined and systematic methods to identify and evaluate the evidence relating to the specific condition in question. Where evidence is lacking, the guidelines incorporate statements and recommendations based upon the consensus statements developed by the Guideline Development Group (GDG).

Clinical guidelines are intended to improve the process and outcomes of healthcare in a number of different ways. They can:

- provide up-to-date evidence-based recommendations for the management of conditions and disorders by healthcare professionals

- be used as the basis to set standards to assess the practice of healthcare professionals
- form the basis for education and training of healthcare professionals
- assist people who self-harm and their carers in making informed decisions about their treatment and care
- improve communication between healthcare professionals, people who self-harm and their carers
- help identify priority areas for further research.

1.1.2 Uses and limitation of clinical guidelines

Guidelines are not a substitute for professional knowledge and clinical judgement. They can be limited in their usefulness and applicability by a number of different factors: the availability of high-quality research evidence, the quality of the methodology used in the development of the guideline, the generalisability of research findings and the uniqueness of individuals who self-harm.

Although the quality of research in this field is variable, the methodology used here reflects current international understanding on the appropriate practice for guideline development (Appraisal of Guidelines for Research and Evaluation Instrument [AGREE]; www.agreetrust.org; AGREE Collaboration, 2003), ensuring the collection and selection of the best research evidence available and the systematic generation of treatment recommendations applicable to the majority of people who self-harm. However, there will always be some people and situations for which clinical guideline recommendations are not readily applicable. This guideline does not, therefore, override the individual responsibility of healthcare professionals to make appropriate decisions in the circumstances of the individual, in consultation with the person who self-harms and/or their carer.

In addition to the clinical evidence, cost-effectiveness information, where available, is taken into account in the generation of statements and recommendations of the clinical guidelines. While national guidelines are concerned with clinical and cost effectiveness, issues of affordability and implementation costs are to be determined by the National Health Service (NHS).

In using guidelines, it is important to remember that the absence of empirical evidence for the effectiveness of a particular intervention is not the same as evidence for ineffectiveness. In addition, and of particular relevance in mental health, evidence-based treatments are often delivered within the context of an overall treatment programme including a range of activities, the purpose of which may be to help engage the person and provide an appropriate context for the delivery of specific interventions. It is important to maintain and enhance the service context in which these interventions are delivered; otherwise the specific benefits of effective interventions will be lost. Indeed, the importance of organising care in order to support and encourage a good therapeutic relationship is at times as important as the specific treatments offered.

1.1.3 Why develop national guidelines?

The National Institute for Health and Clinical Excellence (NICE) was established as a Special Health Authority for England and Wales in 1999, with a remit to provide a single source of authoritative and reliable guidance for service-users, professionals and the public. NICE guidance aims to improve standards of care, diminish unacceptable variations in the provision and quality of care across the NHS, and ensure that the health service is person centred. All guidance is developed in a transparent and collaborative manner, using the best available evidence and involving all relevant stakeholders.

NICE generates guidance in a number of different ways, three of which are relevant here. First, national guidance is produced by the Technology Appraisal Committee to give robust advice about a particular treatment, intervention, procedure or other health technology. Second, NICE commissions public health intervention guidance focused on types of activity (interventions) that help to reduce people's risk of developing a disease or condition or help to promote or maintain a healthy lifestyle. Third, NICE commissions the production of national clinical guidelines focused upon the overall treatment and management of a specific condition. To enable this latter development, NICE has established four National Collaborating Centres in conjunction with a range of professional organisations involved in healthcare.

1.1.4 The National Collaborating Centre for Mental Health

This guideline has been commissioned by NICE and developed within the National Collaborating Centre for Mental Health (NCCMH). The NCCMH is a collaboration of the professional organisations involved in the field of mental health, national service-user and carer organisations, a number of academic institutions and NICE. The NCCMH is funded by NICE and is led by a partnership between the Royal College of Psychiatrists and the British Psychological Society's Centre for Outcomes Research and Effectiveness, based at University College London.

1.1.5 From national guidelines to local protocols

Once a national guideline has been published and disseminated, local healthcare groups will be expected to produce a plan and identify resources for implementation, along with appropriate timetables. Subsequently, a multidisciplinary group involving commissioners of healthcare, primary care and specialist mental health professionals, service-users and carers should undertake the translation of the implementation plan into local protocols taking into account both the recommendations set out in this guideline and the priorities set in the National Service Framework for Mental Health (Department of Health, 1999) and related documentation. The nature and pace of the local plan will reflect local healthcare needs and the nature of existing services; full implementation may take a considerable time, especially where substantial training needs are identified.

1.1.6 Auditing the implementation of guidelines

This guideline identifies key areas of clinical practice and service delivery for local and national audit. Although the generation of audit standards is an important and necessary step in the implementation of this guidance, a more broadly based implementation strategy will be developed. Nevertheless, it should be noted that the Care Quality Commission will monitor the extent to which Primary Care Trusts, trusts responsible for mental health and social care, and Health Authorities have implemented these guidelines.

1.2 THE SELF-HARM: LONGER TERM MANAGEMENT GUIDELINE

1.2.1 Who has developed this guideline?

The GDG was convened by the NCCMH and supported by funding from NICE. The GDG included one service user and two carer representatives, and professionals from psychiatry, clinical psychology, general practice, nursing, and social care.

Staff from the NCCMH provided leadership and support throughout the process of guideline development, undertaking systematic searches, information retrieval, appraisal and systematic review of the evidence. Members of the GDG received training in the process of guideline development from NCCMH staff, and the service user and carers received training and support from the NICE Patient and Public Involvement Programme. The NICE Guidelines Technical Adviser provided advice and assistance regarding aspects of the guideline development process.

All GDG members made formal declarations of interest at the outset, which were updated at every GDG meeting. The GDG met a total of 13 times throughout the process of guideline development. It met as a whole, but key topics were led by a national expert in the relevant topic. The GDG was supported by the NCCMH technical team, with additional expert advice from special advisers where needed. The group oversaw the production and synthesis of research evidence before presentation. All statements and recommendations in this guideline have been generated and agreed by the whole GDG.

1.2.2 For whom is this guideline intended?

This guideline will be relevant for adults and young people who self-harm.

The guideline covers the care provided by primary, community, secondary, tertiary and other healthcare professionals who have direct contact with, and make decisions concerning the care of, adults and young people who self-harm.

The guideline will also be relevant to the work, but will not cover the practice, of those in:

- occupational health services
- social services

- the independent sector.

1.2.3 Specific aims of this guideline

The guideline makes recommendations for the longer term management of self-harm. It aims to:

- evaluate the role of specific psychological, psychosocial and pharmacological interventions in the longer term treatment of self-harm
- evaluate the role of psychological and psychosocial interventions in combination with pharmacological interventions in the longer term treatment of self-harm
- evaluate the role of specific service-level interventions for people who self-harm
- integrate the above to provide best-practice advice on the longer term care of individuals who self-harm
- promote the implementation of best clinical practice through the development of recommendations tailored to the requirements of the NHS in England and Wales.

1.2.4 The structure of this guideline

The guideline is divided into chapters, each covering a set of related topics. The first three chapters provide a summary of the clinical practice and research recommendations, and a general introduction to guidelines and to the methods used to develop them.

Chapter 4 to Chapter 9 provide the evidence that underpins the recommendations about the longer term treatment and management of self-harm.

Each evidence chapter begins with a general introduction to the topic that sets the recommendations in context. Depending on the nature of the evidence, narrative reviews or meta-analyses were conducted, and the structure of the chapters varies accordingly. Where appropriate, details about current practice, the evidence base and any research limitations are provided. Where meta-analyses were conducted, information is given about both the interventions included and the studies considered for review. Clinical summaries are then used to summarise the evidence presented. Finally, recommendations related to each topic are presented at the end of each chapter. On the CD-ROM, full details about the included studies can be found in Appendix 15. Where meta-analyses were conducted, the data are presented using forest plots in Appendix 16 (see Text Box 1 for details).

1.2.5 Evidence for children and young people

There is not a separate chapter relating to children and young people as issues for this group have been addressed throughout the guideline. These can be found in sections: 4.4.4; 4.4.5; 4.4.6; 4.4.7; 4.4.8; 4.4.9; 4.4.10; 5.3; 6.2.3; 6.2.9; 6.2.10; 6.2.11; 6.2.16; 6.2.18; 6.3.7; 6.3.8; 6.5.1; 7.1.7; 7.1.8; 7.1.9; 7.4.4; 9.2.3; 9.4; 9.5.

Text Box 1: Appendices on CD-ROM

Clinical study characteristics tables	Appendix 15
Clinical evidence forest plots	Appendix 16
GRADE evidence profiles	Appendix 17

2 INTRODUCTION TO SELF-HARM

2.1 THE BEHAVIOUR

2.1.1 Terminology

The term self-harm is used in this guideline to refer to any act of self-poisoning or self-injury carried out by an individual irrespective of motivation (Hawton *et al.*, 2003a). This commonly involves self-poisoning with medication or self-injury by cutting. There are a number of important exclusions which this term is not intended to cover. These include harm to the self arising from excessive consumption of alcohol or recreational drugs, mismanagement of physical health conditions, body piercing or from starvation arising from anorexia nervosa. In the past, various terms have been used including ‘attempted suicide’ and parasuicide (Kreitman, 1977). Attempted suicide has been used to describe self harm in which the primary motivation was to end life. It became clear that motivation is complex and does not fall neatly into these categories. Terms such as “non fatal deliberate self-harm” (Morgan *et al.*, 1975) were preferred as this avoided inferring anything about the motivation behind the behaviour. However the word ‘deliberate’ has been dropped as this can be considered judgemental and it has been argued that the extent to which the behaviour is ‘deliberate’ or ‘intentional’ is not always clear. Those who harm themselves during a dissociative state, often describe diminished or absent awareness of their actions at these times.

2.1.2 How common is self-harm?

Population estimates of the prevalence of self-harm in the community vary considerably. One cross national study of 17 countries found that an average of 2.7% of individuals reported a previous episode of self-harm, but with considerable variation between 0.5% in Italy and 5% in the USA (Nock, 2008). This variation may well reflect the willingness of individuals to report self-harm. In the UK, the adult psychiatric morbidity survey collected self reported data on ‘attempted suicide’ and ‘self-harm’ (McManus *et al.*, 2009), according to whether or not the individual reported that they had intended to take their life. Overall 5.6% reported lifetime suicide attempts (6.9% of women and 4.3% of men) with 0.7% reporting this had occurred in the last year. Self reported lifetime history of self-harm (without lethal intent) was slightly less common 4.9% overall (5.4% of women and 4.4% of men). Self-harm can occur at any age but is most common in young people¹.

In Meltzer and colleagues’ survey (2001) of 12,529 children and young people aged 5 to 15 years, 1.3% had tried to harm themselves. Data in this survey was collected from parental interviews and when information is obtained directly from young people rates are considerably higher. Hawton and colleagues (2002) conducted a questionnaire survey of 6020 year 11 pupils in the Oxford area. They reported that 13.2% of young people responding had self-harmed at some point in their lives, 6.9% in the previous

¹ Where it refers to children and young people, this applies to all people who are between 8 and 17 years inclusive.

1 year. Only 12.6% of those who had harmed themselves had presented to hospital, the
2 vast majority of acts of self-harm being “invisible” to professionals. Although rates of
3 self-harm vary between countries, (Madge *et al.*, 2008) research in England, Canada and
4 Australia between 2002 and 2005 indicated that the lifetime rate of self-harm in schools
5 was 12 – 15% (de Leo & Heller, 2004; Ross & Heath, 2002). In contrast only about 5% of
6 all episodes of self-harm occur in people over the age of 65 (Dennis *et al.*, 1997; Draper
7 1996).

8
9 Much of the detailed epidemiological study of self-harm has been based in hospital
10 settings and suggests self-harm might account for over 200 000 hospital attendances in
11 England every year (Hawton *et al.*, 2007). Recent data from Oxford, Manchester and
12 Derby suggested that rates of hospital presentation for self-harm varied between 400 and
13 550 per 100,000 per year for women and 300 and 400 per 100,000 per year for men (Bergen
14 *et al.*, 2010a). Rates fell by between 8% and 21% over an eight year period (2000-2007)
15 with a more pronounced fall in men.

16 **2.1.3 Methods of self-harm**

17 The methods of self-harm can be divided into two broad groups: self-poisoning and self-
18 injury. Although statistically there may be some differences in motivation and intent
19 between these groups (Sutton, 2007) methods are chosen for a variety of individual and
20 practical reasons, which span both groups. Assumptions cannot be made about
21 motivation and intent based on the chosen method of self-harm, and indeed there is good
22 evidence that people often switch methods of self-harm (Lilley *et al.*, 2008a)

23
24 Studies of attendance at emergency departments following self-harm show that about
25 80% have taken an overdose of prescribed or over-the-counter medication (Horrocks *et al.*
26 *et al.*, 2003), most commonly analgesics or antidepressants. A small percentage of overdoses
27 are of illicit drugs or other substances (household substances, plant material etc).
28 However these figures can be misleading as people who self-poison are more likely to
29 seek help than those who self-injure (Hawton *et al.*, 2002; Meltzer *et al.*, 2002a). General
30 population studies have shown that self-injury may be more common than self-
31 poisoning (Hawton *et al.*, 2002; Meltzer *et al.*, 2002b).

32
33 Of those who self-injure, cutting is the most common method (Hawton *et al.*, 2002;
34 Horrocks *et al.*, 2003). Less common methods include burning, hanging, stabbing,
35 swallowing or inserting objects, shooting, drowning and jumping from heights or in
36 front of vehicles.

37 **2.1.4 Outcomes: repetition and suicide**

38 About one in five people who attend an emergency department following self-harm will
39 self-harm again in the following year (Bergen *et al.*, 2010); a small minority of people will
40 do so repeatedly. The frequency with which some of the latter group self-harm means
41 that they are over-represented among those who present at an emergency department or
42 receive psychiatric care. There is no good evidence to support the widely voiced opinion
43 that people who harm themselves repeatedly, particularly by cutting, are less likely to

1 die by suicide than those who harm themselves in other ways. Indeed one hospital
2 based study suggested that self-cutting increased suicide risk (Cooper *et al.*, 2005).
3 Repetition of self-harm may occur quickly with up to 1 in 10 repeat episodes occurring
4 within 5 days of the index attempt (Kapur *et al.*, 2005)
5

6 The suicide rate in general population varies across countries. In the UK, the suicide rate
7 is 2.8 for females and 10.1 for males in 2007 (WHO). Following an act of self-harm the
8 rate of suicide increases to between 50 and 100 times the rate of suicide in the general
9 population (Hawton *et al.*, 2003a; Owens *et al.*, 2002). Men who self-harm are more than
10 twice as likely to die by suicide as women and the risk increases greatly with age for both
11 genders (Hawton *et al.*, 2003b). It has been estimated that one-quarter of all people who
12 die by suicide would have attended an emergency department in the previous year
13 (Gairin *et al.*, 2003). In a large long term followed study of over 20 years Runeson *et al.*
14 (2010) found that certain methods of self-harm were associated with increased suicide
15 risk. Hanging, strangulation and suffocation were associated with a six fold increased
16 risk of future successful suicide compared to self-poisoning (Runeson, 2010).

17 **2.1.5 Why do people self-harm**

18 Self-harm does not often result simply from the wish to die. Those who self-harm may do
19 so to communicate with others or influence them to secure help or care. They may self-
20 harm in order to obtain relief from a particular emotional state or overwhelming
21 situation (Hjelmeland *et al.*, 2002).
22

23 One particular intention or motive might predominate or all might co-exist. This means
24 that a person who self-harms repeatedly might not always do so for the same reason each
25 time, or by the same method (Horrocks *et al.*, 2003). Thus assumptions about intent
26 should not be made on the basis of a previous pattern of self-harm; each act must be
27 assessed separately to determine the motivation behind it. Failure to do this can result in
28 the meaning of the act being misunderstood and in an interpretation that the service user
29 finds judgemental or dismissive. This will inevitably lead to a breakdown in the
30 therapeutic relationship, as well as making it less likely that appropriate help will be
31 offered at times when a person is at high risk of suicide.
32

33 Consistent with these differences in intention and motive, people who self-harm might
34 have very different expectations about how health services should respond and what
35 constitutes a good outcome. In particular, people who harm themselves as a way of
36 relieving distress (through cutting, for example) might be compelled to do this as a
37 coping strategy in order to prevent suicide. They are likely to continue to need to do this
38 until they receive appropriate and sufficient psychotherapeutic interventions and
39 support.

40 **2.1.6 Motives for self-harm in young people**

41 The Child and Adolescent Self-Harm in Europe (CASE) (Hawton & Rodham, 2006) study
42 is the largest and most extensive study of self-harm in young people (15-16 year olds) in
43 the community. The original study comprised seven countries including England with a

1 modified version recently administered in Scotland (O'Connor *et al.*, 2009a). The method
2 of self-harm most commonly reported in these studies is self-cutting.

3
4 Consistent with the clinical studies, the young people endorsed psychological pain
5 motives more frequently than other motives. 'Wanting to get relief from a terrible state
6 of mind', 'wanting to die', 'wanting to punish oneself' and 'wanting to show how
7 desperate one was feeling' are the top four motives endorsed by young people across
8 Europe (Hawton & Rodham, 2006; Madge *et al.*, 2008; O'Connor *et al.*, 2009a).

9 **2.1.7 The meaning of self-harm**

10 It can be difficult for people to understand how an apparently self-destructive act such as
11 self-harm can serve a positive purpose or have meaning for people.

12 Following a qualitative study of 76 women Arnold (1995) argued that self-harm "had
13 evolved as a way of coping with unbearable feelings engendered by painful life
14 experience." For the women who took part in the study it served a range of purposes
15 including; relief of feelings, self-punishment, regaining control and communicating to
16 others. Arnold (1995) suggests that:

17
18 " . . successful approaches to helping someone overcome self-injury need to
19 examine fully the purposes served for an individual and the alternatives which
20 may need to be in place before they can leave self-injury behind."

21
22 Babiker and Arnold (1997) expand on the functions and meanings of self-harm thus:
23 functions concerned with coping and surviving, functions concerned with the self,
24 functions concerned with dealing with one's experience, functions concerned with self-
25 punishment and sacrifice and functions concerning relationships with others. Other
26 models which explore the meaning of self-harm and may be useful to promote
27 understanding in clinicians include 'The eight C's of self-injury' (Sutton 2007) these are:

- 28 • Coping and crisis intervention
 - 29 • Calming and comforting
 - 30 • Control
 - 31 • Cleansing
 - 32 • Confirmation of existence
 - 33 • Creating comfortable numbness
 - 34 • Chastisement
 - 35 • Communication
- 36

37 **2.1.8 Factors that are associated with self-harm**

38 *Demographics, socio-economic factors and life events*

39 Self harm is more common in the young, the incidence peaks between 15-19 in females
40 and 20-24 in males. Self-harm occurs in all sections of the population but is more
41 common among people who are disadvantaged in socio-economic terms and among

1 those who are single or divorced, live alone, are single parents or have a severe lack of
2 social support (Meltzer *et al.*, 2002a).

3
4 Life events are strongly associated with self-harm in two ways. First, there is a strong
5 relationship between the likelihood of self-harm and the number and type of adverse
6 events that a person reports having experienced during the course of his/her life. These
7 include having suffered victimisation and, in particular, sexual abuse (O'Connor, *et al.*,
8 2009b; Meltzer *et al.*, 2002a). Second, life events, particularly relationship problems, can
9 precipitate an act of self-harm (Haw & Hawton, 2008; O'Connor, *et al.*, 2010). Many
10 people who self-harm have a physical illness at the time and a substantial proportion of
11 these report this as the factor that precipitated the act (de Leo *et al.*, 1999).

12
13 Some evidence suggests family history of self-harm may be a risk factor for repetition of
14 self-harm. A large scale study was conducted amongst young people in England
15 (Hawton *et al.*, 2002). This cross-sectional study with over 6,000 participants reported
16 self-harm in family members was a risk factor for both males and females. Although this
17 was based on students' self-report resulting in possible ascertainment bias, this finding
18 suggests there is an intergenerational transmission of risk. One explanation for this
19 intergenerational transmission is genetic susceptibility. This hypothesis is supported by a
20 large twin study with 5,995 participants based in Australia which found that history of
21 self-harm in a co-twin was strongly predictive of self-harm in monozygotic twin pairs
22 but not in dizygotic twin pairs suggesting that the heritability of suicidal thoughts and
23 behaviours was in the region of 45% (Statham *et al.*, 1998).

24 *The association between self-harm and mental disorder*

25 Most of those who attend an emergency department following an act of self-harm will
26 meet criteria for one or more psychiatric diagnoses at the time they are assessed (Haw *et*
27 *al.*, 2001a). More than two-thirds would be diagnosed as having depression although
28 within 12–16 months two-thirds of these will no longer fulfil diagnostic criteria for
29 depression.

30
31 People diagnosed as having certain types of mental disorder are much more likely to
32 self-harm (Skegg, 2005). For this group, the recognition and treatment of these disorders
33 can be an important component of care. In one survey of a sample of the British
34 population, people with current symptoms of a mental disorder were up to 20 times
35 more likely to report having harmed themselves in the past (Meltzer *et al.*, 2002a). The
36 association was particularly strong for those diagnosed as having phobic and psychotic
37 disorders. People diagnosed as having schizophrenia are most at risk and about one-half
38 of this group will have harmed themselves at some time.

39
40 Certain psychological characteristics are more common among the group of people who
41 self-harm, including impulsivity, poor problem-solving, hopelessness, impaired positive
42 future thinking/ goal reengagement, high levels of self-criticism and perfectionism
43 (Brezo, *et al.*, 2005; MacLeod *et al.*, 1997; O'Connor *et al.*, 2009b; Slee *et al.*, 2008). Also,
44 people who self-harm more often have interpersonal difficulties. It is possible to apply

1 diagnostic criteria to these characteristics. This explains why nearly one-half of those
2 who present to an emergency department meet criteria for having a personality disorder
3 (Haw *et al.*, 2001a). However, there are problems with doing this because:

- 4
- 5 • The diagnostic label tends to divert attention from helping the person to overcome
6 their problems and can even lead to the person being denied help (National
7 Institute for Mental Health in England, 2003).
- 8 • Some people who self-harm suggest that the label personality disorder can lead to
9 damaging stigmatisation by care workers (Babiker & Arnold, 1997; Pembroke,
10 1994). Moreover, this stigma may prevent those who self-harm from seeking help
11 (Fortune *et al.*, 2008).

12 *The association between self-harm and alcohol and drug use*

13 About one-half of people who attend an emergency department following self-harm will
14 have consumed alcohol immediately preceding or as part of the self-harm episode
15 (Merrill *et al.*, 1992; Horrocks *et al.*, 2003). For many, this is a factor that complicates
16 immediate management either by impairing judgement and capacity, or by adding to the
17 toxic effects of ingested substances. About one-quarter of those who self-harm will have
18 a diagnosis of harmful use of alcohol (Haw *et al.*, 2001a). Men are more likely to drink
19 before an episode of self-harm than women (Hawton *et al.*, 2003b), and are more likely to
20 be misusing drugs or alcohol, as well as to have higher rates of several risk factors for
21 suicide (Taylor *et al.*, 1999). Substance misuse is associated with hospital admission for
22 self-harm in inpatients discharged from psychiatric care (Gunnell *et al.*, 2008).

23 *The association between self-harm and child abuse and domestic violence*

24 Child sexual abuse is known to be associated with self-harm (Hawton *et al.*, 2002; Meltzer
25 *et al.*, 2002a; Fliege *et al.*, 2009), especially among people who repeatedly self-harm, as
26 well as a range of mental health problems particularly in teenage years and adulthood
27 for females, and for Looked After Children (Meltzer *et al.*, 2002a). Physical abuse is also
28 implicated in self-harm (Glassman *et al.*, 2007; O'Connor *et al.*, 2009a). Those who
29 experienced bullying in childhood are at increased risk of future self-harm even after
30 adjustment for the co-occurrence of other risks such as abuse (Meltzer *et al.*, 2011).
31 Experience of domestic violence (intimate partner violence) is a significant risk factor for
32 self-harm. Compared to controls, in a retrospective cohort study, people suffering from
33 domestic violence were more likely to present with self-harm than controls (Boyle *et al.*,
34 2006). It is suggested that healthcare professionals explore whether self-harm is an issue
35 when there is evidence of domestic violence (Sansone *et al.*, 2007).

36
37 It is important to note that socio-economic factors, such as unemployment and poverty,
38 childhood experiences of abuse, and experiences of domestic violence are all associated
39 with a wide range of mental disorders, as well as self-harm. How these experiences and
40 factors interact needs to be explored and better understood.

41 *The association between sexual orientation and self-harm*

Growing evidence supports an association between sexual orientation and self-harm in men and women (Skegg *et al.*, 2003; O'Connor *et al.*, 2009b). In a recent systematic review and meta-analysis (including data from 214,344 heterosexual and 11,971 non-heterosexual people), lesbian, gay and bisexual people were at a heightened risk of self-harm to heterosexual people (King *et al.*, 2008). The evidence for this association, thus far, is strongest for young people.

2.1.9 Special groups

Young people

The rate of self-harm is low in early childhood but increases rapidly with the onset of teenage years (Hawton *et al.*, 2002). Hawton and Rodham (2006) conducted a school-based survey of 6,000 young people in year 11 (aged 15 and 16 years) in Oxfordshire, Northamptonshire and Birmingham. 13.2% reported having deliberately tried to harm themselves at some point in their lives, and 8.6% in the last year. Rates were higher in girls than boys for both lifetime (20.2% versus 7%) and previous year (13.4% versus 4.4%). This anonymous survey also examined the factors associated with self-harm, coping strategies used and access to services (Hawton & Rodham 2006). Self-harm is clearly related to interpersonal difficulties: younger teenagers describe family problems and older teenagers cite partner issues (Hawton *et al.*, 2003a). Little is known about the problem of self-harm in younger children however there appears to be a difference in the female to male ratio with increasing age; from 8:1 females to males in 10 to 14 year olds, through 3.1:1 in 15 to 19 year olds, to 1.6:1 in 20 to 24 year olds (Hawton & Harriss, 2008a). One study found an overall self-harm rate of 29 per 100 000 (ages 10-19) (Clark *et al.*, 2000). An Oxford study, comparing trends in self-harm between 1985 and 1995, found that the largest rise was in 15-24-year-old males (+ 194.1%) (Hawton *et al.*, 1997).

Asian women

Husain and colleagues (2006) concluded that South Asian women are at an increased risk of self-harm. The demographic characteristics, precipitating factors and recent clinical management are different in South Asian compared to white women. South Asian women may be more likely to self-harm between ages 16-24 years than white women. South Asian women are less likely to attend the ER with a repeat episode of self-harm. Across all age groups the rates of self-harm are lower in South Asian men as compared to South Asian women. However a more recent cohort study of 20,574 individuals from three UK centres found no increased risk in this group, instead reporting an elevated risk in young black women (Cooper *et al.*, 2010).

Older people

Hawton and Harriss (2006) studied 730 people who were 60 years or older and had presented to hospital following self-harm. The authors found very high suicide intent amongst this group and at follow up over 20 years very high suicide rates (4.5%). Dennis and colleagues (2005) studied older people with depression, finding that two thirds had significant suicidal intent. Older people with depression who self-harmed were more likely to have a poorly integrated social network; loneliness and lack of support from

services were identified as important factors in determining suicidal behaviour in older adults.

Lamprecht and colleagues (2005) examined self-harm in older people presenting to acute hospital services over three years. More males (56%) than females (26%) who presented with self-harm were married. The observations suggested an increase in self-harm in men and marriage may no longer be a protective factor among older men.

Dennis and colleagues (2007) confirmed their previous finding that the majority of elderly who harmed themselves had high suicide intent and a high proportion (69%) were depressed. Individuals were frequently living alone with an isolated life-style and poor physical health. Barr, Leitner and Thomas (2004) described four characteristics which have been shown to be associated with increased vulnerability in older people who self-harm: increased suicidal intent, physical illness, mental illness and social isolation.

People with a learning disability

Very little research deals with the type of self-harm which is the focus of this guideline. Some genetic conditions associated with learning disability increase the likelihood that the individual with that condition will exhibit self-injurious behaviour (Gates, 2003). Wisely & colleagues (2002) identified that endogenous opioids produce a morphine-like effect that can account for the development of some forms of self-harm.

James & Warner (2005) argue that self-harm represents a significant, yet poorly theorised area of concern with respect to women who have learning disabilities – particularly in the context of secure service provision. Their self-harm is meaningful and consideration should be given to how they understand and manage their experiences, cognitions and emotions.

2.1.10 Service provision for self-harm

There are no accurate figures for the number of presentations to emergency departments but extrapolated from registers held at centres in the UK there are around 200,000 attendances in England annually (Hawton *et al.*, 2003b). One hallmark of service provision for self-harm has been its variability. This variability has been consistent over time (Blake & Mitchell, 1978; Kapur *et al.*, 1998; Bennewith *et al.*, 2004). Studies have also suggested under provision with respect to self-harm services. In one study of 32 general hospitals in England only just over half of episodes resulted in a specialist psychosocial assessment and the range 36% to 82%. There was also considerable variation in psychiatric admission (overall 9.5%; range 2.5% to 23.8%), and mental health follow up (overall 51%; range 35% to 82%) (Bennewith *et al.*, 2004). Possible reasons for poor services include limited resources, a lack of an evidence base for treatments, and the unpopularity of this group of service users among some clinical staff (Kapur *et al.*, 1999).

2.1.11 Professional Attitudes to self-harm and service users' experience

People who self-harm often describe experiencing negative responses from staff in mental health services and emergency departments. This may be linked to professionals' lack of understanding of the behaviour (Arnold, 1995):

Professionals are often terrified by self-injury. Their normal empathy with others' distress and their confidence and ability to help often desert them when faced with someone who persistently hurts themselves. This problem reflects a serious and widespread lack of understanding of self-injury, which results in great inconsistency and inadequacies in services.

As part of writing NICE Clinical Guideline 16: Short-Term Management of Self-harm (NICE, 2004) a series of focus groups were held with service users to establish their experience of professionals' attitude to self-harm. Service Users mentioned approaches that they had found helpful and supportive, but also mentioned less positive responses.

2.2 TREATMENT AND MANAGEMENT IN THE NHS

2.2.1 Detection, recognition and referral in primary care

Available figures suggest that up to 6.6% (Meltzer *et al.*, 2002a) of individuals seen in primary care may have a history of self-harm which may not be identified during the consultation. Some of the factors contributing to this include the tight time constraints upon consultation time, which may not facilitate the development of a confiding relationship/atmosphere in which thoughts/acts of self-harm may be disclosed. Additionally, interactions with members of the primary care team will usually be task related and there is not a culture of routinely asking about self-harm, unless there are features suggesting this. Many healthcare professionals are not educated in risk factors for self-harm and may miss opportunities to detect it. Research interventions in primary care for those who have self-harmed have been made possible by proactive invitation of service users known to self-harm (Bennewith *et al.*, 2002).

Young people who self-harm frequently come to the attention of school teachers and young people's health advisors. Whilst these staff often receive training in how to handle a young person disclosing that they self-harm, this aspect of work causes concern amongst staff who often request further training from local healthcare professionals. In some areas, schools – supported by CAMHS staff – provide universal interventions focussed on the development of emotional literacy and coping skills, in an endeavour to decrease the likelihood of self-harm.

2.2.2 Assessment

Assessments should encompass both an assessment of risk and the wider context and needs of the service user. These assessments are intended to determine the type and intensity of future input required by the service user. One of the main challenges in

assessment of risk post self-harm is that there are no risk assessments that can accurately determine the likely risk of repetition. All measures are likely to class too many people at high risk of repetition and possible future death and to misclassify some people as low risk when in fact they are at high risk (Department of Health, 2007). Consequently, NICE *Clinical Guideline 16: Short-Term Management of Self-harm* (NICE, 2004) recommends that healthcare professionals do not use risk assessments alone to decide not to offer follow-up. Subsequent to assessment, the assessing clinician may recommend no follow-up, follow-up in primary care, referral to a Community Mental Health Team or crisis resolution & home treatment team, referral for psychological treatment or a recommendation for inpatient admission. In some areas psychiatric liaison teams may offer brief time limited follow-up (1-4 weeks) before discharge or referral on to the CMHT.

Young people

Young people, especially those under the age of 16, on presentation at emergency departments are likely to be admitted to the paediatric ward to await assessment by the CAMHS service prior to discharge. In some areas 17-18 year olds may receive similar treatment, in others they may receive assessment under the protocol used for the treatment of adults. In other respects their treatment will resemble that of adults; firstly addressing any medical issues before moving onto risk and psychosocial assessment. The outcomes following assessment will vary. Some young people will refuse further input from the CAMHS service, in part because the self-harm act and the response from the system may have resulted in at least a temporary resolution of the difficulties precipitating the behaviour. Others will accept an offer of further assessment or therapy, which is usually family-centred, although non-attendance at follow-up is a common problem with young people (Piacentini *et al.*, 1995). A small proportion of young people may remain highly suicidal and need admission directly (within 24 hours) to inpatient psychiatric treatment in Tier 4, however this is often delayed. Depending upon the assessment of the relevant factors contributing to the episode of self-harm, some young people may be referred to Social Services under either Section 17 (Child in Need) or Section 47 (Child in Need of Protection) of the Children Act (HMSO, 2004).

Assessment in Secondary Care Services

Assessment for adults most commonly occurs in the context of the Community Mental Health Team (CMHT) and will focus more broadly on the range of presenting problems of the service user. The team, as part of this initial assessment, will also conduct a risk assessment and are likely to develop an initial safety plan with the service user and / or carer. As part of the assessment the team will consider the relationship between the self-harm and the other presenting problems of the service user. In some circumstances, the team may not address a service user's self-harm actively as part of the treatment plan if it is believed that this is a result of a particular psychiatric diagnosis for example, depression. Rather the focus will be on the primary psychiatric diagnosis. In other circumstances where the self-harm is potentially highly lethal, management of self-harm may form the centre of the treatment plan and service users may receive treatments that

1 focus directly on reducing self-harm. These different treatment options and evidence
2 relating to them will be discussed further in Chapter 7.

3
4 Whilst significant numbers of young people who self-harm may be managed by staff in
5 Tier 1 (teachers, social workers, GPs), many young people who self-harm are referred for
6 assessment to the Tier 3 CAMHS team. Young people who self-harm will receive an
7 assessment of their wider presenting problems as well as an assessment of self-harm,
8 encompassing an assessment of risk. Subsequent to this assessment, young people are
9 likely to be offered a range of interventions that may or may not focus specifically on the
10 self-harm.

11 **2.2.3 Pharmacological treatments**

12 Drug treatments do not play a direct role in the management of self-harm, however they
13 have a significant indirect part to play in the management of associated conditions.
14 Depression, anxiety, and schizophrenia are associated with a higher risk of self-harm,
15 and the drug treatment of these conditions is documented in their respective guidelines
16 (NICE, 2009a; 2005; 2011; 2009b). There have been reports linking lithium treatment with
17 a reduction in suicidal behaviour (Cipriani *et al.*, 2005). Other coexisting conditions that
18 may increase the risk of self-harm, such as chronic pain, may also lend themselves to
19 drug treatments (NICE, 2009c).

20 **2.2.4 Psychological treatments**

21 Self-harm is associated with a wide variety of psychiatric diagnoses and psychological
22 problems. Psychological treatments offered to service users who self-harm differ to the
23 extent to which self-harm is an explicit goal of the treatment. In routine clinical practice
24 service users will receive a wide range of psychological interventions which may or may
25 not focus primarily on their self-harm. Addressing self-harm may occur in series or in
26 parallel with other interventions the service user is receiving. Treatments for self-harm
27 are discussed in Chapter 7.

28 **2.2.5 Harm Reduction**

29 For many service users a consideration of a 'harm-reduction approach' may be
30 indicated. Whilst the concept and use of a 'harm-reduction' approach has been well
31 established in relation to substance and alcohol misuse, the use of such approach in
32 relation to self-harm has been the focus of much controversy. The use of such an
33 approach raises a number of complex and often inter-related clinical, ethical and legal
34 issues, and requires careful consideration of a number factors, including: the meaning
35 and function of self harm for the individual; the importance of supporting the service
36 user to achieve their own goals and retain their autonomy, dignity and responsibility
37 wherever possible; the need to balance the risks associated with a harm reduction
38 approach versus the risks associated with a 'preventative approach': and the application
39 of potentially relevant legalisation (HMSO, 1983; 1989; 2004; 2005; 2007a). Further
40 discussion of this issue can be found in Chapter 7.

2.2.6 Consent, capacity, and confidentiality

There are many situations in which clinical decisions regarding the longer term treatment and management of self-harm require consideration of relevant legislation. One major development since the publication of the previous NICE self-harm guideline (NICE, 2004) is the introduction of the Mental Capacity Act (2005). The sharing of clinical data and the need to protect the confidentiality of service users are also important issues in the assessment and management of self-harm. Chapter 9 discusses them further.

2.2.7 Risk and recovery

Following the publication of 'Our health, our care, our say' (Department of Health, 2006a), choice and control are now considered critical components in the development of health and social care policy and practice. It is a policy which supports a 'recovery-oriented' approach which aims to empower people to live a meaningful and purposeful life and which promotes self-management (Shepherd *et al.*, 2008).

Essentially, there is a need to ensure that any risk management plans are 'defensible' rather than 'defensive'. The concept of 'positive risk' taking is highly relevant. This is an approach which both balances the service users quality of life and safety needs of the service user, carers and public and considers the "potential benefits and harms of choosing one course of action over another", (Morgan, 2004; Morgan, 2007).

2.2.8 Partnerships with other sectors

Individuals who self-harm may be involved with social care agencies and the voluntary sector in addition to involvement with healthcare services. In some areas staff from multiple agencies may work together to provide specific treatments or social care interventions particularly to support service users with long standing histories of self-harm.

2.2.9 Looked After Children

Looked After Children and Adolescents (LACA) may demonstrate far higher levels of psychiatric diagnoses than children in the general population (Meltzer *et al.*, 2001; 2002b; Dimigen, 1999). Children are taken into State care for many reasons, the main being physical and sexual abuse by parents and/or associates. These traumatic experiences often lead to long term psychiatric conditions and thus mental ill health. Interventions for this group of young people may be complex and might include securing longer term placements.

2.2.10 Training

The majority of professionals working in secondary care will have received training in the assessment and management of risk associated with self-harm and suicidal behaviours. Despite this, clinicians frequently report high levels of anxiety around working with service users who self-harm and concern about working with high levels of

1 risk. The “Better Services for People who Self-Harm” project (Royal College of
2 Psychiatrists, 2007) surveyed staff in ambulance services, emergency departments, and
3 mental health services regarding their need for training about self-harm. All groups of
4 staff reported a need for further training, with ambulance staff indicating the greatest
5 need, but even many staff in mental health services felt under-trained in this area.
6 Training in how to treat factors associated with high risk is less widely available and
7 practitioners may rely on safety plans that focus on decreasing access to the means to
8 self-harm and distraction or other crisis skills. Such strategies may help service users
9 manage a short term crisis but are unlikely to resolve more substantive issues leading to
10 self-harm.

11
12 There are a range of training programmes developed for training healthcare
13 professionals who work with people who self-harm, which are reviewed in Chapter 5.

14 **2.3 ECONOMIC COSTS OF SELF-HARM**

15 In addition to the physical and mental impact of self-harm on service users as well as
16 their families and carers, self-harm imposes a significant economic cost both on the
17 health sector and society in general. To date, no formal attempt has been made to
18 quantify the total economic cost of self-harm within the UK. As self-harm is associated
19 with a range of mental disorders rather than a diagnosis, it is difficult to determine
20 resource use and costs attributable directly to self-harm rather than any underlying cause
21 (Sinclair *et al.*, 2010). However, it is clear that the assessment and management of self-
22 harm incurs significant NHS resources, with 101,670 emergency department attendances
23 recorded in 2008/09 due to self-harm (NHS Information Centre, 2009). This is probably a
24 considerable underestimate – extrapolating from a study of three hospitals, Hawton and
25 colleagues (2007) estimated there were 220, 000 episodes dealt with by hospitals in
26 England each year. Previously published studies have focused on the immediate costs of
27 self-harm management rather than the wider costs involved in the longer term
28 management of self-harm (Sinclair, 2006).

29
30 A recent UK-based study retrospectively collected health care resource use from a cohort
31 of people who self-harm recruited from a general hospital following an episode of self-
32 harm (Sinclair *et al.*, 2010). The results of the study showed that a cumulative increase in
33 the number of self-harm episodes were correlated with increased healthcare and social
34 services costs within a six-month period, particularly for service users who experienced
35 five or more self-harm episodes. There was significantly more use of psychotropic
36 prescriptions and psychiatric care in those who harmed themselves five times or more
37 during the six-month study period. Care for service users with five or more episodes was
38 characterised by high resource use of psychiatric services in the first seven years after
39 their first episode. Overall, total health care and social service costs were £3,524 (2004/05
40 prices) more per 6 month period for service users who self-harmed on five or more
41 occasions compared with single episode service users. Within the year following the first
42 ever episode of self-harm, inpatient and outpatient psychiatric services accounted for
43 69% and social services accounted for 19% of total costs. The results of the study

highlighted a cumulative effect on health care costs, with increasing episodes of self-harm, particularly for service users with five or more episodes.

The study by Byford and colleagues (2009) estimated the long-term costs, over six years, of a cohort of young people who participated in a RCT following an episode of self-poisoning. Lifetime and current (6-month) costs were calculated and compared to general population controls to explore costs incurred by the UK general public sector. Resource use data included inpatient and day-patient services for psychiatric reasons, pregnancy or child birth, foster or residential care, supported accommodation, special education, prison and criminal justice and social security benefits. Over the longer-term follow-up, the self-poisoning group used substantially more public sector resources in terms of special education, foster care, and residential care or other supported accommodation and social security benefits. They also spent more time in prison or police custody and had a number of hospital attendances for psychiatric reasons, in comparison to the general population control group. Lifetime differences in the costs of key services were large and statistically significant. The self-poisoning group incurred significantly more costs per year in terms of psychiatric hospital contacts, supported accommodation, special education and social security benefits. In total, the self-poisoning group cost over £1,500 per year compared to only £65 per year in the control group (mean difference £1,440; $p < 0.001$).

The indirect costs of self-harm in terms of lost productivity, days lost from work, as well as costs to families and carers are unknown but are likely to be substantial given its prevalence within the UK. Ensuring the efficient use of available healthcare resources will maximise the health benefits for people who self-harm and can potentially reduce costs to the UK healthcare system and society in the long term.

3 METHODS USED TO DEVELOP THIS GUIDELINE

3.1 OVERVIEW

The development of this guideline drew upon methods outlined by NICE (further information is available in *The Guidelines Manual* [NICE, 2009d]). A team of health professionals, lay representatives and technical experts known as the Guideline Development Group (GDG), with support from the NCCMH staff, undertook the development of a patient-centred, evidence-based guideline. There are six basic steps in the process of developing a guideline:

1. Define the scope, which sets the parameters of the guideline and provides a focus and steer for the development work.

2. Define review questions considered important for practitioners and service users.
3. Develop criteria for evidence searching and search for evidence.
4. Design validated protocols for systematic review and apply to evidence recovered by search.
5. Synthesise and (meta-) analyse data retrieved, guided by the review questions, and produce GRADE evidence profiles and summaries.
6. Answer review questions with evidence-based recommendations for clinical practice.

The clinical practice recommendations made by the GDG are therefore derived from the most up-to-date and robust evidence base for the clinical and cost effectiveness of the treatments and services used in the longer term management of self-harm. In addition, to ensure a service user and carer focus, the concerns of service users and carers regarding health and social care have been highlighted and addressed by recommendations agreed by the whole GDG.

3.2 THE SCOPE

Guideline topics are selected by the Department of Health and the Welsh Assembly Government, which identify the main areas to be covered by the guideline in a specific remit (see *The Guidelines Manual* [NICE, 2009d] for further information). The NCCMH developed a scope for the guideline based on the remit. The purpose of the scope is to:

- provide an overview of what the guideline will include and exclude
- identify the key aspects of care that must be included
- set the boundaries of the development work and provide a clear framework to enable work to stay within the priorities agreed by NICE and the National Collaborating Centre, and the remit from the Department of Health/Welsh Assembly Government
- inform the development of the review questions and search strategy
- inform professionals and the public about expected content of the guideline
- keep the guideline to a reasonable size to ensure that its development can be carried out within the allocated period.

An initial draft of the scope was sent to registered stakeholders who had agreed to attend a scoping workshop. The workshop was used to:

- obtain feedback on the selected key clinical issues
- identify which patient or population subgroups should be specified (if any)
- seek views on the composition of the GDG
- encourage applications for GDG membership.

The draft scope was subject to consultation with registered stakeholders over a 4-week period. During the consultation period, the scope was posted on the NICE website (www.nice.org.uk). Comments were invited from stakeholder organisations and the

Guideline Review Panel (GRP). Further information about the GRP can also be found on the NICE website. The NCCMH and NICE reviewed the scope in light of comments received, and the revised scope was signed off by the GRP.

3.3 THE GUIDELINE DEVELOPMENT GROUP

The GDG consisted of: professionals in psychiatry, clinical psychology, nursing, social work, and general practice; academic experts in psychiatry and psychology; a service user, and representatives from service user organisations. The carer perspective was provided through topic group discussion with carers. The service user topic group meetings were coordinated between the staff from NCCMH, the service user and carer representative. The guideline development process was supported by staff from the NCCMH, who undertook the clinical and health economics literature searches, reviewed and presented the evidence to the GDG, managed the process, and contributed to drafting the guideline.

3.3.1 Guideline Development Group meetings

Thirteen GDG meetings were held between November 2009 and June 2010. During each day-long GDG meeting, in a plenary session, review questions and clinical and economic evidence were reviewed and assessed, and recommendations formulated. At each meeting, all GDG members declared any potential conflicts of interest, and service user and carer concerns were routinely discussed as part of a standing agenda.

3.3.2 Service users and carers

Individuals with direct experience of services gave an integral service-user focus to the GDG and the guideline. The GDG included a service user and representatives of a national service user group. They contributed as full GDG members to writing the review questions, helping to ensure that the evidence addressed their views and preferences, highlighting sensitive issues and terminology relevant to the guideline, and bringing service-user research to the attention of the GDG. In drafting the guideline, they contributed to writing the guideline's introduction, Chapter 4 and identified recommendations from the service user and carer perspective.

3.3.3 Special advisors

Special advisors, who had specific expertise in one or more aspects of treatment and management relevant to the guideline, assisted the GDG, commenting on specific aspects of the developing guideline and making presentations to the GDG. Appendix 3 lists those who agreed to act as special advisors.

3.3.4 National and international experts

National and international experts in the area under review were identified through the literature search and through the experience of the GDG members. These experts were contacted to recommend unpublished or soon-to-be published studies, to ensure that up-to-date evidence was included in the development of the guideline. They informed the

group about completed trials at the pre-publication stage, systematic reviews in the process of being published, studies relating to the cost effectiveness of treatment and trial data if the GDG could be provided with full access to the complete trial report. Appendix 6 lists researchers who were contacted.

3.4 REVIEW QUESTIONS

Review (clinical) questions were used to guide the identification and interrogation of the evidence base relevant to the topic of the guideline. Before the first GDG meeting, an analytic framework (see Appendix 7) was prepared by NCCMH staff based on the scope and an overview of existing guidelines, and discussed with the guideline Chair. The framework was used to provide a structure from which the review questions were drafted. Both the analytic framework and the draft review questions were then discussed by the GDG at the first few meetings and amended as necessary. Where appropriate, the framework and questions were refined once the evidence had been searched and, where necessary, sub-questions were generated. Questions submitted by stakeholders were also discussed by the GDG and the rationale for not including any questions was recorded in the minutes. The final list of review questions can be found in Appendix 8.

For questions about interventions, the PICO (Patient, Intervention, Comparison and Outcome) framework was used (see Table 1).

Table 1: Features of a well-formulated question on effectiveness intervention – the PICO guide

Patients/population	Which patients or population of patients are we interested in? How can they be best described? Are there subgroups that need to be considered?
Intervention	Which intervention, treatment or approach should be used?
Comparison	What is/are the main alternative/s to compare with the intervention?
Outcome	What is really important for the patient? Which outcomes should be considered: intermediate or short-term measures; mortality; morbidity and treatment complications; rates of relapse; late morbidity and readmission; return to work, physical and social functioning and other measures such as quality of life; general health status?

For questions that were not related to effectiveness (intervention studies), a different question format was used. Please see the question formats in the review protocol (Appendix 8).

To help facilitate the literature review, a note was made of the best study design type to answer each question. There are four main types of review question of relevance to NICE guidelines. These are listed in Table 2. For each type of question, the best primary study design varies, where 'best' is interpreted as 'least likely to give misleading answers to the question'.

However, in all cases, a well-conducted systematic review (of the appropriate type of study) is likely to always yield a better answer than a single study.

Deciding on the best design type to answer a specific review question does not mean that studies of different design types addressing the same question were discarded.

Table 2: Best study design to answer each type of question

Type of question	Best primary study design
Effectiveness or other impact of an intervention	Randomised controlled trial (RCT); other studies that may be considered in the absence of RCTs are the following: internally/externally controlled before and after trial, interrupted time-series
Accuracy of information (for example, risk factor, test, prediction rule)	Comparing the information against a valid gold standard in a randomised trial or inception cohort study
Rates (of disease, patient experience, rare side effects)	Prospective cohort, registry, cross-sectional study

3.5 SYSTEMATIC CLINICAL LITERATURE REVIEW

The aim of the clinical literature review was to systematically identify and synthesise relevant evidence from the literature in order to answer the specific review questions developed by the GDG. Thus, clinical practice recommendations are evidence-based, where possible, and, if evidence is not available, informal consensus methods are used (see Section 3.5.6) and the need for future research is specified.

3.5.1 Methodology

A stepwise, hierarchical approach was taken to locating and presenting evidence to the GDG. The NCCMH developed this process based on methods set out by NICE (*The Guidelines Manual* [NICE, 2009d]), and after considering recommendations from a range of other sources. These included:

- Clinical Policy and Practice Program of the New South Wales Department of Health (Australia)
- *BMJ Clinical Evidence*
- Grading of Recommendations: Assessment, Development and Evaluation (GRADE) Working Group
- New Zealand Guidelines Group
- NHS Centre for Reviews and Dissemination
- Oxford Centre for Evidence-Based Medicine
- Oxford Systematic Review Development Programme
- Scottish Intercollegiate Guidelines Network (SIGN)

- The Cochrane Collaboration
- United States Agency for Healthcare Research and Quality.

3.5.2 The review process

Scoping searches

A broad preliminary search of the literature was undertaken in July 2009 to obtain an overview of the issues likely to be covered by the scope, and to help define key areas. Searches were restricted to clinical guidelines, health technology assessment reports, key systematic reviews and randomised controlled trials (RCTs), and conducted in the following databases and websites:

- British Medical Journal Clinical Evidence
- Canadian Medical Association (CMA) Infobase [Canadian guidelines]
- Clinical Policy and Practice Program of the New South Wales Department of Health (Australia)
- Clinical Practice Guidelines [Australian Guidelines]
- Cochrane Central Register of Controlled Trials (CENTRAL)
- Cochrane Database of Abstracts of Reviews of Effects (DARE)
- Cochrane Database of Systematic Reviews (CDSR)
- Excerpta Medical Database (EMBASE)
- Guidelines International Network (G-I-N)
- Health Evidence Bulletin Wales
- Health Management Information Consortium [HMIC]
- Health Technology Assessment (HTA) database (technology assessments)
- Medical Literature Analysis and Retrieval System Online MEDLINE/MEDLINE in Process
- National Health and Medical Research Council (NHMRC)
- National Library for Health (NLH) Guidelines Finder
- New Zealand Guidelines Group
- NHS Centre for Reviews and Dissemination (CRD)
- OMNI Medical Search
- Scottish Intercollegiate Guidelines Network (SIGN)
- Turning Research Into Practice (TRIP)
- United States Agency for Healthcare Research and Quality (AHRQ)
- Websites of NICE and the National Institute for Health Research (NIHR) HTA Programme for guidelines and HTAs in development.

Existing NICE guidelines were updated where necessary. Other relevant guidelines were assessed for quality using the AGREE instrument (AGREE Collaboration, 2003). The evidence base underlying high-quality existing guidelines was utilised and updated as appropriate. Further information about this process can be found in The Guidelines Manual (NICE, 2009d).

Systematic literature searches

After the scope was finalised, a systematic search strategy was developed to locate all the relevant evidence. Searches were conducted in the following databases:

- CINAHL
- EMBASE
- MEDLINE / MEDLINE In-Process
- Psychological Information Database (PsycINFO)
- Cochrane Database of Abstracts of Reviews of Effects (DARE)
- Cochrane Database of Systematic Reviews (CDSR)
- Cochrane Central Register of Controlled Trials (CENTRAL)
- Health Technology Assessment (HTA) database
- Health Management Information Consortium (HMIC)
- International Bibliography of the Social Sciences (IBSS)
- PsycEXTRA
- PsycBOOKS

The search strategies were initially developed for Medline before being translated for use in other databases/interfaces. Strategies were built up through a number of trial searches, and discussions of the results of the searches with the review team and GDG, to ensure that all possible relevant search terms were covered. In order to assure comprehensive coverage, search terms for self-harm were kept purposely broad to help counter dissimilarities in database indexing practices, and imprecise reporting of study populations by authors in the titles and abstracts of records.

Reference Manager

Citations from each search were downloaded into Reference Manager (a software product for managing references and formatting bibliographies) and duplicates removed. Records were then screened against the inclusion criteria of the reviews before being quality appraised (see below). The unfiltered search results were saved and retained for future potential re-analysis to help keep the process both replicable and transparent.

Search filters

To aid retrieval of relevant and sound evidence, study design filters were, where appropriate, used to limit searches to systematic reviews, randomised controlled trials and observational studies. The systematic review and RCT filters are adaptations of pre-tested strategies designed by the Centre for Reviews and Dissemination (CRD) and the Health Information Research Unit of McMaster University, Ontario. The observational study filter was developed in-house. The filters, which comprise a combination of controlled vocabulary and free-text retrieval methods, maximise sensitivity (or recall) to ensure that as many potentially relevant records as possible are retrieved from a search.

Date and language restrictions

Systematic database searches were initially conducted in March 2010 up to the most recent searchable date. Search updates were generated on a 6-monthly basis, with the

1 final re-runs carried out in January 2011 ahead of the guideline consultation. After this
2 point, studies were only included if they were judged by the GDG to be exceptional (for
3 example, if the evidence was likely to change a recommendation).

4
5 Although no language restrictions were applied at the searching stage, foreign language
6 papers were not requested or reviewed, unless they were of particular importance to a
7 review question. Date restrictions were applied for searches for systematic reviews, and
8 for updates of published reviews only (see Appendix 9). No date restrictions were
9 imposed for the remainder of the searches.

10 *Other search methods*

11 Other search methods involved: 1) scanning the reference lists of all eligible publications
12 (systematic reviews, stakeholder evidence and included studies) for more published
13 reports and citations of unpublished research; 2) sending lists of studies meeting the
14 inclusion criteria to subject experts (identified through searches and the GDG) and
15 asking them to check the lists for completeness, and to provide information of any
16 published or unpublished research for consideration (see Appendix 6); 3) checking the
17 tables of contents of key journals for studies that might have been missed by the database
18 and reference list searches; 4) tracking key papers in the Science Citation Index
19 (prospectively) over time for further useful references.

20
21 Full details of the search strategies and filters used for the systematic review of clinical
22 evidence are provided in Appendix 9.

23 *Study selection and quality assessment*

24 All primary-level studies included after the first scan of citations were acquired in full
25 and re-evaluated for eligibility at the time they were being entered into the study
26 information database. More specific eligibility criteria were developed for each review
27 question and are described in the relevant clinical evidence chapters. Eligible systematic
28 reviews and primary-level studies were critically appraised for methodological quality
29 (see Appendix 11 for methodology checklists). The eligibility of each study was
30 confirmed by at least one member of the GDG.

31
32 For some review questions, it was necessary to prioritise the evidence with respect to the
33 UK context (that is, external validity). To make this process explicit, the GDG took into
34 account the following factors when assessing the evidence:

- 35
36
 - **participant factors** (for example, gender, age and ethnicity)
 - 37 • **provider factors** (for example, model fidelity, the conditions under which the
 - 38 intervention was performed and the availability of experienced staff to undertake
 - 39 the procedure)
 - 40 • **cultural factors** (for example, differences in standard care and differences in the
 - 41 welfare system).

1 It was the responsibility of the GDG to decide which prioritisation factors were relevant
2 to each review question in light of the UK context and then decide how they should
3 modify their recommendations.

4 *Unpublished evidence*

5 The GDG used a number of criteria when deciding whether or not to accept unpublished
6 data. First, the evidence must have been accompanied by a trial report containing
7 sufficient detail to properly assess the quality of the data. Second, the evidence must
8 have been submitted with the understanding that data from the study and a summary of
9 the study's characteristics would be published in the full guideline. Therefore, the GDG
10 did not accept evidence submitted as commercial in confidence. However, the GDG
11 recognised that unpublished evidence submitted by investigators might later be retracted
12 by those investigators if the inclusion of such data would jeopardise publication of their
13 research.

14 **3.5.3 Data extraction**

15 Study characteristics and outcome data were extracted from all eligible studies that met
16 the minimum quality criteria, using a bespoke database and Review Manager 5.0.25 (The
17 Cochrane Collaboration, 2011) and/or Word-based forms (see Appendix 11).

18
19 In most circumstances, for a given outcome (continuous and dichotomous), where more
20 than 50% of the number randomised to any group were lost to follow-up, the data were
21 excluded from the analysis (except for the outcome 'leaving the study early', in which
22 case, the denominator was the number randomised). Where possible, dichotomous
23 efficacy outcomes were calculated on an intention-to-treat basis (that is, a 'once-
24 randomised-always-analyse' basis). Where there was good evidence that those
25 participants who ceased to engage in the study were likely to have an unfavourable
26 outcome, early withdrawals were included in both the numerator and denominator.
27 Adverse effects were entered into Review Manager as reported by the study authors
28 because it is usually not possible to determine whether early withdrawals had an
29 unfavourable outcome. Where there was limited data for a particular review, the 50%
30 rule was not applied. In these circumstances the evidence was downgraded due to the
31 risk of bias.

32
33 Where some of the studies failed to report standard deviations (for a continuous
34 outcome) and where an estimate of the variance could not be computed from other
35 reported data or obtained from the study author, the following approach was taken.²

36
37 When the number of studies with missing standard deviations was less than one-third
38 and when the total number of studies was at least ten, the pooled standard deviation was
39 imputed (calculated from all the other studies in the same meta-analysis that used the
40 same version of the outcome measure). In this case, the appropriateness of the
41 imputation was made by comparing the standardised mean differences (SMDs) of those

² Based on the approach suggested by Furukawa and colleagues (2006).

1 trials that had reported standard deviations against the hypothetical SMDs of the same
2 trials based on the imputed standard deviations. If they converged, the meta-analytical
3 results were considered to be reliable.

4
5 When the conditions above could not be met, standard deviations were taken from
6 another related systematic review (if available). In this case, the results were considered
7 to be less reliable.

8
9 The meta-analysis of survival data was based on log hazard ratios and standard errors.
10 Since individual patient data were not available in included studies, hazard ratios and
11 standard errors calculated from a Cox proportional hazard model were extracted. Where
12 necessary, standard errors were calculated from confidence intervals or p-value
13 according to standard formulae (see the Cochrane Handbook for *Systematic Reviews of*
14 *Interventions*, 5.0.2, Higgins *et al.*, 2009). Data were summarised using the generic inverse
15 variance method using Review Manager.

16
17 Consultation with another reviewer or members of the GDG was used to overcome
18 difficulties with coding. Data from studies included in existing systematic reviews were
19 extracted independently by one reviewer and cross-checked with the existing data set.
20 Where possible, two independent reviewers extracted data from new studies. Where
21 double data extraction was not possible, data extracted by one reviewer was checked by
22 the second reviewer. Disagreements were resolved through discussion. Where consensus
23 could not be reached, a third reviewer or GDG members resolved the disagreement.
24 Masked assessment (that is, blind to the journal from which the article comes, the
25 authors, the institution and the magnitude of the effect) was not used since it is unclear
26 that doing so reduces bias (Jadad *et al.*, 1996; Berlin, 2001).

27 **3.5.4 Synthesising the evidence**

28 *Meta-analysis*

29 Where possible, meta-analysis was used to synthesise the evidence using Review
30 Manager. If necessary, reanalyses of the data or sub-analyses were used to answer review
31 questions not addressed in the original studies or reviews.

32
33 Dichotomous outcomes were analysed as relative risks (RR) with the associated 95% CI
34 (for an example, see Figure 1). A relative risk (also called a risk ratio) is the ratio of the
35 treatment event rate to the control event rate. An RR of 1 indicates no difference between
36 treatment and control. In Figure 1, the overall RR of 0.73 indicates that the event rate
37 (that is, non-remission rate) associated with intervention A is about three-quarters of that
38 with the control intervention or, in other words, the relative risk reduction is 27%.

39
40 The CI shows a range of values within which we are 95% confident that the true effect
41 will lie. If the effect size has a CI that does not cross the 'line of no effect', then the effect
42 is commonly interpreted as being statistically significant.

Review: NCCMH clinical guideline review (Example)
Comparison: 01 Intervention A compared to a control group
Outcome: 01 Number of people who did not show remission

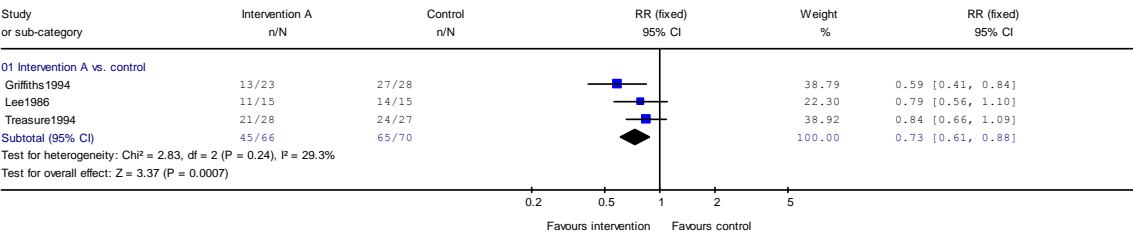


Figure 1: Example of a forest plot displaying dichotomous data

Continuous outcomes were analysed using the mean difference (MD), or standardised mean difference (SMD) when different measures were used in different studies to estimate the same underlying effect (for an example, see Figure 2). If reported by study authors, intention-to-treat data, using a valid method for imputation of missing data, were preferred over data only from people who completed the study.

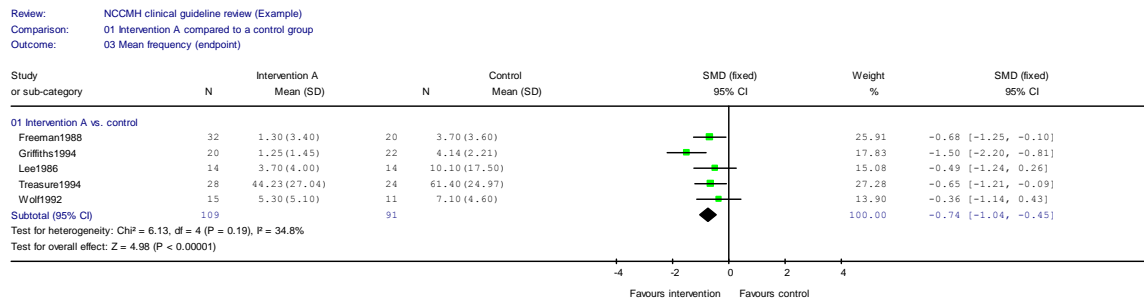


Figure 2: Example of a forest plot displaying continuous data.

Heterogeneity

To check for consistency of effects among studies, both the I^2 statistic and the chi-squared test of heterogeneity, as well as a visual inspection of the forest plots were used. The I^2 statistic describes the proportion of total variation in study estimates that is due to heterogeneity (Higgins & Thompson, 2002). The I^2 statistic was interpreted in the follow way based on Higgins and Green (2009):

- 0% to 40%: might not be important
- 30% to 60%: may represent moderate heterogeneity
- 50% to 90%: may represent substantial heterogeneity
- 75% to 100%: considerable heterogeneity.

Two factors were used to make a judgement about importance of the observed value of I^2 : first, the magnitude and direction of effects, and second, the strength of evidence for heterogeneity (for example, p-value from the chi-squared test, or a confidence interval for I^2).

Publication bias

Where there was sufficient data, we intended to use funnel plots to explore the possibility of publication bias. Asymmetry of the plot would be taken to indicate possible publication bias and investigated further.

Where necessary, an estimate of the proportion of eligible data that were missing (because some studies did not include all relevant outcomes) was calculated for each analysis.

3.5.5 Presenting the data to the Guideline Development Group

Study characteristics tables and, where appropriate, forest plots generated with Review Manager were presented to the GDG.

Where meta-analysis was not appropriate and/or possible, the reported results from each primary-level study were included in the study characteristics table (and where appropriate, in a narrative review).

Evidence profile tables

A GRADE³ evidence profile was used to summarise both the quality of the evidence and the results of the evidence synthesis (see Table 3 for an example of an evidence profile). The GRADE approach is based on a sequential assessment of the quality of evidence, followed by judgment about the balance between desirable and undesirable effects, and subsequent decision about the strength of a recommendation.

For each outcome, quality may be reduced depending on the following factors:

- **study design** (randomised trial, observational study, or any other evidence)
- **limitations** (based on the quality of individual studies)
- **inconsistency** (see Section 3.5.4 for how consistency was assessed)
- **indirectness** (that is, how closely the outcome measures, interventions and participants match those of interest)
- **imprecision** (based on the confidence interval around the effect size).

For observational studies, the quality may be increased if there is a large effect, plausible confounding would have changed the effect, or there is evidence of a dose-response gradient (details would be provided under the other considerations column). Each evidence profile also included a summary of the findings: number of patients included in each group, an estimate of the magnitude of the effect, and the overall quality of the evidence for each outcome.

³ For further information about GRADE, see www.gradeworkinggroup.org

Table 3: Example of GRADE evidence profile

Quality assessment							Summary of findings				
							No. of patients		Effect		Quality
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other	Intervention	Control	Relative (95% CI)	Absolute	
Outcome 1											
6	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Very serious ^{1,2}	None	8/191	7/150	RR 0.94 (0.39 to 2.23)	0 fewer per 100 (from 3 fewer to 6 more)	⊕⊕OO LOW
Outcome 2											
3	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	120/600	220/450	RR 0.39 (0.23 to 0.65)	30 fewer per 100 (from 17 fewer to 38 fewer)	⊕⊕⊕⊕ HIGH
Outcome 3											
3	Randomised trials	No serious limitations	Serious inconsistency ³	No serious indirectness	Very serious ^{1,2}	None	83	81	-	MD -3.51 (-11.51 to 4.49)	⊕OOO VERY LOW
Outcome 4											
3	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious ¹	None	88	93	-	SMD -0.26 (-0.50 to -0.03)	⊕⊕⊕O MODERATE
Outcome 5											
4	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Very serious ^{1,2}	None	109	114	-	SMD -0.13 (-0.6 to 0.34)	⊕⊕OO LOW
¹ Optimal information size not met.											
² The CI includes both 1) no effect and 2) appreciable benefit or appreciable harm.											
³ Considerable heterogeneity.											

Table 3: Example of GRADE evidence profile

Quality assessment							Summary of findings				
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other	No. of patients		Effect		Quality
							Intervention	Control	Relative (95% CI)	Absolute	
Outcome 1											
6	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Very serious ^{1,2}	None	8/191	7/150	RR 0.94 (0.39 to 2.23)	0 fewer per 100 (from 3 fewer to 6 more)	⊕⊕OO LOW
Outcome 2											
3	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	None	120/600	220/450	RR 0.39 (0.23 to 0.65)	30 fewer per 100 (from 17 fewer to 38 fewer)	⊕⊕⊕⊕ HIGH
Outcome 3											
3	Randomised trials	No serious limitations	Serious inconsistency ³	No serious indirectness	Very serious ^{1,2}	None	83	81	-	MD -3.51 (-11.51 to 4.49)	⊕OOO VERY LOW
Outcome 4											
3	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Serious ¹	None	88	93	-	SMD -0.26 (-0.50 to -0.03)	⊕⊕⊕O MODERATE
Outcome 5											
4	Randomised trials	No serious limitations	No serious inconsistency	No serious indirectness	Very serious ^{1,2}	None	109	114	-	SMD -0.13 (-0.6 to 0.34)	⊕⊕OO LOW
¹ Optimal information size not met.											
² The CI includes both 1) no effect and 2) appreciable benefit or appreciable harm.											
³ Considerable heterogeneity.											

3.5.6 Method used to answer a review question in the absence of appropriately designed, high-quality research

In the absence of appropriately designed, high-quality research, or where the GDG were of the opinion (on the basis of previous searches or their knowledge of the literature) that there were unlikely to be such evidence, an informal consensus process was adopted. This process focused on those questions that the GDG considered a priority.

Informal consensus

The starting point for the process of informal consensus was that a member of the GDG identified, with help from the systematic reviewer, a narrative review or key study that most directly addressed the review question. Where this was not possible, a brief review of the recent literature was initiated. These were then used as a basis for beginning an iterative process to identify lower levels of evidence relevant to the review question and to lead to written statements for the guideline. The process involved a number of steps:

1. A description of what is known about the issues concerning the clinical question was written by one of the GDG members.
2. Evidence from the existing studies was then presented in narrative form to the GDG and further comments were sought about the evidence and its perceived relevance to the review question.
3. Based on the feedback from the GDG, additional information was sought and added to the information collected. This included studies that did not directly address the review question but were thought to contain relevant data.
4. A summary of statements that directly addressed the review question were then developed.
5. Following this, on occasions and as deemed appropriate by the development group, the report was then sent to appointed experts outside of the GDG for peer review and comment. The information from this process was then fed back to the GDG for further discussion of the statements
6. Recommendations were then developed and could also be sent for further external peer review.
7. After this final stage of comment, the statements and recommendations were again reviewed and agreed upon by the GDG.

3.5.7 Forming the clinical summaries and recommendations

Once the GRADE evidence profiles relating to a particular review question were completed, summary evidence tables were developed (these tables are presented in the evidence chapters). Finally, the systematic reviewer in conjunction with the GDG produced a clinical evidence summary.

After the GRADE profiles and clinical summaries were presented to the GDG, the associated recommendations were drafted. In making recommendations, the GDG took into account the trade-off between the benefits and downsides of treatment as well as other important factors, such as economic considerations, social value judgements⁴, the requirements to prevent discrimination and to promote equality⁵, and the group's awareness of practical issues (Eccles *et al.*, 1998; NICE, 2009d).

Finally, to show clearly how the GDG moved from the evidence to the recommendations, each chapter has a section called 'from evidence to recommendations'. Underpinning this section is the concept of the 'strength' of a recommendation (Schunemann *et al.*, 2003). This takes into account the quality of the evidence but is conceptually different. Some recommendations are 'strong' in that the GDG believes that the vast majority of healthcare professionals and service users would choose a particular intervention if they considered the evidence in the same way that the GDG has. This is generally the case if the benefits clearly outweigh the harms for most people and the intervention is likely to be cost effective. However, there is often a closer balance between benefits and harms, and some service users would not choose an intervention whereas others would. This may happen, for example, if some service users are particularly averse to some side effect and others are not. In these circumstances the recommendation is generally weaker, although it may be possible to make stronger recommendations about specific groups of service users. The strength of each recommendation is reflected in the wording of the recommendation, rather than by using labels or symbols.

Where the GDG identified areas in which there are uncertainties or where robust evidence was lacking, they developed research recommendations. Those that were identified as 'high-priority' were included in the NICE version of the guideline.

3.6 HEALTH ECONOMICS METHODS

The aim of the health economics was to contribute to the guideline's development by providing evidence on the cost effectiveness of interventions for the longer term management of self-harm covered in the guideline. This was achieved by:

- systematic literature review of existing economic evidence
- decision-analytic economic modelling.

⁴ See NICE's Social Value Judgements: Principles for the Development of NICE Guidance: www.nice.org.uk/aboutnice/howwework/socialvaluejudgements/socialvaluejudgements.jsp

⁵ See NICE's equality scheme: www.nice.org.uk/aboutnice/howwework/NICEEqualityScheme.jsp

1 Systematic reviews of economic literature were conducted in all areas covered
2 in the guideline. Economic modelling was undertaken in areas with likely
3 major resource implications, where the current extent of uncertainty over cost
4 effectiveness was significant and economic analysis was expected to reduce
5 this uncertainty, in accordance with *The Guidelines Manual* (NICE, 2009d).
6 Prioritisation of areas for economic modelling was a joint decision between
7 the Health Economist and the GDG. The rationale for prioritising review
8 questions for economic modelling was set out in an economic plan agreed
9 between NICE, the GDG, the Health Economist and the other members of the
10 technical team. The economic question selected as a key issue addressed by
11 economic modelling was:

- 12
13 • Cost-effectiveness of psychological intervention and Treatment-as-
14 usual for prevention of self-harm repetition among people who self-
15 harm.

16
17 In addition, literature on the health-related quality of life of people who self-
18 harm was systematically searched to identify studies reporting appropriate
19 utility scores that could be utilised in a cost-utility analysis.

20
21 The rest of this section describes the methods adopted in the systematic
22 literature review of economic studies. Methods employed in economic
23 modelling are described in the respective sections of the guideline.

24 **3.6.1 Search strategy for economic evidence**

25 *Scoping searches*

26 A broad preliminary search of the literature was undertaken in July 2009 to
27 obtain an overview of the issues likely to be covered by the scope, and help
28 define key areas. Searches were restricted to economic studies and health
29 technology assessment reports, and conducted in the following databases:

- 30
31 • EMBASE
- 32 • MEDLINE / MEDLINE In-Process
- 33 • Health Technology Assessment (HTA) database (technology
34 assessments)
- 35 • NHS Economic Evaluation Database (NHS EED)

36
37 Any relevant economic evidence arising from the clinical scoping searches
38 was also made available to the health economist during the same period.

39 *Systematic literature searches*

40 After the scope was finalised, a systematic search strategy was developed to
41 locate all the relevant evidence. Searches were restricted to economic evidence

(including full and partial economic evaluations) and health technology assessment reports, and conducted in the following databases:

- CINAHL
- EconLit
- EMBASE
- MEDLINE / MEDLINE In-Process
- PsycINFO
- Health Technology Assessment (HTA) database (technology assessments)
- NHS Economic Evaluation Database (NHS EED)

Any relevant economic evidence arising from the clinical searches was also made available to the health economist during the same period.

The search strategies were initially developed for Medline before being translated for use in other databases/interfaces. Strategies were built up through a number of trial searches, and discussions of the results of the searches with the review team and GDG, to ensure that all possible relevant search terms were covered. In order to assure comprehensive coverage, search terms for self-harm were kept purposely broad to help counter dissimilarities in database indexing practices, and imprecise reporting of study populations by authors in the titles and abstracts of records.

Reference Manager

Citations from each search were downloaded into Reference Manager (a software product for managing references and formatting bibliographies) and duplicates removed. Records were then screened against the inclusion criteria of the reviews before being quality appraised. The unfiltered search results were saved and retained for future potential re-analysis to help keep the process both replicable and transparent.

Search filters

The search filter for health economics is an adaptation of a pre-tested strategy filter designed by Centre for Reviews and Dissemination (CRD) (2007). The search filter is designed to retrieve records of economic evidence (including full and partial economic evaluations) from the vast amount of literature indexed to major medical databases such as Medline. The filter, which comprises a combination of controlled vocabulary and free-text retrieval methods, maximises sensitivity (or recall) to ensure that as many potentially relevant records as possible are retrieved from a search. Full details of the filter are provided in Appendix 12.

Date and language restrictions

1 Systematic database searches were initially conducted in March 2010 up to the
2 most recent searchable date. Search updates were generated on a 6-monthly
3 basis, with the final re-runs carried out in January 2011 ahead of the guideline
4 consultation. After this point, studies were included only if they were judged
5 by the GDG to be exceptional (for example, the evidence was likely to change
6 a recommendation).

7
8 Although no language restrictions were applied at the searching stage,
9 foreign language papers were not requested or reviewed, unless they were of
10 particular importance to an area under review. All the searches were
11 restricted to research published from 1995 onwards in order to obtain data
12 relevant to current healthcare settings and costs.

13 *Other search methods*

14 Other search methods involved scanning the reference lists of all eligible
15 publications (systematic reviews, stakeholder evidence and included studies
16 from the economic and clinical reviews) to identify further studies for
17 consideration.

18
19 Full details of the search strategies and filter used for the systematic review of
20 health economic evidence are provided in Appendix 12.

21 **3.6.2 Inclusion criteria for economic studies**

22 The following inclusion criteria were applied to select studies identified by
23 the economic searches for further consideration:

- 24
25 • Only studies from Organisation for Economic Co-operation and
26 Development countries were included, as the aim of the review was to
27 identify economic information transferable to the UK context.
- 28 • Selection criteria based on types of clinical conditions and patients as
29 well as interventions assessed were identical to the clinical literature
30 review.
- 31 • Studies were included provided that sufficient details regarding
32 methods and results were available to enable the methodological
33 quality of the study to be assessed, and provided that the study's data
34 and results were extractable. Poster presentations of abstracts were
35 excluded.
- 36 • Full economic evaluations that compared two or more relevant options
37 and considered both costs and consequences were included in the
38 review.
- 39 • Economic studies were included if they used clinical effectiveness data
40 from an RCT, a prospective cohort study, or a systematic review and
41 meta-analysis of clinical studies. Studies that had a mirror-image or
42 other retrospective design were excluded from the review.

- Studies were included only if the examined interventions were clearly described. This involved the dosage and route of administration and the duration of treatment in the case of pharmacological therapies; and the types of health professionals involved as well as the frequency and duration of treatment in the case of psychological interventions. Evaluations in which medications were treated as a class were excluded from further consideration.
- Studies that adopted a very narrow perspective, ignoring major categories of costs to the NHS, were excluded; for example studies that estimated exclusively drug acquisition costs or hospitalisation costs were considered non-informative to the guideline development process.

3.6.3 Applicability and quality criteria for economic studies

All economic papers eligible for inclusion were appraised for their applicability and quality using the methodology checklist for economic evaluations recommended by NICE (NICE, 2009d), which is shown in Appendix 13 of this guideline. The methodology checklist for economic evaluations was also applied to the economic models developed specifically for this guideline. All studies that fully or partially met the applicability and quality criteria described in the methodology checklist were considered during the guideline development process, along with the results of the economic modelling conducted specifically for this guideline.

3.6.4 Presentation of economic evidence

The economic evidence considered in the guideline is provided in the respective evidence chapters, following presentation of the relevant clinical evidence. The references to included studies and the respective evidence tables with the study characteristics and results are provided in Appendix 14. Methods and results of economic modelling undertaken alongside the guideline development process are presented in the relevant evidence chapters. Characteristics and results of all economic studies considered during the guideline development process (including modelling studies conducted for this guideline) are summarised in economic evidence profiles accompanying respective GRADE clinical evidence profiles in Appendix 17.

3.6.5 Results of the systematic search of economic literature

The titles of all studies identified by the systematic search of the literature were screened for their relevance to the topic (that is, economic issues and information on health-related quality of life in people who self-harm). References that were clearly not relevant were excluded first. The abstracts of all potentially relevant studies (12 references) were then assessed against the inclusion criteria for economic evaluations by the health economist. Full texts of the studies potentially meeting the inclusion criteria (including those for

which eligibility was not clear from the abstract) were obtained. Studies that did not meet the inclusion criteria, were duplicates, were secondary publications of one study, or had been updated in more recent publications were subsequently excluded. Finally, 2 economic studies that fully or partially met the applicability and quality criteria were considered at formulation of the guideline recommendations.

3.7 STAKEHOLDER CONTRIBUTIONS

Professionals, service users, and companies have contributed to and commented on the guideline at key stages in its development. Stakeholders for this guideline include:

- Service users and carer stakeholders: national patient and carer organisations that represent the interests of people whose care will be covered by the guideline
- local patient and carer organisations: but only if there is no relevant national organisation
- professional stakeholders' national organisations: that represent the healthcare professionals who provide the services described in the guideline
- commercial stakeholders: companies that manufacture drugs or devices used in treatment of the condition covered by the guideline and whose interests may be significantly affected by the guideline
- providers and commissioners of health services in England and Wales
- statutory organisations: including the Department of Health, the Welsh Assembly
- Government, NHS Quality Improvement Scotland, the Healthcare Commission and the National Patient Safety Agency
- research organisations that have carried out nationally recognised research in the area.

NICE clinical guidelines are produced for the NHS in England and Wales, so a 'national' organisation is defined as one that represents England and/or Wales, or has a commercial interest in England and/or Wales.

Stakeholders have been involved in the guideline's development at the following points:

- commenting on the initial scope of the guideline and attending a scoping workshop held by NICE
- contributing possible review questions and lists of evidence to the GDG
- commenting on the draft of the guideline
- highlighting factual errors in the pre-publication check.

3.8 VALIDATION OF THE GUIDELINE

Registered stakeholders had an opportunity to comment on the draft guideline, which was posted on the NICE website during the consultation period. Following the consultation, all comments from stakeholders and others were responded to, and the guideline updated as appropriate. The GRP also reviewed the guideline and checked that stakeholders' comments had been addressed.

Following the consultation period, the GDG finalised the recommendations and the NCCMH produced the final documents. These were then submitted to NICE for the pre-publication check where stakeholders are given the opportunity to highlight factual errors. Any errors are corrected by the NCCMH, then the guideline is formally approved by NICE and issued as guidance to the NHS in England and Wales.

4 EXPERIENCE OF CARE

4.1 INTRODUCTION

This chapter provides an overview of the experience of people who self-harm including different age groups such as young people and adults, and special groups such as those with mild learning disabilities, males or those with borderline personality disorder, and their families/carers.

The first section comprises first-hand personal accounts written by people who self-harm and carers, which provide an understanding of self-harm, accessing services, having treatment and caring for someone who self-harms. It should be noted that these accounts are not representative of the experiences of all people who self-harm and therefore can only ever be illustrative. For instance, the accounts are all written by adults who self-harm and most of them used the method of cutting.

The second section of the chapter includes a review of the qualitative literature which provides a basis for the recommendations, found at the end of the final section.

4.2 PERSONAL ACCOUNTS – PEOPLE WHO SELF-HARM

4.2.1 Introduction

The writers of the personal accounts from people who self-harm were contacted through representatives on the GDG and through various agencies that had access to people who self-harm. The people who were approached to write the accounts were asked to consider a number of questions when composing their narratives. These included:

- When did you first seek help for self-harm and whom did you contact? (Please describe this first contact.)
- What helped or did not help you gain access to services? Did a friend or family member help you gain access to these services?
- Do you think that any life experiences led to the onset of the problem? If so, please describe if you feel able to do so.
- In what ways has the self-harm affected your everyday life (such as education, employment and making relationships) and the lives of those close to you?
- What possible treatments were discussed with you?
- What treatment(s) did you receive? Please describe any drug treatment and/or psychological therapy.

- Was the treatment(s) helpful? (Please describe what worked for you and what didn't work for you.)
- How would you describe your relationship with your practitioner(s) (for example, your GP, psychologist or other)
- Did you use any other approaches to help your self-harm in addition to those provided by NHS services, for example private treatment? If so please describe what was helpful and not helpful.
- Do you have any language support needs, including needing help with reading or speaking English? If so, did this have an impact on your understanding of the self-harm or on receiving treatment?
- Did you attend a support group and was this helpful? Did family and friends close to you or people in your community help and support you?
- How has the nature of the problem changed over time?
- How do you feel now?
- If your self-harm has improved, do you use any strategies to help you to stay well? If so, please describe these strategies.

Each author signed a consent form allowing the account to be reproduced in this guideline. Four personal accounts from people with self-harm were received in total.

4.2.2 Personal account A

I started to harm myself when I was 10 years old. I don't remember what was happening in my life at the time, but I know I always felt alone, like I didn't fit in or belong. On paper, I had the perfect family: a Mum and Dad, and a younger sister on whom I doted. Yet feelings of pain and struggle began to surface from an early age, when I was too young to have the words to describe what I was feeling. These feelings became increasingly pronounced and at 13 my self-destruction escalated. I began to harm myself more and more severely, either cutting or burning myself and with little regard for the long-term consequences of my actions. Despite people around me having some inclination about what was happening to me, no one intervened, and my difficulties continued, shrouded in a secrecy that allowed them to get worse.

As I headed towards adulthood, self-harm was still a part of my life on a daily basis. This got much worse in my twenties, when I no longer lived at home, and where I had the freedom and independence for the self-harm to worsen both in frequency and severity. I had always cut myself, but somehow the superficial cuts of my youth no longer satisfied the growing self-loathing and despair that I felt as an adult. The cuts got deeper, and more frequent; they migrated to other areas of my body that could be well concealed, and when

1 this no longer provided the same level of relief, I began to self-poison. I had
2 turned to a range of substances to poison myself with, ranging from
3 significant and life threatening amounts of paracetamol, to other painkilling
4 medication, iron tablets, and psychiatric medication. On one occasion I used
5 weed killer to poison myself. Both cutting and poisoning myself had escalated
6 to the point where they warranted medical intervention. I ended up sitting in
7 an A & E department like so many others, wondering what was going to
8 happen to me, or what people would think, nursing cuts so deep and painful
9 that I would need stitching. The overdosing and self-poisoning required
10 countless hospital admissions to undo the damage to myself. Some of these
11 acts were direct attempts upon my life, and others were in the absence of care
12 over whether I lived or died; I no longer cared. All I wanted was peace inside
13 from the constant struggle and torment.

14
15 There were times when I attended A & E voluntarily, but there were other
16 times when I was taken there by ambulance after becoming unwell or after
17 collapse. This aspect of my self-destruction was painful for those who
18 witnessed it. Although I tried to keep my self-harm private, sometimes I was
19 so unwell that other people in my life needed to know.

20
21 Some friends watched me do these things to myself, tormented and
22 frightened by what was going to happen to me. These relationships waned.
23 People could no longer invest in an attachment to someone who didn't have
24 the will to live anymore. A couple of friends, in particular, attempted to
25 advocate on my behalf to services, to let them know that I needed help and
26 support. It was so hard for me to ask for help, because I believed that I
27 deserved none, and when people did offer their help I was suspicious of it. It
28 was hard for me that people needed to intervene, and it was even harder
29 because it was only when there was a chorus of voices seeking help that there
30 was any action from services.

31
32 I feared statutory services and I didn't want to go to a doctor as I felt so
33 ashamed. Instead, I looked for help in the voluntary sector and attended a
34 support group for women who self-harmed. Here I began to focus solely
35 upon myself as a self-harmer. I was exposed to the harming of others, and this
36 made my harming much worse during this time. In my experience, support
37 groups are unhelpful unless they are well moderated; for me it was an arena
38 in which competitive urges towards self- destruction could rise. Due to this I
39 ended up in A & E countless times for treatment for the cuts and for
40 overdosing.

41
42 My GP became aware of my problems, and I was seen by a psychiatrist, and a
43 CPN. The self-harm was so severe that I was deemed too high a risk for
44 psychotherapy.

1 I was prescribed medication (Seroxat) that only worsened my condition, as I
2 entered a world where all I could think about was self-harm. I soon became
3 an inpatient because of the level of risk I posed to myself. Ultimately therapy
4 was offered by an astounding therapist who, with my CPN, recognised that
5 unless some intervention was offered, it was likely that I might end up
6 completing suicide. Self-harm, suicidality and suicide became a messed-up
7 continuum that I found very difficult to pick apart.

9 The CPN and therapist worked collaboratively to try and keep me safe. They
10 were on hand to support me in managing my distress and learn to accept help
11 and support and begin to articulate my struggles instead of turning them
12 inwards. Their hard work was matched by my own. At first, the self-harm
13 continued to escalate – the more I talked about everything that hurt, the more
14 I ruminated upon self-destruction. But they persisted, and I persisted. The
15 progress I made was in tiny steps, first just increasing my awareness of why I
16 was self-harming. Countless times I had been asked ‘why I was doing this’
17 but I am not sure I really knew. I just responded to my distress in a physical
18 way, and to begin to do things differently, I had to at first understand the
19 motivation behind the harm.

21 No one had ever really talked about what my options were for treatment. In
22 fact the opposite: I have a range of really damaging experiences such as being
23 called a ‘time waster’, or being treated by CPNs as someone who was not
24 willing to engage, and written off as an ‘expected suicide’ by the local crisis
25 intervention team. This couldn’t be it for me. I was told each time I was in
26 hospital that I ‘had to be’ assessed, and that my level of risk meant that people
27 were going to step in and tell me what to do. I never really had a choice,
28 except to choose to take a gamble on those kind individuals who were, by
29 chance, involved in my life, and to learn to get better.

31 My relationships with the therapist and my CPN were absolutely crucial to
32 me overcoming the self-harm, as was my relationship with two GPs, who
33 collectively gave me the skills to save my own life. Without their dedication,
34 compassion and commitment I doubt I would be here writing these words for
35 you to read. I was receiving CBT, and soon that and all the support helped me
36 to recognise that the self-harm was only but a symptom of a damaged sense
37 of self and distress that had been rampaging out of control since I was a child.

39 Over the years I was prescribed a number of other medications, including
40 oxazepam, chlorpromazine, mirtazapine, quetiapine, lorazepam, temazepam
41 and carbamazepine. I needed none of these – what I needed was someone to
42 hear me and help me, and with patience and care, to explore and overcome
43 these difficulties. Medicating a problem like this was only ever going to be a
44 temporary measure, a prop. I ended up taking three or four medications at

1 any one time, and I should never have been medicated to this level – all it did
2 was perpetuate feelings of dissociation and lack of control.

3
4 There were many life experiences that contributed to my self-harm and
5 distress and medication was not going to remedy these. Mainly these were
6 related to a sense of autonomy and worth, with a range of invalidating
7 experiences leading me to feel as though I had no right to my emotional
8 experience, and therefore no recourse to expressing or exploring these strains
9 naturally. Everything that I encountered in an emotional way was
10 subsequently subjugated, and an internal process of dismissing my real
11 feelings became second nature. These feelings then popped up somewhere
12 else, where self-harm was used to manage them. Getting better involved re-
13 learning and relating to my emotion, validating my experiences, and
14 developing greater skills at emotional management and regulation.

15
16 For a long time I was isolated beyond measure, almost living two lives. I
17 ended up withdrawing from almost all social activity, and gave up my well-
18 paid job because I could no longer sustain the life that I was trying to live. For
19 years I was out of work, with very little else happening in my life except for
20 distress, despair, self-harm and sleeplessness.

21
22 Getting better was a long road. When the 2004 NICE self-harm guideline was
23 being developed, I was one of the individuals interviewed and my account of
24 my experiences was used in the guidance. To be able to sit here and write
25 from a different perspective as recovered, as another guideline on self-harm is
26 developed, is an interesting exercise. I now work as a therapist. I know that
27 there was very little access to services when I needed it the most. I was
28 repeatedly met with judgement or contempt from those others involved in my
29 care who never took the time to get to know me, the person behind the harm.
30 So I now run a service called Harmless, which was established out of direct
31 experience of the lack of services for those who self-harm.

32
33 The distress that I experience now I relate to in a more managed way – I
34 understand myself so much more and accept that there are times when I will
35 struggle more than others. I also know that no matter what – there is no going
36 back for me. Self-harm is a thing of my past. I have learnt a new way of being,
37 and I believe faithfully that this can happen for other people if we develop
38 and deliver appropriate and needs-led services that are dedicated to meeting
39 people in their distress and helping them to move through this at their own
40 pace.

41 42 **4.2.3 Personal account B**

43 Disgust. Shame. The look of pity. Intrigue. Fear. These are views I have
44 experienced, and unfortunately become accustomed to, as a 28-year old

1 woman with scars covering my arms. I have not self-harmed for just over 3
2 years now, but the scars are still on my arms and shall remain there for life.

3
4 When I first spoke to someone (a teacher) about my self-harm urges, I was
5 only 14 or 15 years old. She was fantastic and offered me the school
6 counsellor's services. As I got older and life circumstances took a hold of me,
7 the self-harm in the form of cutting, gradually grew worse.

8
9 At the age of about 21, I started attending A&E to be stitched back together.
10 There were times when, unfortunately, the experience at A&E itself left me
11 feeling worthless. There could be one fantastic triage nurse or doctor but their
12 care would be undermined by another nurse, doctor or receptionist whose
13 care or attitude would be cold or their frustration towards me for causing
14 damage to my own body would show. I think there were times when the fact
15 that I am of South-Asian origin, living in a city with a high Asian population,
16 led to pre-judgements being made of me. Doctors assumed that the reason
17 why I had self-harmed was due to a cultural conflict. They did not wait or
18 ask; if they had done so they would have found it was actually due to
19 growing up in an abusive home, and having a child out of wedlock may be a
20 factor, although this was by no means the foundation of my problems.

21
22 It is difficult to remember exactly how I felt during the periods of cutting as it
23 is like I was a totally different person to who I am now. I do recall being at a
24 loss, angry and frustrated – I was scared. The fear of hurting others, especially
25 my daughter was very real and this led me to justify my cutting; I was not
26 hurting anyone else, thereby it was all OK. During the time I cut, there was no
27 pain; looking back now it shocks me that I did this to myself. After cutting,
28 however, the pain was excruciating: small cuts stung, big cuts really hurt. But
29 practicalities took over first: how was I going to dress them? Did I need to go
30 to hospital? What was I going to tell my daughter? I did regret the cuts I made
31 because they were not really stating my case for sanity, however they
32 accomplished something – they helped me through an immensely difficult
33 period of my life.

34
35 The care and treatment that I have received has been mixed and difficult to
36 label as 'good' or 'bad'. Within each service there are individuals who shine
37 through. It is the triage nurse who took the extra moment to tell me that I
38 should not worry about my daughter and placed a hand gently and
39 reassuringly on my shoulder. It is the doctor who when stitching me up did
40 not rush and make me feel as if I had committed a sin, but instead spoke to
41 me and informed me of the psychiatric liaison team who were available. It is
42 the CPN who comes every day and calls in between visits, listens to what I
43 have to say and does not just fill out the care plan. It is the members of the
44 home treatment team who will take a few minutes out to sit down and not
45 simply check that I am taking my medication. It is the psychiatric consultant

1 who puts away all his notes and lets me explain what is going on in my head
2 without assuming he knows my problems. It is the psychotherapist who does
3 not rush me and allows me to talk or remain silent.

4
5 I have had input from GPs, A&E staff, psychiatric unit staff, mental health
6 nurses, CPNs and the home treatment team. Alongside all these individuals I
7 have also been fortunate to have had the support of some of the best
8 counsellors and psychotherapists I could ever wish to meet. All of these
9 people working together, with not just one another but also with me, has, in
10 my opinion, led to my recovery. My own circumstances were made more
11 bearable and workable when services worked together: my therapist
12 understanding the impact the medication I was taking was having on my
13 mood helped me in therapy as I could make sense of my mood swings; my
14 key worker in the housing project knowing the impact the medication was
15 having upon my ability to care for my daughter also helped as it meant social
16 services were not unnecessarily brought into the situation.

17
18 My family have found it difficult to understand my self-harm as well as my
19 bipolar disorder (which was diagnosed around 2004); maybe it is a cultural
20 issue or maybe it is just simply too distressing for them to acknowledge. My
21 friends have taken the time to learn about self-harm and understand that
22 removing all sharp objects only benefits their conscience, and in reality put
23 me at risk because I was more likely to not 'safe self-harm'.

24
25 I have a beautiful 9-year old daughter who is now aware of the story behind
26 my scars. It was not easy explaining self-harm to her, but I knew it was such a
27 big part of me; I needed to tell her because I could not hide it. I wish that
28 everyone could take a leaf out of the innocent book of a child's mind. It is so
29 simple; there is no judgement, just honest questions and accepting responses.
30 She still saw me as 'Mum', but 'Mum who got very sad at times and hurt
31 herself'. Unfortunately there were those who thought I posed a risk to my
32 daughter due to my self-harm, but thankfully they soon realised this was not
33 the case.

34
35 People constantly ask how it is that I have managed to stay 'well' for so long
36 and not self-harm. The true answer is that I do not have a definitive answer. I
37 can only say that I know that therapy really played a major part in my life.
38 The ability to finally have an opportunity to open up that locked box of
39 terrible memories to someone in a safe and supportive environment had a
40 profound impact upon me. Don't get me wrong, it was scary and there were
41 times when therapy itself led to self-harm episodes, but without those terribly
42 tough sessions, I hate to think what my life would be like now. Would I still
43 be self-harming to the degree that I was? Medication, as much as I hate it, also
44 played its part, but only once I began to understand what the tablets were for
45 and how different ones benefited, or, hindered me. Getting the right

1 combination enabled me to be rested (zopiclone), less agitated (lorazepam)
2 and keep my mood stable (lithium/ antidepressants). This in combination
3 with therapy, in combination with supportive professionals, is what has
4 enabled me to now be 'well', a better mother, and a full time student at
5 university studying for, ironically, a psychology degree! I am now in control.
6

7 **4.2.4 Personal account C⁶**

8 The first time I self-harmed was when I was 15 years old. I was taking GCEs
9 and CSEs at school. There was a lot of pressure from my parents as I was
10 going to be the first person in their family to go to college and become a
11 teacher. My grandmother had wanted to teach but poverty intervened and at
12 14 she was a servant in a big house, my mother had a fantasy of teaching but
13 lacked the intellect so it was pretty clear that I was there to fulfil their dreams.
14 I didn't want to become a teacher; I wanted to learn what I wanted to be. I
15 wanted to leave home and see strange things. I wanted to stop living safely
16 and take some risks. I wanted to go out when it was cold without wearing a
17 scarf or cross the road without being that careful. I wanted to drink, take
18 drugs and meet the kind of men I wasn't supposed to.
19

20 A few weeks before my exams began, having missed the mocks due to illness,
21 I felt as though I was shattering into a thousand pieces. No matter what I did
22 to try and rebuild myself it was the wrong thing. My mother hectored me in
23 to revising to get the results she needed. It was made clear that when I
24 qualified I'd still live in the same town and that I would be expected to
25 support my parents financially. I'd been supporting them emotionally, being
26 their surrogate parents since I was 12 and it was just too much. I later learned
27 that it was when I was around 15 years old that I began to experience bipolar
28 disorder for the first time and that makes a lot of sense. My parents didn't
29 notice, except for the odd moment, that I was under a great deal of stress and
30 then they wrote me off as being difficult. I've spent my whole life being
31 difficult.
32

33 I found myself out in the dark one night, walking around terraced streets that
34 were too narrow by the day and by the night narrower still so I had to turn
35 my anorectic body sideways to make my way through without banging my
36 bony elbows on the doors as I passed by. It wasn't the best neighbourhood in
37 the world. We had a poly, a town centre and a red light district all within a
38 few hundred yards. Across the main road was the area that even the residents
39 didn't go to at night. At the top of the road was a school in a few acres of
40 ground where my brother's friend had found a hanging body one morning.
41 Not the sort of place you should let your kids roam around after dark.

⁶ Reproduced with permission from: <http://weirdsid.wordpress.com/>
(accessed February 2011)

1 I heard a noise behind me and began to run as fast as my barely strung
2 together body would take me, tripping in the dark knee first on to a pile of
3 glass. The noise behind me was in my head. My school trousers were ruined,
4 my hands were filthy, I was crying but I felt relieved. The nagging and
5 shouting love-in I got when I returned home was spectacular. What was I
6 doing out? Well actually nobody had realized that I wasn't there so I always
7 felt that it was a pretty redundant question. Much emphasis was laid upon
8 how much the family relied upon me and how I had to stop being so dramatic
9 and pass my exams. The relief that I'd felt earlier quickly disappeared.
10 Adding to the pressure was the fact that I'd formed a relationship with
11 someone older from school. I was 15 and he was 18. He was pressuring me
12 into having sex with him; my mother was pressuring me to marry him. I was
13 staying with him because he was joining the army and I thought it would be
14 an escape from the family that held me so tightly against my will. I felt
15 kidnapped in my own home. Life was a mess.

16
17 I passed the exams and left school. I didn't go onto further education I went
18 out to work. My family was furious especially as one of the jobs I took was in
19 a factory. It suited me well and the money was fantastic and the accidental
20 injuries were frequent. I still have the faded scars on my hands, each one a
21 moment of misery blissfully relieved.

22
23 I had no idea until I was in my mid forties why I really did what I did. A
24 consultant psychiatrist was doing a study on self-harm and asked me to be
25 part of the study. There was a recorded session with a researcher and I
26 described my experiences of what I did, how it felt, what the outcome was.
27 Even now as I'm typing this I feel the scars on my arm twitching. That's
28 usually a sign that something is stressful and that harm could be on the way. I
29 had to stop wearing earrings because I always felt tempted to pull them out
30 the hard way when I felt my scars twitch.

31
32 I sat in a room in a psychiatric out patients department. A lovely room with a
33 plant in that I tended each time I went. As the researcher settled herself and
34 set up the recording equipment I had my chat with the plant, watered it,
35 washed its leaves, wasted some time until I had to sit down and begin to talk.
36 I wanted to talk but, like all of these experiences, sometimes you learn truths
37 about yourself that you'd rather you didn't.

38
39 We talked of when I harmed and the ritual. Had there been any time when I
40 hadn't followed this pattern of harming. Surprisingly yes, a ten-year gap
41 during the time I was conscientiously drinking England dry. Yet another form
42 of self-harm.

43
44 We talked of why I harmed and the outcome and this is why I can never say
45 that I will stop harming myself. I feel pressure building up inside me when I

1 have mood swings. I have violent moods swings. They're sudden, massive
2 physical attacks that my mind wreaks on my body. I have no control over
3 them but I can gain relief from them. I am a fully inflated balloon waiting to
4 explode loudly. The self-harm is a strip of sellotape over the balloon and a pin
5 piercing the balloon through the sellotape. The balloon deflates slowly, easily,
6 painlessly, and comfortably. It leaves me exhausted, ravaged, a mess of tears,
7 laughter, sadness and joy. It leaves me alive because without it I would surely
8 kill myself.

10 As I harm I get a hit. A legal shot of a drug I never used in my hedonistic days
11 as an abuser. That's probably the truest reason why I won't stop harming.
12 I've tried to stop. I've tried drawing on myself and holding ice and all of the
13 other things that don't come close to stopping me want to die. I have
14 formulated a way of harming safely with the knowledge and consent of my
15 GP and my consultant. It's not ideal but it keeps me alive and scarred as
16 opposed to dead and without a mark.

17 **4.2.5 Personal account D**

18 I first suffered from depression in my late teens and early twenties, after what
19 I had always assumed was the usual teenage angst and drama became more
20 serious. I became withdrawn from my friends and family, and had negative
21 thoughts about myself and those around me. I believed that I was worthless,
22 and I assumed everyone else agreed. At some point – I don't remember the
23 first time – I started cutting myself. I used a razor blade to carve increasingly
24 deep and angry wounds into my arms.

26 It was at this point that my parents decisively intervened, and involved our
27 GP. I was prescribed antidepressants and referred to a specialist. As this was
28 the mid 1990s, and I was still very new to the terminology of mental health
29 disorders, I don't remember exactly what drugs I took. I visited the
30 psychiatric department of my local hospital as a regular outpatient, and I
31 finally found a person to whom I felt I could really talk. At the time, I didn't
32 really care what qualifications she had – I just knew that, for the first time, I
33 felt that I was managing the problem, and not being managed by it.

35 With the support of my family, my health improved, and I went on to
36 university – a year older than my peers but more confident in my ability to
37 deal with the stresses and pressures of life. In later years, I was able to
38 identify what I saw as early warnings of a relapse, and manage the symptoms
39 before I lost control.

41 Fifteen years later, however, in my mid-thirties, I became depressed again.
42 Now with a wife and child, and all the responsibilities that entails, I found
43 that my working environment caused severe anxiety and I quickly lost my

1 ability to manage the symptoms. Eventually, I began cutting myself whilst at
2 work.

3
4 It's difficult to say definitively why I cut myself. There was certainly an
5 element of release involved – immediately after cutting, I would feel better,
6 less anxious, and so that feeling of relief became an incentive to cut again. I
7 also believe I wanted to create a physical manifestation of the emotional
8 turmoil – a physical wound is so much more visible and obvious. However,
9 there's a clear paradox here because I didn't want anyone else to see the
10 wounds. Perhaps I was creating this physical evidence to convince myself that
11 there was something wrong.

12
13 I went to see my GP seeking some medication that I naively believed would
14 magically make the problem disappear. I was prescribed an antidepressant
15 (mirtazapine), and my doctor also took time to ask me how I felt during the
16 periods of depression and anxiety, and how I felt when I was self-harming.
17 She asked what I thought might be causing the problems. Although I didn't
18 have the answers, I appreciated the questions being asked.

19
20 I am usually a self-confident and self-reliant person and therefore I found it
21 very difficult to ask for help – it felt like I was exposing myself. Although I
22 had no previous relationship with my GP, she was patient, understanding
23 and sympathetic. As my treatment continued, I found my fortnightly
24 consultations with her to be a useful barometer of my progress.

25
26 Initially, I withdrew from my 'normal' life – I stopped working and spent
27 little time with my family, preferring my own company. I would try to read,
28 but found I could only concentrate for short periods of time before my
29 thoughts would wander. During this time I continued to cut myself when I
30 felt particularly worthless.

31
32 After several weeks, I was assessed by the local mental health team and
33 referred to a group CBT course. This was a classroom-based course with
34 around eight other service users. I found this of limited use, as I was so
35 anxious at the prospect of joining the group, I found it difficult to concentrate
36 on the content. Also, I had no relationship or rapport with the chap who was
37 delivering the content, so I found what he was saying did not carry much
38 weight.

39
40 A friend gave me a book produced by the National Self-harm Network about
41 'Safe Cutting'. This was useful because, as silly as this might sound, I didn't
42 want to do any serious damage to myself. Although there were times when I
43 felt suicidal, these were very different from the times I cut myself. When I was
44 cutting myself, the motivation was certainly not to end my life, but to hurt
45 myself – to damage myself.

1
2 Later on, I was seen by an occupational therapist. These sessions were one to
3 one and focused specifically on my own recovery. Straight away this was
4 more useful and as I built a rapport with the therapist, I found myself
5 participating more with the process. Each week we would agree clear targets
6 and goals – go to the shops three times, speak to my parents, spend time with
7 my son – then we would review those goals the following week. This follow-
8 up was crucial as it allowed me to see what progress I was making – it's all
9 too easy to just see the bad side of things.

10
11 It's fairly obvious that group CBT is far cheaper to provide than the one-to-
12 one therapy. However, in my opinion, it doesn't deliver anywhere near the
13 value it should. I shouldn't speak for other members of the group, but the
14 atmosphere within the room was tense and agitated – I'm not sure that
15 anyone was learning much.

16
17 As, gradually, I started to feel better, I tried to analyse what had made the
18 difference – I think it's probably an element of everything – the drugs, the
19 various therapies, the GP consultations, the natural cycle of my mental health.
20 The local mental health team invited me to join a reading club (bibliotherapy).
21 We read short stories and novels, and discussed them as a group. We had all
22 been suffering from mental health conditions, but the group wasn't about that
23 – it was about the books. I found this to be a really useful exercise. It helped
24 me get back into the social habits I had lost whilst I had been ill. The timing
25 was important – I wouldn't have been able to participate in the group unless I
26 had already gone through the therapies I had had up to that point.

28 **4.3 PERSONAL ACCOUNTS – CARERS**

29 **4.3.1 Introduction**

30 The methods used for obtaining the carers' accounts were the same as
31 outlined in Section 4.2.1, but the questions included:

- 32
- 33 • In what way do you care for someone with self-harm?
 - 34 • How long have you been a carer of someone with self-harm?
 - 35 • In what ways has being a carer affected your everyday life (such as
36 schooling, employment and making relationships) and the lives of
37 those close to you?
 - 38 • How involved are/were you in the treatment plans of the person with
39 self-harm?
 - 40 • Were you offered support by the person's practitioners (for example,
41 their GP, psychologist, or other)?

- How would you describe your relationship with the person's practitioner(s)?
- Have you and your family been offered help or received assessment/treatment by a healthcare professional?
- Did you attend a support group and was this helpful?
- Did any people close to you help and support you in your role as a carer?

4.3.2 Carer account A

My son died in April 2010, so I have written this account from my point of view as his mother and carer. My mother, who suffered from depression and anxiety, also self-harmed and took her life in June of the same year after many previous attempts. I would like to understand what drove them to such desperate methods because neither of them had any particularly awful life events, in fact, generally speaking, the opposite would be the case. But what was going on in their minds must have negated the positive aspects of their lives.

My son began self-harming when he was 13 when we were living in Germany as part of the MOD. My son wrote a suicide note and took an overdose of over-the-counter pain relief drugs with alcohol. Before this event, he had had an argument with a friend about some money he was owed, and I had been a little cross with him because he had taken some things that belonged to his brother. He was taken to a German hospital and when he left the hospital we were told that he should see a child psychologist immediately but the only one available as part of the MOD services was an educational psychologist. He saw this professional for about a year. The main diagnosis was anxiety, and he was given relaxation tapes and taught exercises to control this. The psychologist thought that he would probably try to end his life again, so we were obviously terribly worried about this.

At the age of 25 my son attempted suicide again. We were still living in Germany and he was taken to hospital and put under close scrutiny. He had been depressed and was taking medication for this. By this time he had a serious alcohol problem and had experienced withdrawal seizures. He stayed in the unit for about 5 months. The quality of care was very good; he had therapy and self-help, although the language was a bit of a barrier as my son did not speak fluent German. He was prescribed citalopram. After leaving hospital he was assigned to a CBT therapist and saw her every week until we left Germany about 3 months later.

We left Germany to live in the UK and my son registered with a local GP, taking a copy of the therapist's notes with him. We also asked for his hospital

1 notes to be transferred to the practice, but this didn't happen for several
2 months. He was put on a waiting list for counselling and no copy was taken
3 of the therapist's letter. His prescription was changed to venlafaxine, which
4 was the same medication that my mother was taking.

5
6 Two months later, he was admitted to A & E, after cutting his wrist and
7 taking an overdose of antidepressants, painkillers and iron tablets (he had
8 previously had a bad accident and broken his leg, so he had a lot of pills
9 prescribed for pain). He was put on a ward in a general hospital. I asked what
10 would happen and was told he would probably be sent home after seeing a
11 psychiatrist. I asked to speak to a doctor on the ward so I could make him
12 aware of my son's history, which was arranged and my son then saw a
13 psychiatrist. My son told the psychiatrist that he would not be safe if he went
14 home, and he was admitted to a psychiatric hospital. He was diagnosed with
15 severe depression and treated with high doses of antidepressants. He stayed
16 there for 5 months and was then transferred to the crisis team. He was on a
17 waiting list for CBT and he had about 8 sessions of this about 3 months after
18 he left hospital.

19
20 My son rarely talked about self-harming – when we asked him about the
21 various injuries he had, he would say they were accidental, and it is possible
22 that some of them were, as he was still having withdrawal fits from trying to
23 regulate his alcohol intake. He lived alone, so many of these were not
24 witnessed. His CPN thought that the fits he was having were psychogenic; his
25 psychiatrist seemed convinced the problem was alcohol addiction. His notes
26 show that he did talk about hurting himself to his CPN – describing it as
27 'giving himself a good battering'. There is nothing in his notes to say that self-
28 harming was discussed or explored.

29
30 My son often talked about feelings of emptiness and said that was why he
31 drank. Drinking seemed to put him in touch with his emotions but in an
32 exaggerated way so that he often became very tearful and upset. When he
33 was sober he was often quite distant and withdrawn.

34
35 My son had always been a quiet child, he was generally very passive,
36 although would have quite severe mood swings, which in early childhood
37 were tantrums and later on would show themselves in outbursts of
38 frustration such as breaking things in his house or hitting himself. He had
39 usually been drinking when he lashed out at himself. He was quite insightful
40 about this and had ways of calming himself such as taking a bath, or using a
41 punch ball. He found dealing with change, such as starting school, very
42 difficult, and because we moved around a lot in Germany he had many
43 changes to deal with. Break ups with a girlfriend usually led to self-harm
44 incidents. He often described himself as worthless and compared himself
45 with his brothers, both of whom were getting on well with their lives, settled

1 with jobs and girlfriends/ wives. He had considerable artistic talent, and all of
2 his peers really liked him and thought him very good company, but he didn't
3 seem to be aware of this and thought people didn't like him and were
4 laughing or talking about him behind his back.

5
6 My son didn't have a job for the last 3 years of his life. He didn't like to be
7 criticised in any way, and inevitably this could happen if he was employed.
8 So he didn't try to get a job. The drink problem led to several break ups with
9 girlfriends and also to losing respect of his peers. My son was quite naïve – he
10 was taken advantage of by others who borrowed money and didn't pay it
11 back.

12
13 About 5 months before he died, my son began talking to me about his self-
14 harm; he said the cuts to his face were so that he didn't do something worse
15 and he talked about how he was planning to end his life and how he
16 proposed to do it. I told the CPN, who advised me to go to my son's GP. The
17 GP said there was nothing that could be done until my son decided he
18 wanted to stop drinking.

19
20 My son very rarely saw his named GP; he told me that he didn't understand
21 his problems, and he chose to see more sympathetic doctors from the practice.
22 One of these was very helpful and guided my son to the Addiction team, and
23 also re-referred him back to the CMHT.

24
25 After his re-referral to the CMHT in April 2009, there was no care plan, I
26 asked why and was told it was because he was with the Wellbeing And
27 Access Team, and they didn't do care plans. I found out later that this team
28 would only normally see a client on about three or four occasions, but my son
29 saw his CPN 37 times.

30
31 Once my son accessed the addiction service, things seems to improve quite a
32 bit. The counsellor was aware of dual diagnosis, which his CPN seemed to
33 not be aware of, and she seemed to have a lot of insight into my son's
34 personality. There seems to have been a proper plan for his treatment, and I
35 think he was taken seriously, instead of just a 'drunk'.

36
37 There was a plan to refer my son for dialectical behaviour therapy as one of
38 the possible diagnoses was severe emotional personality disorder. The
39 referral process started in September 2009, but he was not actually referred
40 until the week before he died in the following April. There was quite a long
41 waiting list so he wouldn't have accessed the therapy for quite a while.

42
43 He only ever saw his psychiatrist when I had made an urgent request – the
44 last time was in February 2010 after he was talking openly about suicide to his
45 addiction counsellor and to me, and because he was physically ill, having lost

1 about 20 kg in weight. The first risk assessment in my son's file, since his re-
2 referral, appears on this date.

3
4 My son did see a private counsellor but I don't know if he discussed self-harm
5 issues with her. He also had contact with a Rethink volunteer and met a few
6 times with them. There was a proposal to go to an art class with support, but
7 my son never acted upon it.

8
9 I was offered carer support – but what I really needed was to be clear about
10 my position as a carer and what I could do to help, and what not to do. Once
11 my son had accessed the secondary mental health services, I was relieved
12 because I thought I could take a 'back seat' and let the professionals help him.
13 But this didn't seem to happen. He had lots of help in getting benefits, but
14 there didn't seem to be any overall plan. I was largely excluded from his
15 treatment – there was no discussion about his care plan and although I think
16 my son didn't mind me knowing about his treatment, there was never any
17 formal acknowledgement of this. My son hadn't signed any of his care plans
18 and the section about discussion with carers all had ticks in the 'NO' boxes.

19
20 I had very little faith in the psychiatrist or the CPN, when I asked at the
21 emergency meeting why there was no care plan or a risk assessment, I was
22 told that I was making the situation worse. But the addiction counsellor
23 seemed to have a real understanding of the link between mental illness and
24 substance misuse, and she seemed to have a very good relationship with my
25 son, he was more open and honest with her than with the other agencies. She
26 had also discussed issues of confidentiality with him and I felt when I talked
27 with her that the boundaries were clear and this was a relief because I didn't
28 want to feel disloyal or as though I was prying into his life. I knew that
29 anything she said to me was with his permission.

30 I was not offered help by a healthcare professional. I attended a voluntary
31 group with carers who had adult children with similar problems. My family
32 were also supportive.

33 **4.4 REVIEW OF THE QUALITATIVE LITERATURE**

34 **4.4.1 Introduction**

35 A systematic search for published reviews of relevant qualitative studies of
36 people who self-harm was undertaken. The aim of the review was to explore
37 the experience of care for people with self-harm, the experiences of carers
38 who care for people who self-harm, and of health care professionals who
39 work with people who self-harm.

4.4.2 Evidence search

Reviews were sought of qualitative studies that used relevant first-hand experiences of people with self-harm and families/carers. For more information about the databases searched see Table 4.

Table 4: Databases searched and inclusion/exclusion criteria for clinical evidence.

Electronic databases	CINAHL, EMBASE, MEDLINE, PSYCINFO, HMIC, IBSS, PsycEXTRA, PsycBOOKS
Date searched	2006 to 25 Jan 2011
Study design	Systematic reviews of qualitative studies, qualitative studies, observational studies
Population	Individuals who self-harm by any method
Outcomes	None specified - any narrative description service user experience with self-harm

4.4.3 Studies considered

At the scoping stage, two recent systematic reviews were found and these were modified in two ways. Firstly, only studies that were relevant to the long term management of people who self-harm were included (for example, studies which focussed exclusively on experience of care in general hospital emergency department settings were excluded) and secondly, the reviews were updated to include studies published through to January 2011.

The first systematic review explored the experience of self-harm and treatment from the perspective of people who self-harm (Taylor *et al.*, 2009). This review involved undertaking a search between 1950 and June 2006 and included a total of 31 studies. Of these, a total of 21 studies were included and narratively reviewed for the purpose of this guideline (please refer to Appendix 15 for study characteristics) and 10 studies were excluded as they focused on shorter rather than longer term management (please refer to Appendix 15 for excluded studies references). The quantitative studies were not subject to meta-analysis due to the lack of studies providing similar data. They were used instead to provide evidence about the general experiences of a larger population of service users, with the qualitative data used to deepen our understanding through the describing of specific examples and occurrences.

Since the review (Taylor *et al.*, 2009) only included studies published before 2007, an updated search was conducted to capture more recent studies relating to service user, healthcare professionals and carer experience. A total of 2,269 references were identified by the electronic search. Of these references, 2,200 were excluded at the screening stage on the basis of reading the title and/or abstract. The remaining 69 references were assessed for eligibility on the basis of the full text. Overall, 28 qualitative studies and

quantitative studies met these inclusion criteria, the characteristics of which have been summarised in Appendix 15. Forty one studies were considered for the review but they did not meet the inclusion criteria so were excluded. The most common reasons for exclusion were if the study focused only on shorter term medical or psychological management of self-harm rather than longer term management, the study did not allude to either the experience of self-harm or treatment, experience of carers or healthcare professionals; non-English articles or dissertations, studies in which experiences of services or reasons for self-harm differ (for example, developing countries).

The second systematic review carried out by Saunders and colleagues (in press) examined attitudes of healthcare professionals and knowledge regarding people who self-harm, and is reviewed below. However, only findings relating to longer term management were included. We excluded studies which in the judgement of the reviewers and the GDG had limited relevance to UK health settings (for example, Elliot, *et al.*, 1992 which examined nurse's views of parasuicide in a developing country).

Further to this, there were three additional studies (Huband & Tantam, 2004; Reece, 2005; Taylor, 2003) that were included on the basis of cross-checking an existing literature review (Bosman & Meijel, 2008) that met the inclusion criteria and a further four studies (Jeffery & Warm, 2002; O'Donovan, 2007; Mackay & Barrowclough, 2005; Hopkins, 2002) were included after crosschecking a recent literature review carried out by McHale & Felton (2010). These were all qualitative studies that examined the experience of self-harm from the perspective of service users or healthcare professionals, the characteristics of which have been summarised in Appendix 15.

4.4.4 Service user experience of self-harm

While reviewing each study, key findings which were relevant to the service user experience of self-harm, were extracted and summarised into a study characteristics table (Appendix 15). There were 27 studies (Adler & Adler, 2007; Arnold, 1995; Baker & Fortune, 2008; Burgess *et al.*, 2008; Bywaters & Rolfe, 2002; Camgan *et al.*, 1994; Craigen & Foster, 2009; Crockwell & Burford, 1995; Curtis *et al.*, 2006; Dorer *et al.*, 1999; Fish & Duperouzel, 2008; Harris, 2000; Horne & Csipke, 2009; Huband & Tantam, 2004; Hume & Platt, 2007; Kokaliari & Berzoff, 2008; Kool *et al.*, 2009; Lesniak, 2010; Lewis & Darcy, 2010; Moyer & Nelson, 2007; Polk & Liss, 2009; Ray *et al.*, 2007; Russell *et al.*, 2010; Reece, 2005; Schoppmann *et al.*, 2007; Shaw, 2006; Sinclair & Green, 2005) that fell under the category of service user experience of self-harm.

The review team listed the themes which emerged from the analysis of these main findings, and these were presented to the GDG and used to structure

1 this chapter. The findings that emerged under the heading of ‘service user
2 experience of self-harm’ were:

- 3
- 4 • Underlying reasons for engaging in self-harm behaviour (e.g. traumatic
- 5 life events, psychiatric illness, a coping strategy and cultural factors)
- 6 • Alternative coping strategies
- 7 • Coexisting destructive behaviours
- 8 • Physical and psychological consequences of self-harm
- 9 • Stigma and misconceptions about self-harm
- 10 • Stopping self-harm

11

12 These findings appeared in both populations of adults and young people,
13 however as these populations may differ in their experiences the findings for
14 young people were reported separately.

15

16 In addition to these different age groups, there were two additional
17 subgroups for which the experience of self-harm may have differed and so
18 these were also reported separately. These included people who self-harm
19 with mild/moderate learning disabilities, and males who self-harm.

20

21 *Reasons behind self-harm*

22 The motivations or underlying reasons for self-harm were commonly
23 reported in the literature. Overall, the majority of studies found that self-harm
24 was linked to traumatic life events, difficulties in interpersonal relationships
25 and experiences of isolation or rejection (Adler & Adler, 2007; Arnold, 1995;
26 Bywaters & Rolfe, 2002; Crockwell & Burford, 1995; Curtis, 2006; Harris, 2000;
27 Horne & Csipke, 2009; Kool *et al.*, 2009; Lesniak, 2010; Ray, 2007; Schoppmann
28 *et al.*, 2007). However, it must be noted that many of these studies referred to
29 self-injury as opposed to self-poisoning. There were only four studies that
30 looked at the reasons behind self-poisoning (Burgess *et al.*, 2008; Crockwell &
31 Burford, 1995; Dorer *et al.*, 1999; Sinclair & Green, 2005).

32

33 Crockwell and Burford (1995) interviewed women who had engaged in
34 multiple suicide attempts by overdose in Canada and were among the first to
35 examine the underlying reasons behind self-harm. They revealed that overall
36 participants had experienced significant life events such as strained or absent
37 relationships with parents, being bullied at school and physical, sexual, or
38 emotional abuse. These life experiences were linked by participants with their
39 self-harm.

40

41 In line with these findings, both Harris (2000) and Bywaters and colleagues
42 (2002) conducted studies in the UK which also found that the majority of
43 service user’s accounts were strongly characterised by traumatic life events or

1 chronic life problems, including physical and sexual abuse in childhood, the
2 death of family member and again all the participants explicitly linked their
3 self-harm in some way to such experiences. The above findings were
4 replicated in more recent studies carried out in New Zealand (Curtis, 2006)
5 and the US (Lesniak, 2010) thus, strengthening our findings reported. In fact,
6 many participants in the study carried out by Curtis (2006) spoke explicitly of
7 feeling powerless or out of control of some aspect of their lives, often as a
8 direct result of abuse. Likewise, in the study carried out by Lesniak (2010) all
9 of the participants experienced some form of childhood trauma such as
10 emotional, verbal or physical abuse. They felt ill-equipped to deal with these
11 traumatic events and felt they received no parental support or guidance to
12 help them.

13
14 In contrast, in a study carried out by Adler and Adler (2007) in the US on
15 females who self-harm it was found that many of the participants did not
16 come from a background of physical or sexual abuse and in fact many had
17 unremarkable childhoods. One female noted:

18
19 *I've got no history of abuse, and my recollections of my childhood are happy,*
20 *so why do I self injure? Who knows?*
21

22 Arnold (1995) conducted semi-structured interviews (n=26) and written
23 questionnaires (n = 50) with women who had a history of self-injury, in order
24 to provide some insight into the act of self-injury and found that many of the
25 childhood experiences which women felt had led them to self-injure were
26 similar to those reported by other researchers. However, sexual abuse, though
27 common, was less prevalent than many authors report.

28
29 Other common precipitants of self-harm were ruptures in interpersonal
30 relationships experiences of isolation, loss, abandonment and rejection (Adler
31 & Adler, 2007; Crockwell & Burford, 1995; Horne & Csipke, 2009; Kool *et al.*,
32 2009; Lesniak, 2010; Ray, 2007; Schoppmann *et al.*, 2007). For many
33 respondents, the lack of connection or, conversely, the existence of a very
34 close connection provided a reason to self-harm (Kool *et al.*, 2009). One
35 participant (Ray, 2007) explains how difficulties in her relationship with her
36 mother were a significant stressor and perhaps triggered her self-harm:

37
38 *We were extremely close when I was in high school because that's all I had.*
39 *She was all I had...When I was going through all this stuff, I mean really,*
40 *really bad depression, my mother was just like, 'I don't want to deal with*
41 *it'...she was like, 'I'm stepping out'...so I mean I lost the number one person I*
42 *had in my life.*
43

44 Many participants voiced some form of abandonment such as neglect,
45 bereavement, fear of being alone or feeling disconnected with those around

1 them (Lesniak, 2010). For others, experiences of breakups, fights, or other
2 forms of rejection led them to self-harm (Adler & Adler, 2007). Romantic
3 traumas were a more significant factor cited by boys (Adler & Adler, 2007).
4 Others mentioned that they engaged in self-harm in order to feel alive or
5 relieve themselves of dissociation (Lewis & Darcy, 2010; Polk & Liss, 2009;
6 Schoppmann *et al.*, 2007). In doing so the visual and tactile perception of the
7 blood played an important role. To feel dampness and warmth meant to be
8 able to perceive one's own body and that meant that the state of alienation
9 had ended and one is 'whole' again (Schoppmann *et al.*, 2007). Moreover, the
10 results suggested that young adults who indicated that they self-harm to
11 manage tension and dissociation also had a stronger intent to self-harm again
12 – at least within the next three months. These individuals also indicated that
13 self-harm produced the effect congruent with the reason set they endorsed
14 (i.e. tension or dissociation reduction). Thus self-harm may be reinforcing
15 because the goals associated with its reasons are achieved and thus produce a
16 desired outcome (e.g. escape from a psychological state). This may partially
17 explain why these individuals report more past self-harm and a stronger
18 intent to self-harm again (Lewis & Darcy, 2010). Moreover, this reason was
19 used in conjunction with other reasons such as venting emotion or striving for
20 control, indicating that people may harm themselves for different reasons on
21 different occasions (Polk & Liss, 2009).

22
23 Other reasons reported for self-harm included school stress, over commitment
24 in extracurricular activities, self-punishment and a driving sense of
25 perfectionism (Adler & Adler, 2007; Arnold, 1995; Kokaliari & Berzoff, 2008;
26 Polk & Liss, 2009). Another frequent reason for engaging in self-harm was to
27 provide a form of 'self-punishment' for not meeting expectations of others or
28 themselves (Polk & Liss, 2009). One individual wrote:

29
30 *I hate who I am. I hate who I was. I hate what I am becoming. If I can work to*
31 *kill that, even if only to hurt it, I will accomplish my goal. I feel deserving of*
32 *punishment for my wrongdoings and if that punishment doesn't come from*
33 *anywhere else, it will come from me.*
34

35 Perfection was also related to body image, where self-harm offered control
36 over the body (Kokaliari & Berzoff, 2008):

37
38 *Eating disorders are just another form of self-injury, and all these are based on*
39 *control, and you know, at that point, I could control my body, and so appear*
40 *perfect.*
41

42 Above all, self-harm functioned as a coping mechanism for dealing with
43 intense emotions and an opportunity to regain some control over a person's
44 life (Arnold, 1995; Bywaters & Rolfe, 2002; Harris, 2000; Horne & Csipke,
45 2009; Huband & Tantam, 2004; Hume & Platt, 2007; Lesniak, 2010; Lewis &

Darcy, 2010; Polk & Liss, 2009; Ray, 2007). For example, one individual (Polk & Liss, 2009) claimed:

It was a coping mechanism. Everything would build up inside me until I needed some way to release it. Cutting was that release

Similarly, in a study carried out by Ray (2007) on US students, self-harm was described a method of tension release (i.e. 'letting the pain out') or a means of regaining a sense of control. The tendency to doubt their ability to cope with emotional issues, as well as perceptions of being far more sensitive than others was also highlighted. For instance, one service user stated:

I feel things more strongly than most people...or at least the bad emotions much more powerfully than the average person.

Correspondingly, in a study carried out by Huband & Tantam (2004) on women's subjective experience prior to self-harm, the majority of women recalled self-wounding due to an emotional state that intensified over time. Many women consistently spoke to the efficacy and immediacy of self-harm in relieving emotional pain (Huband & Tantam, 2004; Kokaliari & Berzoff, 2008; Ray, 2007):

It is definitely a quick fix...Welcome to McDonald's society, right where we came from, fast food, anything into a sugar high and then it drops!

Furthermore, the effect of self-harm was described as more powerful than other methods of emotional release, including using a punching bag, writing in a journal, and talking to others (Ray, 2007). On the other hand, many interviewees described their experience with self-harm in a manner that suggested it is primarily utilised as a means of avoiding fully processing emotions (Ray, 2007).

Others engaged in self-harm to regain a sense of control over their lives (Arnold, 1995; Polk & Liss, 2009). Many indicated feeling out of control before the self-harm, and that subsequent self-harm led them to feel in control of something in their lives, even if it was just their pain. For example, one participant (Polk & Liss, 2009) reported:

I self-injure for a feeling of control. If I lose control of a situation, I cut to make myself feel that I still have the power to handle the situation.

In contrast, many others viewed self-harm as a consequence of their psychiatric illness and the 'trigger' for accessing help (Sinclair & Green, 2005). Self-harm was a means to get support and attention, because of frustration about not receiving support for their illness (Harris, 2000). They also reported

1 sometimes feeling a strong desire to be admitted, to escape the overwhelming
2 and often uncontrollable emotions leading to self-harm (Harris, 2000). Many
3 of the women acknowledged experiencing significant depressive episodes,
4 with self-harm seen as a symptom of their depression as well as an attempt of
5 relieving depression (Ray, 2007; Sinclair & Green, 2005).

6
7 In another study carried out by Polk and Liss (2009) in the US, self-harm was
8 used by participants as a means to keep from killing themselves or hurting
9 others. However, it should be noted that only one participant indicated that
10 she used self-harm to keep from hurting others. Self-harm was a means to get
11 support and attention, because of frustration about not receiving support for
12 their illness (Harris, 2000). They also reported sometimes feeling a strong
13 desire to be admitted, to escape the overwhelming and often uncontrollable
14 emotions leading to self-harm (Harris, 2000).

15
16 The influence of cultural factors on self-harm was also highlighted. In
17 particular, participants suggested that the promotion of an individualistic
18 culture can lead to members of that society being more likely to deal with
19 their feelings alone (Kokaliari & Berzoff, 2008):

20
21 *I am wondering if it says something about our culture's need to deal with*
22 *something on your own as opposed to deal with something with other people*
23 *or with healthy means...You can't rely on other people to help you, and sort of*
24 *like an independent self-sufficient mentality is pretty widespread.*

25
26 Attempts to justify the behaviour as sanctioned by pop culture and as a
27 behaviour that is practised by numerous other women also emerged (Ray,
28 2007).

29 ***Co-existing destructive behaviours***

30 Destructive behaviours tended to co-occur with self-harm, including drug
31 and alcohol abuse, over-sleeping and eating disordered behaviour (Arnold,
32 1995; Huband & Tantam, 2004; Ray, 2007; Sinclair and Green, 2005). Arnold
33 (1995) found that most women who took part in the study engaged in various
34 other sorts of self-harm, in addition to inflicting injuries on themselves. Most
35 notably was the high occurrence of eating disorders, while overdosing and
36 misuse of alcohol and drugs were also common. Moreover, there were
37 numerous other ways in which women saw themselves as engaging in self-
38 harm. These included overwork, over-exercising, staying in abusive
39 relationships, unnecessary and repeated risk-taking and smoking.
40 In another study carried out by Ray (2007) one participant touched on the
41 notion that certain types of self-harm behaviours may be inter-changeable. In
42 discussing the relationship between purging and cutting, she admitted she
43 was looking for the same thing out of both behaviours, specifically a release of
44 pain. Similarly, Sinclair and Green (2005) discovered that co-occurring alcohol

misuse dominated for four participants and for these participants abstaining from alcohol was key to the resolution of their self-harm. Looking back, they attributed their use of alcohol to an attempt to escape from difficult emotions but now saw it as precipitating a vicious cycle of low self-esteem and self loathing. Moreover, refraining from drinking led to an increase in self-pride and individuality and an immediate end to their acts of self-harm that required hospital admission. Finally, sleep – or overdose of medication to induce sleep – was cited as an additional alternative release to self-harm (Huband & Tantam, 2004).

Consequences of self-harm: psychological and physical

Many papers reported the physical and psychological consequences in the aftermath of a self-harm episode. In general, the women expressed mixed feelings about self-harm (Ray, 2007). They spoke to the manner in which self-harm brought relief to their suffering and offered them a sense of satisfaction and empowerment. At the same time, many alluded to internalised feelings of guilt and shame after an episode of self-harm (Huband & Tantam, 2004; Lesniak, 2010; Moyer & Nelson, 2007; Ray, 2007). In particular, concern about disappointing or hurting others through self-harm were frequently expressed (Ray, 2007). They also articulated apprehension about hiding evidence of their injuries and the consequences of others discovering them (e.g., having to go back to therapy, losing a job). Moreover, many of the women made comments suggesting that they were dissociated at the time of their self-wounding, for example describing numbness at the time of the wound and of feeling like the cut was to ‘another person’s arm...not really mine’ (Huband & Tantam, 2004). In a recent study carried out by Gordon and colleagues (2010), 106 participants with a history of self-harm completed questionnaires about their emotional reactions during their most recent self-harm episode. They found that people with more frequent self-harm episodes felt more soothed, relieved, calmer and attentive following their most recent self-harm episode suggesting that self-harm may become more reinforcing with reoccurrence.

Along with the psychological impact of self-harm, the physical consequences of self-harm were also apparent in the service user literature. One of the most prominent physical consequences of engaging in self-harm was the sensation of physical pain. Horne and Csipke (2009) examined the experience of pain sensation in adults and young people who self-harm. Some experienced no pain at all and the remainder felt a reduced level of pain. Others explained that there was a certain pain threshold they needed to reach before they could reconnect with themselves again. The issue of pain was addressed in another study carried out by Polk & Liss (2009) with 16.8% reported no pain, 47.7% little pain, 32.3% some pain and 3.2% reported a great amount of pain during self-harm. In a recent study carried out by Gordon and colleagues (2010) they found that the greater the frequency of past self-harm episodes led to more intense feelings of physical pain during their most recent episode.

1 *Stigma and misconceptions about self-harm*

2 Another common finding that surfaced from the service user literature was
3 the mixed reactions of others to their self-harm and the stigma and
4 misconceptions about self-harm. Other people's reactions to their self-harm
5 varied, with some women reporting fairly supportive responses, while others
6 endured quite negative reactions. To a certain extent, others' reactions seemed
7 to determine if the women would continue to be open about their self-harm
8 and potentially even if they would seek help for this behaviour (Ray, 2007). In
9 a study carried out by Baker and Fortune (2008), family, friends and wider
10 society, including medical and mental health services, were often explicitly
11 characterised as judgmental and lacking understanding. Moreover, Dorer and
12 colleagues (1999) revealed that the most commonly perceived reaction of
13 others was distress – generally expressed by parents and often associated
14 with concern. The second most common response, which was largely
15 articulated by parents, was anger. Many young people also reported being
16 ignored, whilst others felt that people around them had been overprotective
17 since the overdose. One of the most common responses of peers was to think
18 that the overdose was a stupid action. On the other hand, Burgess and
19 colleagues (1998) discovered that reactions of significant others to the young
20 people following the overdose were largely favourable with more persons
21 responding with understanding and wishing to help than responding with
22 anger. Overall, mothers appeared to be more sympathetic than fathers.

23

24 Participants also spoke about various misconceptions about self-harm. The
25 first misconception that was addressed in the literature was that people self-
26 harm in order to gain attention from others or as a cry for help. The majority
27 of participants expressed strong reactions toward individuals who self-harm
28 '*for attention.*' They spoke of the need to distinguish between, for lack of a
29 better term, 'true' versus 'false self-injurers' (Ray, 2007). Many of the women
30 expressed anger or annoyance toward people who show off their injuries or
31 harm themselves in obvious ways. Conversely, one participant (Ray, 2007)
32 offered a more sympathetic approach to people who harm themselves for this
33 reason:

34

35 *If this person is doing it for attention they obviously need it. Someone who is*
36 *going to take it to that extreme has a lot of problems and they just need*
37 *someone to care. Don't be mean about it. They need help.*

38

39 Some women stressed additional misconceptions about self-harm. One
40 participant criticised the tendency to oversimplify the behaviour by
41 attributing it to a single reason, and emphasised the need to recognise the
42 multitude of factors that can simultaneously contribute to this behaviour.
43 Another participant expressed frustration that so much of what is available to
44 read about self-harm focuses on those who have been sexually abused and
45 stated she does not feel this material applies to her. The women discredited

1 stereotypical images of the 'self-injurer' and emphasised the fact that normal,
2 productive people engage in this behaviour (Ray, 2007).

3 *Experience of recovery*

4 An additional key topic to come out of the service user's accounts was the
5 experience of ending self-harm and the process of recovery. In a US study
6 (Adler & Adler, 2007) the majority of people who had self-harmed for a long
7 period had no intention of ever stopping. Others wanted to quit, but
8 recognised its benefits as a coping mechanism and a means of self-expression.
9 Yet, for a small minority their self-harm subsided after many years, either
10 through therapy or with the help of online peer support and education. Many
11 of these people remained in online communications, helping others, as a way
12 of maintaining their abstinence. Kool and colleagues (2009) explored people's
13 experiences and motivations for stopping self-harming in a sample of
14 inpatients from a psychiatric intensive treatment centre. All respondents
15 indicated that learning how to cope with their inner selves and others was an
16 important skill to reduce and stop self-harm. The analysis demonstrated that
17 the process of stopping self-harm can be divided into several phases such as
18 connecting and setting limits; heightening of self-esteem; gaining an
19 understanding of the self and increasing their sense of autonomy; the use of
20 alternative strategies and finally preventing relapse. The first phase of
21 connecting and setting limits provided a sense of safety that allowed service
22 users to reach out more to others and themselves and to feel their emotions,
23 such as pain and sadness. The second phase entailed the heightening of self-
24 esteem with a further deepening of contact with the self. Respondents
25 indicated that their self-esteem increased because they could see and feel that
26 they were recognised by carers and family and friends as full human beings,
27 with all their faults and imperfections. One of the respondents to Kool and
28 colleagues (2009) stated:

29
30 *The carers told me they did not disapprove of me as a person, but because of*
31 *what I did. For me this meant there was nothing wrong with my character, my*
32 *personality. When I came out of isolation, they saw me as me and I could just*
33 *start again with a clean slate.*
34

35 This growing sense of self-esteem allowed service users to discover their own
36 strengths and creative talents, which, in turn, contributed to a more positive
37 self-image. By putting these talents to use, they succeeded in expressing their
38 emotions in ways other than self-harm. In the third phase service users
39 learned to understand themselves which allowed them to realise that they can
40 control their own lives. Respondents learned to know themselves better and
41 began to understand their own behaviour.

42
43 The fourth phase was one of increasing the service user's sense of autonomy.
44 They felt that they gradually became better able to make independent

1 decisions about their lives, act upon those decisions, and thus take
2 responsibility for their own behaviour. In this phase, contact with others
3 changed: because of their growing sense of autonomy, the respondents chose
4 for themselves with whom they wanted to forge a connection and with whom
5 they did not. They also determined the content and limitations of their
6 contacts with others. As one of the respondents (Kool *et al.*, 2009) expressed:

7
8 *I got control of my life because I realised I could make choices, I could and was*
9 *allowed to want things for myself and, more importantly, I could stop things.*

10
11 The fifth stage entailed implementing alternative strategies to cope with
12 emotional distress and urges to self-injure and asking for help (Kool, *et al.*,
13 2009). Finally, the sixth phase focused on preventing relapse. Even if they had
14 not engaged in self-harm for a long time, the risk of relapse continued to exist
15 for many. All respondents indicated that they still found it very difficult at
16 certain moments, especially in situations of increasing tension, not to injure
17 themselves (Kool *et al.*, 2009).

18
19 An additional US study (Shaw, 2006) examined how female college students
20 stopped self-injuring and the role (if any) of professional treatment in this
21 process. Not all participants expressed an explicit desire to stop or made a
22 conscious decision to stop. Whether women expressed a desire to stop or not,
23 they all stopped cutting when the psychological symptoms giving rise to self-
24 harm, such as alienation or extreme anxiety, discontinued or reduced in
25 number or intensity. Furthermore, all of the women spoke of the importance
26 of self-initiative or taking control of their lives as essential in their journeys
27 toward stopping (Shaw, 2006). Furthermore, it appears that the women's
28 involvement in self-harm diminished as increasing involvements in life
29 pursuits—such as intellectual interests, career goals, and enlarged social
30 networks—gained prominence in their lives. Relational ties and support from
31 parents, peers, and romantic partners were also of vital significance in helping
32 to stop self-injuring. Participants frequently expressed a desire to satisfy or
33 not concern others as important motivations to stop self injuring (Shaw, 2006).
34 For others, disclosure was used as a means of reinforcing their commitment to
35 stopping self-injuring and a means of accessing professional treatment. Fear
36 of being labelled “crazy” was a frequently cited deterrent, as well as fear that
37 the behaviour might become increasingly entrenched and out of control.
38 Moreover, the longer women abstained from self-injuring, the easier they
39 found it to resist urges to hurt themselves (Shaw, 2006).

40 *Alternative coping strategies*

41 Alternative coping strategies played an important role in preventing relapse
42 after stopping self-harm. For instance, in a study carried out by Kool and
43 colleagues (2009) almost all participants still felt the urge to self-injure at

1 certain moments and had developed specific strategies to respond to these
2 moments. One respondent said:

3
4 *It is still a daily struggle, but I am taking on the challenge every day. I am*
5 *like: I know what I am doing this for and it is worth it.*
6

7 The respondents identified the following strategies: (a) expressing emotions
8 directly, (b) physical exercise, (c) creative activities, and (d) establishing a
9 connection with others. It was important that these alternative activities
10 should control precisely those emotions for which self-harm was previously
11 adopted as a controlling strategy. For example, a respondent who tried to
12 control her aggressive impulses through self-harm indicated that blowing
13 against a piece of fluff or pulling on a rubber band hardly had any effect.
14 However, she could vent her aggression in an acceptable manner by kicking a
15 cushion (Kool *et al.*, 2009).
16

17 Similarly, in another study carried out by Schoppmann and colleagues (2007)
18 in Germany, participants engaged in many alternative strategies in order to
19 end feelings of alienation such as jogging, physical labour, listening to loud
20 music and forms of expression which are not in need of verbal
21 communication like, for example, painting. However, all participants stated
22 that self-harm was the most effective way to end the agonising experience of
23 alienation.
24

25 *I think jogging would give me the same relief but cutting is easier and acts*
26 *much faster and that is what I want in these moments – a prompt relief.*
27

28 On the other hand, it is important to note that the use of alternative coping
29 strategies was not always found to be helpful and some believed that
30 alternatives were only temporary solutions (Craigén & Foster, 2009):
31

32 *There were periods where I managed to assuage the need to self-injure by*
33 *picking up another healthy or acceptable behaviour, at the urging of a*
34 *counsellor ... if that makes sense. It didn't really last too long because they*
35 *were terribly simplistic behaviours that were sort of short-term answers.*

36 ***Young people's experience of self-harm***

37 A study carried out on several US students (Moyer & Nelson, 2007), unveiled
38 some important findings in relation to the origins of self-harm in young
39 people. Most learned of self-harm from their friends; they had asked a friend
40 about it or had a friend recommend self-harm to them. The expectations and
41 mental stress placed on these young people often became overwhelming,
42 leaving them feeling as though there was no escape, with the exception of
43 self-harm (Moyer & Nelson, 2007). Dorer and colleagues (1999) found that
44 participants had varying reasons for overdosing. The majority of participants

1 reported that when they took the overdose they wanted to die. Other reasons
2 for overdosing were: escaping from painful feelings, to communicate how bad
3 they were feeling, or to get admitted to hospital in order to escape difficult
4 family situations. This supports the idea that the motivation behind self-harm
5 is unique to the individual and is fluctuant in nature.

6
7 Regarding the consequences of self-harm, some young people reported that
8 relationships within their family had improved and others felt that it had led
9 them to develop better coping skills (Dorer *et al.*, 1999). An earlier study by
10 Burgess and colleagues (1998) found that most young people felt that overall
11 the overdose and its aftermath had resulted in improvements in their lives;
12 whereas others felt that it had made things worse for them. When asked how
13 they felt in the aftermath of the self-harm behaviour, many reported feeling
14 ashamed about what they had done. However, almost half of the participants
15 felt that they would probably or definitely take an overdose again in similar
16 circumstances.

17
18 In a study carried out by Sinclair and Green (2005), young people with a
19 history of self-harm but who no longer harm themselves talked about their
20 experiences in terms of lack of control over their lives and their uncertainty
21 within their family relationships. Specifically, the core finding that emerged
22 from these young people's experience of stopping self-harm was '*the resolution*
23 *of adolescent chaos*'. For these participants, the defining differences that lead
24 them to stop their self-harm were the resolution of their lack of control within
25 the family structure. Family life was recounted as not just chaotic but also
26 failing to provide any validation of their experiences at the time. For many of
27 the young people interviewed the sense of autonomy and independence
28 achieved after breaking away from their family allowed them to cut loose
29 from their unpredictable family environments, giving them a sense of
30 purpose and responsibility which gave them enough control to manage their
31 responses to distress in a less self-destructive way (Sinclair & Green, 2005).

32 *Experience of self-harm in people with mild-moderate learning* 33 *disabilities*

34 Fish and Duperouzel (2008) examined the experiences of people with mild-
35 moderate learning disabilities who self-harm. The common finding
36 throughout the interviews was healthcare professional-service user
37 relationships (both negative and positive aspects), and the way they affect
38 individual ability to cope with stress, emotion and urges to self-harm. Service
39 users reported that healthcare professionals could make them feel that they
40 did not care about their distress when they were slow to respond to their
41 distress, were dismissive of their personal problems or were perceived to be
42 uncaring (Fish & Duperouzel, 2008):

1 *I feel that nobody cares, and when you talk to them, it's "Oh, wait a minute".*
2 *And when the minute comes it's, like, "I've not got a minute now, I'm doing*
3 *this now" or "I'm doing that now". In the end you just go in your room and*
4 *do [self-injure], instead of saying I feel like doing it...*

5
6 Service users also identified a lack of control over their treatment as a
7 negative aspect of the relationship:

8
9 *...I wanted to go to a meeting that's discussing my future or what possibly*
10 *could happen in my future. And they said no., clients are not allowed. I think*
11 *that's badly wrong...*

12
13 Conversely, service users reported that when healthcare professionals spent
14 time with them one-to-one and they demonstrated a caring attitude and most
15 importantly recognised their individuality, this has a positive effect.

16
17 Service users and some healthcare professionals agreed that self injuring
18 should be allowed. Service users viewed it as a right of theirs and also
19 explained that it was futile to attempt to stop self-harm behaviour:

20
21 *I think as a self-harmer you should be entitled to what you do to your body as*
22 *long as it's hurting no-one else's but your own. I feel that I should be entitled*
23 *to cut up as much as want and when I want. I do feel there are too many*
24 *people laying the law down as far as I'm concerned as my self-harming.*

25
26 The feeling of being punished was also highlighted by service users. They
27 explained that this lowered their self-esteem, and as a consequence made
28 them more likely to self-harm:

29
30 *Well when I've cut up in the past there's your punishment of putting you on*
31 *a level three for a few months until things get better. That's what they've*
32 *always done with me. They punish me by putting me on a higher supervision*
33 *level, increase my supervision level to level three. I'd feel bad, they didn't trust*
34 *me, once I'd cut. I'm alright, I wouldn't do it again cos I feel better.*

35 36 ***Experience of self-harm in males***

37 Only two studies examined the experience of self-harm in males (Russell *et al.*,
38 2010; Taylor, 2003). With regard to reasons behind self-harm, these were
39 similar to those provided by women with early childhood experiences such as
40 neglect and abuse; experiences of rejection in adulthood; and as a coping
41 strategy and alternative communication method being frequently reported
42 (Taylor, 2003).

1 Similar to women, guilt and shame were frequent emotions expressed by the
2 males interviewed with one man stating that he felt '*very ashamed*' of his self-
3 harm, and another said he ends up '*punishing myself*' for it. As well as limiting
4 the degree to which men seek support for their self-harm, this shame may
5 perpetuate the problem by damaging their self-esteem further (Taylor, 2003).

6
7 Russell and colleagues (2010) examined the experience of self-harm in four
8 males and found the inability to hold satisfaction or contentment was a
9 central theme portrayed by all participants. One participant (Russell *et al.*,
10 2010) illustrates the potency of this issue in the following statement:

11
12 *Like you were supposed to enjoy a party or you're supposed to enjoy a holiday.*
13 *At the time you do, but underneath, you didn't, 'cause I always end up in*
14 *hospital afterwards. My brothers said, oh you're supposed to enjoy it, it's been*
15 *paid for and that, so I did, but I didn't, 'cause I used to destruct, but I couldn't*
16 *.... I couldn't... separate them, happiness and sadness, erm, so I was out there*
17 *enjoying it, I was enjoying it, but it wasn't lasting, it was like it was a short*
18 *term thing...*

19
20 All participants talked about the differences between men's self-harm and
21 women's, as if men's was somehow more real:

22
23 *I think a lot of men do it, whereas a lot of women do it for sympathy, a lot of*
24 *men do it out of anger and upset and....*

25
26 Likewise, in a study carried out by Taylor (2003) the differences between men
27 and women who self-harm was also a prominent theme. Firstly, men tended
28 to injure themselves more severely than women and had less concern about
29 bodily scars. They are more likely to engage in public and violent self-harm,
30 such as punching themselves or a wall or breaking bones.

31
32 The concept of masculinity and the misconception that men should be
33 powerful and should conceal their weakness was another prominent theme
34 (Russell *et al.*, 2010; Taylor, 2003). Many of the interviewees felt that the
35 expectation that men are '*stronger*' and '*able to cope*' was a particular issue for
36 men who self-harm. One participant in particular, felt that '*to be seen as a man,*
37 *you have to be seen as not weak*' (Taylor, 2003, p. 87). Whilst they may try to
38 conceal these feelings; they are likely to find expression in some way. As a
39 result they may resort to self-harm as an expression of their underlying
40 emotions (Taylor, 2003).

41 42 **4.4.5 Access and barriers to services**

43 In the review of the literature, several findings emerged under the broad
44 heading of 'access and barriers to services' for people who self-harm

1 including stigma, negative attitudes of healthcare professionals and barriers
2 to help-seeking behaviour were also examined. There were 14 studies from
3 which findings of access and barriers to treatment were apparent (Bolger *et*
4 *al.*, 2004; Brophy *et al.*, 2006; Burgess *et al.*, 1998; Bywaters & Rolfe, 2002;
5 Camgan *et al.*, 1994; Dower *et al.*, 2000; Harris, 2000; Hood, 2006; Horrocks *et*
6 *al.*, 2005; Kreitman & Chowdhury, 1973; Nada-Raja *et al.*, 2003; Ray, 2007;
7 Rissanen *et al.*, 2009; Schoppmann *et al.*, 2007).

8 *Accessibility*

9 Three studies reported findings that were relevant to the accessibility of
10 services (Bolger *et al.*, 2004; Bywaters & Rolfe, 2002; Burgess *et al.*, 1998).
11 Several participants felt it was essential that services be as accessible as
12 possible by being staffed 24 hours a day, providing walk-in services and
13 minimal waiting times for appointments (Bywaters & Rolfe, 2002).
14 Furthermore, several respondents interviewed explained that they wished
15 they had known about the types of support services available to them before
16 they self-harmed. For instance, many study participants were unaware of
17 local services that provide support to individuals who self-harm (Bywaters &
18 Rolfe, 2002). Finally, it was also suggested that services offer alternatives to
19 clinical support such as having nurses working in the community who can
20 treat self-inflicted wounds (Bywaters & Rolfe, 2002).

21 *Young people's experience of accessibility to services*

22 Young people, in particular, had a variety of suggestions about how services
23 could be made more accessible for young people who self-harm. It was
24 suggested that services be centrally located. Walk-in services and telephone
25 access as well as decreased wait time for appointments were recommended.
26 Others wished that prior to taking the overdose they had access to the type of
27 professional help that they had subsequently received (Burgess *et al.*, 1998).

28 *Barriers to treatment*

29 Six studies reported findings that were relevant to barriers to treatment
30 (Brophy *et al.*, 2006; Camgan *et al.*, 1994; Dower *et al.*, 2000; Harris, 2000; Hood,
31 2006; Horrocks *et al.*, 2005). Camgan and colleagues (1994) revealed many
32 problematic issues with regard to communication with professionals.
33 Specifically, inadequate sharing of information by healthcare professionals
34 with service users was perceived as an important problem. Most respondents
35 stated that there was a need for better understanding and more assistance by
36 nurses regarding individual difficulties with problem solving. Harris (2000)
37 found that participants often felt that they were maltreated because their
38 injuries were self-inflicted.

39
40 Other important barriers to treatment were highlighted by a study conducted
41 by Harris and colleagues (2000). Firstly, some service users said treatment

rooms did not provide privacy, either due to the location of treatment, for example in a waiting room, or lack of respect given by healthcare professionals, for example 'showing off' service users to other members of staff. Finally, some people felt that their need for help was not acknowledged, particularly after no aftercare was arranged. Many said they were not given the opportunity to play an active role in their treatment. In particular, service users perceived that treatments had often been given or forced upon them without any information as to why this was being done. Some respondents explained they had received contact numbers for services at hospital but upon ringing, no-one was there to answer their call. Likewise, service users often felt a lack of rapport between themselves and healthcare professionals and a general lack of support (Horrocks *et al.*, 2005).

Young people's experience of barriers to treatment

In a UK-based study on young people who self-harm (Brophy *et al.*, 2006) some respondents who had previously presented to hospital due to a self-harm episode felt ostracised by healthcare professionals who, it was felt, were 'act[ing] as if to say "not you again"' (p.50). One study (Dower *et al.*, 2000) provided some insight into the reasons behind early termination of follow-up care. Some felt they had got as much out of treatment as possible, felt uncomfortable with the professional providing care or the location of the care, or the care they received was deemed unhelpful. Other young people reported that psychiatrists were often unavailable for continued care because they were too busy, or had left the service during the young person's treatment period (Hood, 2006).

Help seeking: attitudes towards and barriers

Five studies looked at attitudes and behaviour with regard to help seeking for self-harm in adult populations (Hunter & Cooper, unpublished); Kreitman & Chowdhury, 1973; Nada-Raja *et al.*, 2003; Ray, 2007; Schoppmann *et al.*, 2007). Kreitman & Chowdhury (1973) recruited individuals attending hospital for the first time after a suicide attempt in Edinburgh and carried out individual semi-structured, face-to-face interviews to investigate attitudes to help seeking after completion of formal psychiatric examination. Most of the participants were in favour of seeking help, with the most 'acceptable' form of help being specialist services followed by 'anyone available', 'no-one' and lastly relatives. However, a quarter maintained that seeking help for personal problems was not an acceptable form of behaviour. It must be noted however, that as this study was carried out in the 1970's and therefore the attitudes towards help seeking and services may have changed since, placing limitations on the generalisability of the findings reported.

A cohort study carried out on individuals who self-harm in New Zealand examined help seeking via semi-structured interviews with young adults

(Nada-Raja *et al.*, 2003). The main reason given for seeking help were psychological aspects related to self-harm, specifically for self-harm or for an injury relating to self-harm behaviour (Nada-Raja *et al.*, 2003). Moreover, amongst the small percentage of services users that did seek help (only 8%), approximately one third reported attitudinal barriers when seeking help from professionals. In a study carried out by Hunter and colleagues (unpublished), participants lack of continuity of aftercare impacted negatively on their attitudes towards future help-seeking and towards themselves.

Stigma also emerged as an important barrier to seeking help and disclosing to others about their self-harm (Ray, 2007). While all women reported trying to hide the fact of their self-harm, some alluded to the hidden wish that others would acknowledge their distress and care enough to reach out to them in a supportive and accepting manner. The women appeared quite inhibited in their ability to reach out to others for fear that others would not understand and for fear that they would be labelled as attention seekers. Some spoke to a lack of parental understanding in response to their distress. Others expressed the desire to protect their loved ones from their pain (Ray, 2007).

Finally, for those who did not seek help attitudinal barriers such as thinking they should be strong enough to handle the problem on their own; thinking the problem would resolve itself; thinking that no-one could help or being too embarrassed to discuss it with anyone. Confidence and trust are also important conditions for seeking and accepting help (Schoppmann *et al.*, 2007). The participants described that they would not ask strangers for help or support, for example, an unknown nurse during a night/ weekend shift, because for them strangers are an equivalent to someone who cannot do anything, someone from whom help is not to be expected.

Young people's experience of help seeking

Only one study examined the experience of help seeking and barriers to reaching out for support in young people in Finland (Rissanen *et al.*, 2009). Three main categories emerged from the analysis: the helpers, factors contributing to help, and help-hindering factors. From the viewpoint of young people, any person who knows about their self-harm can be a helper, while adults are felt to be duty-bound to intervene. According to young people who self-harm, there is insufficient reliable presence of parents at home. They also feel that school and healthcare personnel could do more to intervene. Factors that enabled help seeking were: becoming conscious of being in need of help; knowledge of self-harm as a phenomena; knowledge of the available help for self-harm; a caring environment; and finally support from friends, peers and parents. Other helpful factors were practical intervention for common problems for young people, early intervention, learning to discuss self-harm and emotions and difficult experiences with someone and genuine caring for the young person.

Factors hindering help-seeking were the following: lack of awareness of being in need of help, an inability to seek help, emotional factors, lack of awareness of self-harm or a lack of awareness of the help available for self-harm. Additional unhelpful factors were unresponsiveness to self-harm, underestimating or overstating the meaning of self-mutilation, remaining silent about self-harm, negative emotional reactions of adults or over expectations of the capability of young people to fend for themselves. Knowledge of self-harm as a phenomenon seems to be very important. It emerged in different forms in all three main categories. In fact, knowing facts about self-harm or its existence seems to be a prerequisite for a young person who self-harms to become conscious of the need for help and then to seek help (Rissanen *et al.*, 2009).

Overall, several participants pointed out the importance of accessibility of services especially for young people and the need for inclusion in planning of their treatment. Common barriers to accessing treatment or engaging fully in treatment were stigma; communication difficulties; negative attitudes of healthcare professionals; and privacy issues.

4.4.6 Experience of treatment for self-harm

In this review, common findings emerged under the broad heading of 'experience of treatment for self-harm', including experience of psychosocial assessment; experience of psychiatric services; experience of constant observation; experience of psychological treatment; and finally experience of medication.

Experiences of psychosocial assessment

Four studies investigated the views of service users with regard to psychosocial assessment (Crockwell & Burford, 1995; Horrocks *et al.*, 2005; Hunter & Cooper, unpublished; Whitehead, 2002). From these four studies, it was clear that not all service users received a psychosocial assessment while in hospital, and for those service users that did, their experience varied across studies.

Service users' insights and anticipation of the psychosocial assessment, and the way in which they interpreted healthcare professionals' management of their assessment, had a large impact on their appraisal of the assessment (Crockwell & Burford, 1995; Hunter & Cooper, unpublished). Participants had a more positive experience of assessment when they were given information about it beforehand (Crockwell & Burford, 1995). Moreover, the relational aspect of assessment was a key determining factor in service users' appraisal of assessment, highlighting the importance of the therapeutic relationship in the provision of care (Hunter & Cooper, unpublished). Participants

1 experienced assessment positively when it involved a beneficial, hopeful
2 engagement with healthcare professionals and when it involved the
3 restoration of hope or the possibility of change in their circumstances (Hunter
4 & Cooper, unpublished; Whitehead, 2002). Another important aspect of
5 assessment was the opportunity to talk to someone (Hunter & Cooper,
6 unpublished), with the majority of participants finding this a valuable
7 experience. However, not all participants felt they were given adequate
8 opportunity and it was not always evaluated as a positive experience. Despite
9 this, most participants expressed a desire to speak to someone about their
10 problems which gave them an opportunity to start thinking about the reasons
11 behind their self-harm.

12
13 Conversely, assessment was experienced negatively when the participant felt
14 devalued by the assessor, was treated in a judgemental manner or they felt
15 they were not understood. Similarly, service users who reported being
16 disappointed with their psychosocial management found fault primarily with
17 their lack of involvement in decisions or when the assessor did not give them
18 sufficient time to talk during the assessment (Whitehead, 2002):

19
20 *O.K. The first interview was just "so tell us what happened" and he wrote it*
21 *up and said "um hm, um hm" and wrote notes and he didn't look at me but he*
22 *was nodding and looking at the other guy. And they looked at each other and*
23 *exchanged nods. It was very factual like "So what did you take?" and "What*
24 *happened at the house?" Um, you know I felt like saying "I can understand*
25 *English, doctor". It was just very factual. They filled out their little form and*
26 *that was it.*

27
28 Likewise, in the study carried out by Hunter and colleagues (unpublished)
29 another negative aspect of assessment seemed to be the experience of not
30 being understood, or when healthcare professionals did not seem interested
31 or genuinely engaged in trying to understand the individual reasons behind
32 their self-harm. Furthermore, when participants experienced assessment as
33 invalidating and when assessment seemed to lead nowhere and offer no hope
34 for change, it was experienced negatively and could compound the
35 participant's initial feelings of hopelessness, powerlessness and low self-
36 worth. This study showed that assessments may not have the same salience
37 and importance for users and professionals as assessments are just one single
38 moment in a users life which is likely to be filled with ongoing life difficulties.

39 *Experiences of psychiatric services*

40 Eight studies examined experiences of psychiatric services (Arnold, 1995;
41 Brophy *et al.*, 2006; Bywaters & Rolfe, 2002; Cardell & Pitula, 1999; Dorer *et al.*,
42 1999; Hume & Platt, 2007; Pitula & Cardell, 1996; Taylor, 2003). Individuals
43 admitted to psychiatric wards had mixed reactions to their care. The
44 admission to a psychiatric ward was often described as frightening and led to

1 a sense of diminished control over their lives (Hume & Platt, 2007). One 34-
2 year-old male said:

3
4 *I speak positively about it now, but back at the time it was terrible. Locked*
5 *wards, psychopaths, they used straightjackets and straps.*
6

7 Moreover, service users often felt a lack of rapport between themselves and
8 healthcare professionals (Arnold, 1995). One participant described a
9 psychiatrist as ‘cold, clinical, [and] impersonal’ (Arnold, 1995 p.18). In a study
10 carried out by Taylor (2003) several of the male participants had experienced
11 negative incidences with psychiatrists. Comments included ‘I don’t see them
12 unless I absolutely have to’ and ‘I made a firm decision not to ever see him again’.
13 The only positive assessment of support from a psychiatrist encountered was
14 a man who said of his second psychiatrist:

15
16 *She seems to generally care about my wellbeing. I value her opinion and she is*
17 *quite nice.*
18

19 Service users also explained that, while on a psychiatric ward, they sometimes
20 felt the need to act in exaggerated ways, and even self-harm, in order to get
21 the attention of staff (Bywaters & Rolfe, 2002).
22

23 Only two studies looked at the experience of constant observation whilst on a
24 psychiatric ward, both from the US and both in adult populations (Cardell &
25 Pitula, 1999; Pitula *et al.*, 1996). In the study carried out by Pitula and
26 colleagues (1996) on suicidal inpatients, service users’ initial responses to
27 constant observation ranged from discomfort to surprise or anger. On the
28 other hand, study participants reported feeling safe because of the physical
29 presence of observers who could prevent them from responding to self-
30 destructive impulses. Participants reported that the lack of personal privacy
31 was the most distressing aspect of constant observation. In fact, service users
32 said that constant observation became almost intolerable after 30 to 36 hours.
33

34 In a more recent study carried out by Cardell & Pitula, (1999) the majority of
35 participants expressed positive feelings toward the observers, particularly
36 when they perceived them as friendly and willing to help. Moreover, a
37 significant proportion of service users reported that their dysphoria, anxiety,
38 and suicidal thoughts were decreased by observers who were optimistic, who
39 provided distraction with activities and conversation, and who gave
40 emotional support (Cardell & Pitula, 1999). Furthermore, the participants
41 experienced uncomfortable and at times distressing feelings relating to
42 observers’ attitudes or behaviour, such as a lack of empathy, a lack of
43 acknowledgement, failure to provide information about constant observation,
44 lack of privacy or personal space and a feeling of confinement. It is clear from
45 these two studies that the positive attitude of healthcare professionals,

1 including empathy and an acknowledgment of the person as a unique
2 individual, providing information about the function of constant observation
3 and an effort to combat privacy issues, are essential in improving service user
4 experience of constant observation. However, it should be noted that this
5 study was carried out in North America and the implementation and
6 experiences of constant observation may differ to that of the UK, thus limiting
7 the generalisability of the findings reported above.

8 *Young people's experience of treatment*

9 A UK study reported findings concerning management of young people on a
10 psychiatric ward (Brophy *et al.*, 2006), where confiscation by staff of objects
11 that could be used to self-harm increased their feelings of a lack of control and
12 contributed to the desire to self-harm again. Another study carried out on
13 young people and adults (Bywaters & Rolfe, 2002) echoed these findings in
14 that most felt they were merely being watched and did not receive any sort of
15 therapy for their self-harm. Several young people who presented at hospital
16 after a self-harm episode (Hood, 2006) said they experienced a sense of relief
17 upon being provided with aftercare at a community mental health service.
18 Some women communicated a fear of being on a mixed ward while some
19 older young people had negative experiences of being placed on adult wards.
20 However, this was a very small sample size of only ten participants of which
21 five were female.

22
23 In contrast to the negative attitudes reported above, Dorer and colleagues
24 (1999) found that the majority of young people rated their contact with child
25 and young people's psychiatric services as positive or very positive.
26 However, almost one third of young people rated their stay as negative or
27 very negative. In relation to the benefits of psychiatric consultation, both
28 studies established that the opportunity of '*talking through problems in detail*
29 *with another person*' was an important aspect. Despite this positive experience,
30 some service users disliked having to tell their story to several different staff
31 members (Dorer *et al.*, 1999).

32 *Experience of psychological treatment*

33 Seven studies examined the experience of psychological treatment for those
34 who self-harm (Burgess *et al.* 1998; Bywaters & Rolfe. 2002; Craigen & Foster,
35 2009; Crockwell & Burford 1995; Hood, 2006; Huband & Tantam, 2004; Hume
36 & Platt, 2007).

37
38 Hume and Platt (2007) found that service users' experiences of therapeutic
39 interventions were strikingly diverse. There was a clear preference for
40 specialist community based interventions, which focus on the provision of
41 immediate aftercare and an acknowledgement that the management of self-
42 harm may not necessarily involve its prevention. In a study carried out by

Bywaters *et al.* (2002) many participants welcomed the opportunity to discuss problems associated with their self-harm with a mental health professional. The drawbacks of psychological treatment were few from the participant's perspective, however common disadvantages reported were retelling of their story and opening up to reveal their emotions especially to a stranger. Others were frightened that telling someone their problems would intensify their distress or bring back memories they were trying to repress. Some respondents (Bywaters *et al.*, 2002) appreciated psychological therapy, presumably in a group setting, because it put them in touch with other people like them:

The fact that you talk to other people and there were other people who felt exactly the same as you, no matter what state they were in, no matter what part of life they came from, there were people that felt like you. It felt good to feel that you weren't on your own.

Conversely, in a study carried out by Crockwell & Burford (1995) the stigma associated with an appointment with a psychologist or psychiatrist for some participants was too much to bear and caused individuals to miss their appointments.

I hated it. Couldn't stand the psychiatrist... Just thought "I must be crazy" that's all that came into my head. That's what I thought "if you see one of them, you're crazy".

Craig and Foster (2009) examined the counselling experiences of 10 young adult women with a history of self-injurious behaviour. For those interviewed, the most helpful counsellor behaviours were respectful listening, understanding, and acting as a friend. Furthermore, the women also discussed behaviours that they viewed to be unhelpful which included such things as counsellors who failed to demonstrate understanding and counsellors who forced uninvited ideas upon them.

Many of the participants noted that simply talking during sessions was helpful. Almost without exception, the participants considered no-harm contracts ineffective (Craig and Foster, 2009):

I won't make a promise unless I can keep it. Or, I try not to. I need to feel a deep sense of obligation to that person and that particular cause to make that promise. So that wouldn't have worked for me.

Another alluded to the potential dangers of using no-harm contracts. She suggested that counsellors need to provide service users with new improved coping skills before making them stop using their old coping skills. In terms of the focus of treatment, participants did not like counsellors putting too much emphasis on the self-injurious behaviour. Rather, they reflected about

the value of counselling that targeted the underlying issues. Asked what they would tell counsellors working with college-aged women who self-injure, most of the women emphasised that it was important for the counsellor to be nonjudgmental. One said:

I think the bottom line is to just try not to alienate them further. Because there is already the knowledge that what you are doing is very bizarre and not normal, and you need to be careful of inadvertently stigmatizing them further.

An additional study carried out by Huband and Tantam (2004) found that psychotherapy or counselling was generally experienced as helpful. However, several participants reported 'drifting off' and 'losing the plot' in their therapy sessions, or complained about their therapist enduring silences during which they found it hard to remain focused.

Young people's experience of treatment

Burgess and colleagues (1998) found that most young people appreciated short-term therapy, mostly on an individual basis. Both young people and their parents appreciated 'talking to someone on the outside' with whom the family had 'no emotional attachment' (Hood, 2006 p.84). However, some young people thought talking did not make a difference to the way they felt:

I've talked and stuff and I still don't really feel a hell of a lot better...Cause you know sometimes even just talking about it doesn't really help, sometimes just a hug or something would be cool, more helpful than sitting here talking about it... The talking and things didn't really help me too much. I don't feel that it changes anything... It just seems to scare a person, that's about it.

Several participants described situations in which they felt that their therapist did not understand them. These feelings hindered the resolution of the young person's problems:

I mean there's lots I'd like to have happen in terms of like client and counsellor relationship....I really still don't feel she quite understands me...I just feel like a lot of times what I say isn't, it feels like it's not valid

Other participants explained that their relationship with their therapist made them feel 'acknowledged', 'heard', 'cared for', 'reassured', 'supported' and 'understood' (Hood, 2006, p. 89). A positive relationship between service user and therapist was often associated with perceived positive outcomes by the service user.

Overall, the experience of psychological therapy was mostly positive in nature, however, there were some drawbacks such as the stigma associated with receiving therapy and retelling of their story.

1 *Experience of medication*

2 Four studies examined service user experience of medication (Hood, 2006;
3 Kool *et al.*, 2009; Shaw, 2006; Smith, 2002). Hood (2006) examined the
4 perspective of several young people recruited from community mental health
5 centres in New Zealand with regard to their feelings regarding medication
6 and established that views were mixed. The majority (n =6; 60%) of young
7 people interviewed were prescribed antidepressants as part of their
8 management. On the one hand, service users reported (Hood, 2006) that
9 medication helped them cope with their underlying problems; however, not
10 all participants had a positive attitude towards medication especially at the
11 beginning:

12
13 *I absolutely hated taking my medication when I first started a couple of years*
14 *ago. Then it became part of my life and a part of being able to live so I just*
15 *don't get all down about things... I don't know how it works but I mean I*
16 *know the medication's always an option for me now so if things start to get*
17 *bad and stay bad then it's here.*

18
19 Some young people felt that the medication did not work for them and had
20 many undesirable side effects.

21
22 *[B]eing on medication I didn't deal with things or just had trouble with my*
23 *memory for a while. I didn't know what day of the week it was...I just had no*
24 *idea where I was or what was happening...*

25
26 In another study carried out on adults (Smith, 2002) in the UK a more
27 negative view of medication was observed with service users reporting that
28 they felt that medication was seen as a means of shutting them up. Similarly,
29 in a study carried out in the Netherlands (Kool *et al.*, 2009), many participants
30 felt that their emotions were subdued by the medication and as a result they
31 lost their sense of connection with themselves and others. On the other hand,
32 some participants found medications effective in addressing symptoms such
33 as anxiety (Kool *et al.*, 2009; Shaw, 2006).

34 **4.4.7 Engagement with services and suggestions for service** 35 **improvement**

36 Aftercare for self-harm can include treatment by a wide range of
37 professionals: psychologists, psychiatrists, social workers, nurses, community
38 services, general practitioners. Seventeen studies reported findings that were
39 relevant to engagement with services and suggestions for service
40 improvement (Arnold, 1995; Bolger *et al.*, 2004; Brophy *et al.*, 2006; Burgess *et*
41 *al.*, 1998; Bywaters & Rolfe, 2002; Camgan *et al.*, 1994; Crockwell & Burford,
42 1995; Dower *et al.*, 2000; Hood, 2006; Huband & Tantam, 2004; Ray, 2007;

1 Reece, 2005; Schoppmann *et al.*, 2007; Shaw, 2006; Sinclair & Green, 2005;
2 Smith, 2002; Whitehead, 2002).

3
4 Common suggestions for service improvement included enhanced continuity
5 of care and specialised training and education on self-harm, along with the
6 provision of better information about self-harm for service users and carers
7 (Arnold, 1995; Bywaters & Rolfe, 2002; Camgan *et al.*, 1994; Dower *et al.*, 2000;
8 Horrocks *et al.*, 2005; Whitehead, 2002). The importance of tact and respect for
9 service users' individuality was another aspect of care that people expressed
10 as necessary for service improvement (Camgan *et al.*, 1994; Whitehead, 2002).
11 What emerged from these studies was that an important factor in determining
12 whether a person's experience of services was helpful was the attitude and
13 approach of the professionals involved. Most of the service users' frustration
14 and discontent with services was caused by the negative or flippant attitudes
15 of healthcare professionals, whether this was expressed in terms of
16 disapproval, disinterest or failure to provide any real help.

17
18 Where people felt positive and satisfied with services, this was usually due to
19 the compassionate support offered by individuals (Arnold, 1995). Likewise,
20 Bywaters & Rolfe, (2002) found that overall, service users were more satisfied
21 with their treatment when they felt that the professional was genuinely
22 concerned about them, respected them and did not try to belittle them.
23 Moreover, service users said they wanted healthcare professionals to give
24 them more responsibility for their own management (Bywaters & Rolfe, 2002;
25 Whitehead, 2002). Specifically, the need for clinicians to understand the
26 problem individuals faced rather than focusing on their physical
27 disfigurements was a frequent plea (Bywaters & Rolfe, 2002):

28
29 *Look at the individual, not the harm. Look at the person beyond the scars.*
30 *Scars aren't important. It's the person that did them that's important*

31
32 Several service users felt that hospital staff failed to address the underlying
33 issues and did not have sufficient knowledge about or training in caring for
34 people who self-harm (Arnold, 1995). Many service users suggested that more
35 information should be provided to them about self-harm and its prevalence.
36 In particular, information on how common self-harm is would be helpful.
37 One participant (Arnold, 1995) felt this was important to reduce the shame
38 and stigma associated with self-harm:

39
40 *I used to feel abnormal and weird as I thought I was the only person to do this.*
41 *Information could have helped reduce the shame and isolation this caused me.*

42
43 Women in another study carried out by Reece (2005) expressed a need to be
44 accepted and to be listened to. In particular, they articulated a desire for
45 healthcare professionals to 'reach out' to them as individuals and give them an

opportunity to express their ‘inner torment’ and pain. More recently, Horrocks and colleagues (2005) found that many service users experienced long delays before receiving any aftercare treatment and this led to many feeling disoriented or abandoned. Participants from this study also underlined the importance of professionals focusing on their underlying issues rather than the self-harm itself:

It would have been better if someone had understood – the psychological side of it they didn’t seem bothered about, they should not have put me down for what I did but tried to talk to me about it and help me.’

In a German study (Schoppmann *et al.*, 2007) participants conveyed the importance of personal relationships and confidence in the intervening person, especially if physical contact is involved.

If there would be someone with whom I have no trusting relation I would of course not allow a touch, I would not say a word, I would not show a feeling. Nothing! Only someone I trust.

Similarly, in a study carried out by Huband & Tantam (2004) the women reported on a number of management strategies and their helpfulness. ‘Having a long-term relationship with one key worker’ and ‘expressing feelings about the past’ were rated overall as the most helpful methods of managing their self-wounding. On the other hand, ‘being taught relaxation techniques’ was experienced as the least helpful. Indeed, many reported that relaxation actually had the potential to make their self-harm worse, but they had been unable to convince healthcare professionals that this was so. A Canadian study conducted by Crockwell and Burford (1995) on women who had engaged in multiple suicide attempts by overdose established that some participants were satisfied with their aftercare management because they were given the opportunity to talk about the issues that contributed to their self-harm episode. However, some respondents (Crockwell & Burford, 1995) said that they felt they were not given a sufficient amount of time for their appointments:

[W]hen I left he gave me a prescription for anti-depressants so we hadn’t talked, he didn’t once say it’s O.K. or give me any bit of feedback. He just wrote me out a prescription. I’d say I was only in there about 15 minutes, 20 at the most, and he wrote me out a prescription for anti- depressants and sent me on my way.

Similar to women, many men prioritised the opportunity to talk about their self-harm and to feel understood by healthcare professionals (Taylor, 2003). In contrast, some service users explained that the lack of opportunity to become

involved in discussions about their care made them ‘feel disrespected’. One man in particular, commented that his team worker had:

never asked questions like you’ve asked me...[s/he] never asks me about self-harm, even after times I’ve done it.

This had left him feeling that his self-harm was ‘not taken seriously’, which increased his anger and propensity to self-harm again (Taylor, 2003).

In a study carried out by Ray (2007) the importance of professionals taking self-harm seriously and acknowledging the depths of the person’s pain was highlighted. In particular, the women expressed a preference for practitioners who were direct, proactive, and genuine. For most women, negative experiences with therapy appeared to stem from perceptions of therapists as judgmental, unable to relate, and lacking in knowledge about self-harm (Ray, 2007).

Issues of power and control were important in relationships with counsellors and therapists. Effective therapeutic relationships seemed to be characterised by an equal partnership, with participation in the process of therapy, such as choosing when and how to disclose abuse (Curtis, 2006). Similarly, the confiscation of objects that could be used to self-harm in many cases contributed to a sense of lack of control and an increased desire to self-harm in the future (Smith, 2002).

In another study (Hume & Platt, 2007) participants were often provided with contact numbers to helping organisations in place of, or in addition to, a referral. Although the majority of participants made use of these numbers, some explained they felt uncomfortable initiating their own aftercare by dialling these organisations. Moreover, several participants in this study were anxious to impress on their friends, family and, in some cases, professionals the importance of managing self-harm rather than its prevention.

Furthermore, the desire or willingness to engage with a service or source of support for self-harm was not uniform. It was reported that those who were unwilling to engage with treatment were more likely to have been harming themselves over a long period. Similarly, service users who reported a longer commitment to a particular intervention tended to recount feeling satisfied with this service. In contrast, experience of a large number of different interventions was associated with less commitment to, or perseverance with, a particular intervention (Hume & Platt, 2007).

Young people’s experiences of engagement with service and suggestions for improvement

1 There were many suggestions by young people for improving engagement
2 and service delivery. Firstly, the importance of having services that are
3 informal and staffed by people with experience of mental health disorders
4 was raised as an important issue (Bolger *et al.*, 2004). Moreover, in studies of
5 young people conducted in the UK (Burgess *et al.*, 1998; Brophy *et al.*, 2006;
6 Sinclair & Green, 2005), Ireland (Bolger *et al.*, 2004) and New Zealand (Hood,
7 2006), the opportunity to talk was an important aspect contributing to their
8 positive experience of aftercare. In particular, young people hoped that
9 healthcare professionals would (Brophy *et al.*, 2006):

10
11 *...listen and respond in a natural way – showing concern and wanting to*
12 *support you*
13

14 However, not all participants welcomed the opportunity. Similar to adults,
15 the need for their inclusion in planning their treatment was highlighted as an
16 important issue for aftercare (Bolger *et al.*, 2004). Over half of the participants
17 could think of other types of help they would like to have received but had
18 not. These included admission to hospital, individual rather than family
19 appointments and specific help with school problems. Furthermore, respect
20 for the young person and the opportunity to build trusting relationships with
21 professionals were important aspects identified as a major factor in their
22 receptiveness of an intervention (Crockwell & Burford, 1995; Sinclair & Green,
23 2005). These needs were expressed by one individual as follows (Crockwell &
24 Burford, 1995):

25
26 *Listen to what they're saying, believe in them and make them feel like you're*
27 *there for them. I know one thing. I really wanted people to be there for me; if*
28 *they were, it would have made me feel a lot better. I'd say it would help other*
29 *people too. And don't take it lightly, that's another thing. Some people just*
30 *take it lightly and go 'that's another one of those teenage phases' they're going*
31 *through" or something like this but it's not. It's real!*
32

33 In a US study conducted on female college students (Shaw, 2006), core aspects
34 of treatment women described as helpful in their passage toward stopping
35 self-harm include an empathic relationship with a professional who sees
36 strengths beyond diagnostic labels and provides an opportunity to discuss
37 self-injuring behaviour. In addition to the relational features, women also
38 welcomed the helpfulness of pragmatic interventions such as verbal plans for
39 dealing with urges to self-injure and concrete methods of managing emotions.
40 Many of the participants expressed a desire to make meaning of their self-
41 harm and explore the logic of their behaviour, but felt that this was lacking in
42 their interventions (Shaw, 2006).

4.4.8 Social support

Eight studies investigated the needs, benefits and drawbacks of social support, which includes web-based support or information (Baker & Fortune, 2008), support from family or friends (Bolger *et al.*, 2004; Hood, 2006), community support groups (Corcoran *et al.*, 2007) and support from other people who self-harm (Hume & Platt, 2007) in helping to cope with self-harm behaviour. Overall, participants emphasised the importance of social support in dealing with their self-harm. In particular, many service users expressed a desire for mutual support and shared understanding from others who have harmed themselves (Hume *et al.*, 2007).

Feelings of isolation and alienation were common amongst service users (Camgan *et al.*, 1994; Hume & Platt, 2007; Ray, 2007; Schoppmann *et al.*, 2007). The notion of being alone surfaced as a significant stressor with self-harm emerging as an antidote and a reaction to loneliness (Ray, 2007). One interviewee (Schoppmann *et al.*, 2007) spoke about how there was no-one she could relate to and no-one she could trust:

I think I felt deserted from everybody. Here you are and nobody is there for me. I couldn't talk to anybody.

For many service users, isolation and being alone led to feelings of increased restlessness, fear, and anxiety. Self-harm helped to deal with these feelings and to get some relief. (Schoppmann *et al.*, 2007):

I think when I am outside I have social contacts and when I am here, left on my own, perhaps it is the fear of being alone, yes, to be able to stand this, to feel that there is someone, that I am not alone, to feel myself perhaps.

Corcoran and colleagues (2007) examined the role of support groups in women's management of their self-harm and possible associated difficulties. Belonging emerged as one of the primary feelings experienced, creating a sense of acceptance and welcome, particularly valued by new members. Belonging was fostered by the anonymous and voluntary nature of the group. Acceptance of differences encouraged participants to express themselves openly and contributed to the development of self-acceptance.

. . . if I can't accept myself as someone who self-injures or maybe I will get to a stage of someone who has self-injured, you know I've got physical scars, . . . how am I going to expect the rest of the world to?

Sharing experiences emerged as a valued aspect of group-membership, which involved a sense of 'genuine empathy' derived from all participants having self-harm in common. Participants often realised that, contrary to previously held beliefs, their experiences were shared by many others, which increased

feelings of self-acceptance, thereby reducing feelings of isolation and subsequent desire to self-injure arising from such feelings. Despite this, many participants felt that the depth of sharing could be compromised by the low frequency and time restraints of meetings, sometimes preventing deeper exploration of issues. 'Autonomy' emerged as important, primarily in the group being 'led and run by the participants themselves':

... it's power sharing, ... we're equal, ... we are ... a group of women ... tackling painful issues ... that we have had to deal with ... so we are strong women, ... we don't feel strong all the time but we are equal, ... and the empathy, you couldn't get it ... from ... mental health professionals. ... there is a power difference.

'Positive feeling' emerged as a common experience and led to improved mood and light-heartedness, particularly in relation to their self-harm:

We have a laugh ... , it's not all serious and sometimes I think it can be really healthy to just have a laugh, ... not take it all too seriously which ... [is] hard to do if you're on your own or with people who are worried.

Participants expressed numerous individual changes resulting from group-membership, the most common being increased self-confidence/self-esteem. Moreover, many participants credited group-membership to reduced self-harm. Other changes attributed to group-membership included development of clearer thinking, tapping of inner strengths, discovery of new talents and the ability to do things they had previously been unable to do:

There have been days when I've felt like self-harming and thought I don't want to go to the group, and I've gone and I have come away and I've not wanted to self-harm because it has given me a chance to express myself instead.

A study conducted in the UK examined the impact of self-harm related websites as a form of support for young adults who self-harm (Baker & Fortune, 2008). All participants wrote about understanding and empathy, when they described what benefit they derived from using the self-harm and suicide websites. By understanding others online, it is possible that website users may feel helpful and useful, and several participants gave this as an important reason for using the sites. Another dominant way of writing about the websites was as if they were communities. Participants stated that they provided emotional support, valuable information and advice, and most importantly, friendship (Baker & Fortune, 2008). These websites were an important coping strategy for those who self-harm with a number of participants stating that their use of self-harm and suicide websites served the same function. Interacting with fellow users was reported as a preferable alternative to self-harm and suicidal behaviours. For some participants, this

led to a reduction in the frequency of these behaviours. Participants also wrote about the sites as contributing to their recovery. One reported that the sites had facilitated change *'better than any therapy.'*

Since using the boards to tell people how I felt and stuff I definitely think the frequency of my s/h has decreased a lot. I know that if I feel I need to do it I can go on the boards or on msn and someone will be there who I can talk to, and get my feelings out as well as being a way to distract myself.

Young people's experiences of family support

In a study carried out on young people by Bolger and colleagues (2004) most of the respondents stated that their relationship with their parents and other family members was *'good'* or *'improved'* since the self-harm incident. The majority of the respondents mentioned *'having someone to talk to'* as being of benefit to young people in distress. In Hood's (2006) study of New Zealand young people and their parents, the young people were usually less enthusiastic about parental involvement in their treatment. Conversely, parents valued their involvement in their child's treatment decisions. However, most young people did acknowledge that having a therapist to mediate allowed them to talk to their parents about issues that they felt they could not raise on their own.

4.4.9 Carer experiences

Seven studies (Byrne *et al.*, 2008; Bywaters & Rolfe, 2002; Hood, 2006; McDonald *et al.*, 2007; Oldershaw *et al.*, 2008; Rissanen *et al.*, 2009, Lindgren *et al.*, 2010) were found that could be categorised under the heading of *'carer experiences'*. The review team extracted common findings that emerged from the analysis of the carer perspectives such as the process of discovery, the psychological impact of self-harm, the understanding of the meaning of self-harm, support needs, parental views on treatment, the effects of self-harm on parenting and family life and the role of carers or parents in their child's recovery and treatment.

Firstly, the process of discovery of self-harm was commonly captured from the carer's perspectives review. Oldershaw and colleagues (2008) found that for many parents, the process was gradual. At the beginning, many parents had a suspicion about their child's behaviour, often spotting injuries. However, they accepted implausible explanations in the hope that things would improve on its own. For the majority of cases, formal verification of their child's self-harm was often carried out by schools or other outside organisations, in collaboration with the young person. However, despite their initial concerns, many parents reacted to this news by *'brushing it under the carpet'* as they felt that the situation would fix itself. Furthermore, the behaviour of outside organisations, such as schools or GPs, was suggested by

1 parents as a key factor in the timing of accessing help. In particular, their
2 attitudes and their willingness to discuss self-harm and give information
3 influenced parental behaviour in the interval between disclosure and referral:

4
5 *The teacher at the school actually was really quite good. She actually gave me*
6 *a lot of the background for self-harm, why girls self-harm...she seemed to be*
7 *quite clued up and in fact it was her that, she was the one that explained to*
8 *me, a lot of it to me, because I had no idea what it was, what it meant... I don't*
9 *feel as though I was floundering as much as I think I would have if I hadn't*
10 *had her advice.*

11
12 All parents from this study advised others in a similar situation to seek help
13 sooner than they had done (Oldershaw *et al.*, 2008).

14
15 Another finding emerged was the psychological impact of self-harm on
16 parents. Many parents described strong and lasting emotional reactions to
17 their child's behaviour, including shock, disappointment, helplessness, guilt
18 and fear, a persistent feeling of sadness and a sense of loss (Oldershaw *et al.*,
19 2008). One of the most prominent psychological reactions, however, was
20 feelings of guilt and shame (Byrne *et al.*, 2008; Hood, 2006; Lindgren *et al.*,
21 2010; McDonald *et al.*, 2007; Oldershaw *et al.*, 2008). In particular, feelings of
22 helplessness in discovering or preventing their child's self-harm led to
23 increased guilt and shame. Specifically, they felt guilty that their child was
24 unhappy or hurting to such an extent that they would even consider self-
25 harm (McDonald *et al.*, 2007). In response to their children's expressed
26 unhappiness, the mothers questioned their relationships with their children
27 and felt that they may have failed them. This caused deep feelings of blame
28 (McDonald *et al.*, 2007):

29
30 *It was like, what have I done?...You tend to blame yourself...I wasn't*
31 *watching, I wasn't caring enough, I wasn't showing enough love, I wasn't*
32 *giving enough praise.*

33
34 Interestingly, these emotional reactions are also mirrored in the accounts of
35 healthcare professionals and service users themselves, increasing our
36 confidence in the findings.

37
38 Many parents 'searched for a reason' for their child's self-harm behaviour.
39 Many felt that circumstances or life events in their own lives, such as
40 marriage breakdowns or losing family members, had caused their child to
41 self-harm. As a consequence, they blamed themselves for its occurrence
42 (McDonald *et al.*, 2007). Another source of guilt for these mothers stemmed
43 from their need to be far more vigilant of their children, after the self-harm
44 was discovered. The mothers reported, amongst other things, having read
45 their child's journals and emails as well as listening in to private

1 conversations, in order to supervise their child's activities more thoroughly
2 (McDonald *et al.*, 2007). One mother commented:

3
4 *It means that you are constantly aware, watching them for any signs...which*
5 *is terrible. You feel like you are sneaking around all the time.*
6

7 Public stigma also led to strong psychological reactions such as a sense of
8 failure, worry, isolation and fear (Byrne *et al.*, 2008; Bywaters & Rolfe, 2002;
9 Hood *et al.*, 2006). For instance, Hood and colleagues (2006) established that in
10 some cases parents were uncomfortable with their child's referral to aftercare
11 because it increased their feelings of failure and they were worried about the
12 stigma attached to it. Interestingly, fathers in this study were found to worry
13 more than mothers about stigmatisation (Hood, 2006). Many felt that better
14 information for the general public was also called for to help alleviate some of
15 the stigmatisation faced by individuals who self-harm (Bywaters & Rolfe,
16 2002). Mirroring findings of past studies, a recent study carried out by Byrne
17 and colleagues (2008) on the needs of parents and carers experiences of self-
18 harm and services found that the discovery of self-harm was associated with
19 stigma, which exacerbated feelings of isolation and despair:
20

21 *...go around trying to cover up, not discussing it in front of family or friends.*
22 *The biggest thing is the isolation, terror and fear...it's a very harsh journey.*
23

24 The majority of mothers interviewed felt they could not talk to anyone about
25 their child's self-harm as they were aware of the stigmatised nature of self-
26 harm and feared the judgement of others (McDonald *et al.*, 2007). This fear
27 further contributed to the shame they experienced. Finally, self-harm episodes
28 elicited intense anxiety as many feared the risk of repetition while their child
29 waited for appropriate treatment (Byrne *et al.*, 2008). Parents also described
30 feelings of anger and frustration and sometimes this anger was directed at
31 their child, whose behaviour was disrupting their entire family (Byrne *et al.*,
32 2008).
33

34 A third finding from the carer literature was the parents' understanding of
35 repetitive self-harm behaviour and factors relating to it. Oldershaw and
36 colleagues (2008) were the first to investigate parental views of the meaning of
37 their child's self-harm behaviour and the causal factors. They found that
38 parents were sensitive to the behaviour and deeply affected by their
39 experience, however, almost all parents said that their child gave them little
40 or no explanation for their self-harm. Many of the parents felt that on the
41 outside their children appeared to be ok, but internally they were suffering
42 (Rissanen *et al.*, 2009):
43

44 *I knew she had problems of some kind, but her problems were bigger and more*
45 *serious that I could ever imagine and they could not be seen from the outside.*

1
2 When asked if they had any personal opinions on the causes, common causal
3 factors acknowledged by parents were emotional difficulties; situational
4 difficulties, such as bullying; and personality factors, such as a lack of self-
5 esteem. Most parents recognised that self-harm served a purpose in the young
6 person's life, such as coping with negative emotions or as a means of
7 providing control. (Oldershaw *et al.*, 2008):

8
9 *I can understand that it's some way of you having some sort of control over*
10 *your pain, over your life, because you feel totally out of control when you're*
11 *feeling so depressed or vulnerable or whatever*
12

13 Carers gave similar causal factors for engaging in self-harm as professionals
14 and service users themselves, thus strengthening these findings. Yet beyond
15 an intellectual understanding, many parents felt they could not come to terms
16 with their child's self-harm behaviour and understated its significance. Most
17 parents struggled to accept self-harm and recognised the numerous 'typical'
18 teenage behaviours that their child could alternatively engaged in and felt
19 regret that their child had 'opted' to self-harm. Ultimately, parents felt that
20 they could not fully understand or empathise with self-harm:

21
22 *I find that hard to empathise with because it just wouldn't be my way of*
23 *dealing with it, erm but I can intellectually understand it*
24

25 An additional finding from the carer literature was the need for support and
26 information about self-harm. Above all, carers expressed the need for
27 support; information about suicidal behaviour in young people; skills for
28 parenting and advice on managing further incidences (Byrne *et al.*, 2008;
29 Bywaters & Rolfe, 2002; Rissanen *et al.*, 2008). Furthermore, advice on how to
30 prevent, or manage further episodes was seen as priority for parents and
31 carers (Byrne *et al.* 2008). The opportunity to avail of support and to share
32 similar circumstances was believed to be extremely important in managing
33 the impact of self-harm (Byrne *et al.*, 2008; Oldershaw *et al.*, 2008):

34
35 *It would be a relief to be able to talk to someone else who has gone through it.*
36 *Knowing other people having the same situation really does help. The relief of*
37 *knowing I'm not the only one.*
38

39 Another finding that emerged from the carer literature was their views of
40 services and treatments. Firstly, many parents were divided on their feelings
41 about medication. Specifically, concerns about the side effects, withdrawal
42 effects, changing medication and the long-term effects of medication were
43 frequent worries from parents (Hood *et al.*, 2006). Conversely, some parents
44 were happy that their child was on medication because they saw the
45 beneficial nature of the antidepressants.

1
2 Similar to service users, the majority of the parents felt that services failed to
3 provide their children and their parents with adequate or appropriate
4 support. In particular, the lack of a clear care pathway for 16-18-year olds was
5 highlighted. Akin to service user's views, carers highlighted the lack of
6 continuity of care and specifically the long duration spent waiting for
7 CAMHS appointments (Byrne *et al.*, 2008; Hood *et al.*, 2006). Lindgren *et al.*
8 (2010) conducted a study which examined parents' experiences of their
9 daughters' professional care and caregivers at all levels of outpatient and
10 inpatient child, young people and adult psychiatric care, acute and
11 emergency care, and primary healthcare in Sweden. The experiences were
12 mixed in nature. With regard to negative experiences, they reported feeling
13 invisible by not being listened to, not being seen, not been taken into account,
14 and being excluded from participating in their daughters' care. On the other
15 hand, parents also experienced feelings of peace and of being comforted,
16 listened to, and taken seriously in some meetings with some professional
17 caregivers. Moreover, caregivers who showed compassion and an honest
18 willingness to help were experienced as genuine, reliable, and helpful, which
19 made them feel valued, validated them as valuable people in their daughters'
20 lives and allowed parents to see some hope for their daughter. Some parents
21 said they found young people's psychiatrists were often unavailable for
22 continued care because they were too busy, or had left the service during the
23 young person's treatment period (Hood *et al.*, 2006).

24
25 In a recent study carried out by Rissanen and colleagues (2009) knowledge of
26 self-harm among healthcare professionals was identified by parents as a
27 helpful factor enabling them to approach self-harm in a professional way.
28 Service users also highlighted the importance of knowledge of self-harm in
29 healthcare professionals, and professionals themselves who were more
30 knowledgeable reported feeling more able in treating people who self-harm.
31 According to the parental descriptions, self help was useful in many ways but
32 was insufficient on its own (Rissanen *et al.*, 2009). Parents also described
33 additional factors that were of help in the relationship between healthcare
34 professional and a young person who self-injures. These helpful factors
35 included such things as trustworthiness, professional skills, genuine caring,
36 respecting individuality, sensitivity, speaking about self-harm and the
37 reasons for it, co-operation with the whole family and working
38 communication between nursing units. In addition, parents recognised
39 unhelpful factors such as disinterested attitude, avoiding discussion of self-
40 harm, reproaching or denouncing parents for their child's self-harm and
41 doubting the honesty of parents when talking about the self-harm. Again, the
42 helpful and unhelpful factors reported by parents reflect those of the service
43 users themselves and in some cases healthcare professionals' views (for
44 example the value of communication), increasing our confidence in the
45 findings reported.

1
2 A further finding of importance was the effect of self-harm on parenting and
3 family life. It appeared that self-harm resulted in both negative and positive
4 changes in these areas. With regard to negative changes, self-harm was seen
5 to disrupt family dynamics and impede family functioning (Byrne *et al.* 2008).
6 Many parents reported 'walking on eggshells' around the young people,
7 nervous of triggering an episode of self-harm (Oldershaw *et al.*, 2008). This
8 impacted their parenting style and ability to set limits and maintain
9 boundaries. Several parents (Oldershaw *et al.*, 2008) found that they were
10 now constantly aware of what the young person was doing, both discreetly
11 watching them from a distance, and providing increased overt attention and
12 care-giving:

13
14 *It was like looking after a baby again...I was hiding the knives, I was hiding*
15 *any pills...I was knocking on her door every 5 minutes*
16

17 Many parents felt that they had to deny their own needs and make changes to
18 or limit their lifestyle as a direct result of the self-harm. They found
19 difficulties in balancing parenting and meeting the needs of other children,
20 which heightened the psychological impact of self-harm by increasing
21 parental burden, pressure and stress. Many of the mothers in this study felt
22 guilt regarding their diminishing role within the family – as a wife, mother
23 and core of the family (Oldershaw *et al.*, 2008). Dealing with their child's self-
24 harm often took away from their usual roles at work and home, causing them
25 to feel guilty because they believed that they were not meeting the
26 expectations of themselves or others. Four of the mothers interviewed also
27 considered that the extra time, energy and attention spent on child who self-
28 harms meant that they had neglected the mothering of their other children.
29 (McDonald *et al.*, 2007).
30

31 However, parents did feel that self-harm had resulted in some positive
32 changes to family life by strengthening the parent-child relationship
33 (Oldershaw *et al.*, 2008):
34

35 *It's actually helped me break down some of those barriers because she's always*
36 *coming up for cuddles now and actually I don't reject her anymore, and I*
37 *think that's because I want to and I can. So that's...I think that's a really*
38 *positive thing.*
39

40 Finally, carers highlighted the different roles that they played in their child's
41 struggle with their self-harm behaviour and in their recovery. In a study
42 carried out by Rissanen and colleagues (2009) the parents felt that they played
43 a significant role in their child's self-harm, include intervening in the act of
44 self-injuring; giving support for obtaining professional help; showing they
45 care and discussing the self-harm behaviour and factors associated with it.

1 They wished to help their child express their feelings more appropriately and
2 develop adaptive coping strategies. On the other hand, many of the parents
3 questioned their competencies at disciplining, boundary setting, and re-
4 establishing healthy relationships with their child. Specifically, parents felt
5 that ‘*active disciplining*’ could run the risk of self-harm recurrence, and were
6 left disempowered by self-harm. Problems in communication with young
7 people and the incapacity of parents to help were identified as help-hindering
8 factors in this relationship. On the other hand, helpful factors identified by
9 parents were; parental interaction with the young people, including showing
10 care and awareness; ensuring professional help and interaction of the parents
11 with each other. In reference to parental involvement in treatment, Hood and
12 colleagues (2006) found that young people were usually less enthusiastic
13 about parental involvement, while parents were often very happy to have the
14 opportunity to be involved their child’s therapy.
15

16 **4.4.10 Healthcare professionals’ attitudes, knowledge and** 17 **experience**

18 15 primary studies (Cooke & James, 2009; Duperouzel & Fish, 2007; Gibb *et al.*,
19 2010; Kibler, 2009; Law *et al.*, 2009; Long & Jenkins, 2010; Reece, 2005; Redley,
20 2010; Roberts-Dobie & Donatelle, 2007; Simm *et al.*, 2008; Smith, 2002;
21 Thompson *et al.*, 2008; Treloar & Lewis, 2008a; Wheatley & Austin-Payne,
22 2009; Whitlock *et al.*, 2009) were found that were categorised under the broad
23 heading of ‘healthcare professionals’ attitudes, knowledge and experience’.
24 There were a further two reviews identified that fell into this category
25 (McHale & Felton, 2010; Saunders *et al.*, in press). When reviewing the
26 literature, there were a number of findings such as: the identification of self-
27 harm; healthcare professionals’ knowledge and understanding of self-harm;
28 the psychological impact of self-harm on healthcare professionals; attitudes
29 towards self-harm behaviour; views on treatment and services; support
30 needs; views on harm minimisation strategies and finally training needs and
31 experiences.

32 ***Identification of self-harm***

33 Three studies reported findings related to ‘identification of self-harm’ (Cooke
34 *et al.*, 2009; Roberts-Dobie & Donatelle, 2007; Simm *et al.*, 2007). For school
35 nurses from a primary care trust, identification of self-harm most commonly
36 occurred when staff were approached by friends of service users and other
37 staff members (Cooke *et al.*, 2009). It was a rare occurrence for the school
38 nurses to be approached by children and young people who self-harm and in
39 fact only one school nurse identified self-harm behaviour this way. Similarly,
40 in a US study conducted by Roberts-Dobie & Donatelle (2007) on school
41 counsellors, the most common methods of discovery were being informed by
42 a fellow student (67%), a classroom teacher (65%), being approached by the

1 person who self-harms (51%) or the counsellor personally recognising the
2 symptoms (48%). These findings highlight the need for all school employees
3 and peers to be educated about self-harm as they are the primary sources for
4 identification of self-harm. Importantly, in a study conducted on head
5 teachers of primary schools in the UK (Simm *et al.*, 2007) participants noted
6 that the busy nature of school life and demands on time might hide self-harm
7 behaviours from some staff.

8 *Knowledge of self-harm and its causes*

9 There were five studies that explored the topic of knowledge of self-harm and
10 its causes (Cooke *et al.*, 2009; Duperouzel & Fish, 2007; Kibler, 2009; Simm *et*
11 *al.*, 2007; Thompson *et al.*, 2008). In a study carried out by Simm *et al.* (2007),
12 head teachers of primary schools expressed uncertainty as to what self-harm
13 was and was not. Some participants felt that, if the child does not intend to
14 hurt themselves, then the behaviour does not qualify as self-harm. Others felt
15 that intentionality did not matter in this way. Finally, some participants felt
16 that self-harm had to be repeated behaviour but others considered that
17 behaviour could count as self-harm even if it only happened once. In another
18 study, school nurses' knowledge of self-harm methods was broad, but
19 commonly focussed on 'superficial self-harm' rather than more lethal
20 methods (Cooke *et al.*, 2009).

21 *Understanding of the underlying reasons for self-harm*

22 Regarding the underlying reasons for self-harm (Duperouzel & Fish, 2007)
23 healthcare professionals understood that self-harm was an important coping
24 mechanism and a means of control. This was a common underlying reason
25 quoted by service users themselves, thus strengthening the findings reported.
26 Furthermore, the majority (83%) of US school counsellors were also aware
27 that it is best to be direct with students about stopping the self-injurious
28 behaviour and most participants (80%) also believed it was beneficial to
29 educate students about how and why students self-injure (Kibler, 2009).
30 Ultimately, in a study conducted on experienced community psychiatric
31 nurses (Thompson *et al.*, 2008) the importance of understanding service users
32 in order to have more empathy was highlighted.

33
34 Another recent study by Redley (2010) examined clinicians understanding of
35 self-harm by overdose and their experience of psychosocial assessment. Many
36 seen the act as an impulsive one in the face of adverse life events and
37 influenced by drugs or alcohol. On the contrary, a person's motivation or
38 reasons for taking an overdose are given minimal clinical importance. The
39 authors suggest a number of reasons for this. Firstly, paying greater attention
40 to a person's reasons and motivations may lead to provocation if the clinician
41 does not understand, endorse or agree with the person's motivations.
42 Secondly, some of the interviews suggested that being intimate with details

1 people's lives, in order to better understand their reasons for taking an
2 overdose, is not commensurate with the professional role considered
3 necessary to work with these people.
4

5 Long and Jenkins (2010) recently examined counsellor's perceptions of self-
6 harm and their view of the role of the therapeutic relationship when working
7 with this group. The counsellors concurred that the therapeutic relationship is
8 central when working with people who self-harm. In particular, they
9 recognised the need for time, a safe and confidential environment, non-
10 judgemental support, unconditional positive regard, empathy, equality and
11 sensitivity as important factors in establishing a rapport and a trusting
12 therapeutic relationship. The findings indicate that the therapeutic
13 relationship for self-harm is vital, complex, long-term and multi-dimensional.
14 Observational skills, listening, identifying personal history, supervision, risk
15 assessment and being person-centred were all identified by counsellors as
16 crucial at the beginning of therapy. Two counsellors commented on the use of
17 no-suicide contracts and both agreed that they were detrimental rather than
18 beneficial, in that they 'protect the counsellor rather than the client' and as it
19 takes away a coping mechanism or 'crutch' for dealing with difficult issues.
20 When discussing the ending of the therapeutic relationship, teaching coping
21 strategies, teaching service users to identify triggers for their self-harm and
22 safer self-harm were described as possible options. Many of the counsellors
23 conceded that the ending of therapy was a difficult task and this should be
24 addressed in training.

25 *Attitudes to self-harm*

26 Sixteen studies examined attitudes of healthcare professionals about self-
27 harm and these were predominantly negative in nature (Cooke *et al.*, 2009;
28 Gibb *et al.*, 2010; Hopkins, 2002; Jeffery & Warm, 2002; Kibler, 2009; Mackay &
29 Barrowclough, 2005; McHale & Felton, 2010; O'Donovan, 2007; Redley, 2010;
30 Reece, 2005; Saunders *et al.*, in press; Smith, 2002; Thompson *et al.*, 2008;
31 Treloar & Lewis, 2008a; Wheatley & Austin-Payne, 2009; Whitlock *et al.*, 2009).
32 Some of the negative attitudes addressed by the literature (for example, that
33 self-harm is a means of seeking attention) were quoted as common
34 misconceptions in the perspectives of service users reported above (Reece,
35 2005).
36

37 A number of studies exposed that many healthcare professionals felt that
38 people who self-harm were labelled as '*attention seeking*' (Cooke *et al.*, 2009;
39 Kibler, 2009; McHale & Felton, 2010; Reece, 2005; Saunders *et al.*, in press;
40 Smith, 2002). For instance, in one study carried out by Kibler (2009) when US
41 counsellors were asked whether most students who self-injure want attention,
42 approximately equal numbers agreed and disagreed with this statement.
43 Also, in the systematic review carried out by Saunders and colleagues (in
44 press) a number of studies indicated an over-representation of attention-

1 seeking as a motive for self-harm. This was found to be less common in
2 psychiatric staff compared with general hospital staff. When asked the
3 reasons why it was felt that people who self-harm were viewed negatively,
4 healthcare professionals frequently cited (Smith, 2002):

5
6 *A general fear of working with these people and I think the fear is born out of*
7 *not quite knowing what to do with them, and due to the blame culture*
8 *professionals have lost confidence in themselves and therefore empathy*
9 *towards other human beings suffering*

10
11 Moreover, some healthcare professionals expressed that those who used
12 superficial methods of self-harm were doing so to gain attention, whereas,
13 those engaged in more 'serious' self-harm had different motives (Cooke *et al.*,
14 2009):

15
16 *I think there are two groups: those that say they're self-harming, and*
17 *it's...probably only superficial scratching or whatever and I wonder if it's more*
18 *attention-seeking or frustration or anything else. And then you get what I call*
19 *your serious self-harmers that are really abusing or hurting themselves*
20

21 On the other hand, not all studies highlighted negative attitudes towards
22 individuals who self-harm. The literature review carried out by Saunders and
23 colleagues (in press) identifies two studies where sympathy was reported by
24 at least 40% of healthcare professionals (Friedman *et al.*, 2006; Pallikkathayil &
25 Morgan, 1988). Moreover, in a study carried out by Gibb and colleagues
26 (2010), there were some positive attitudes including 73% of healthcare
27 professionals stating that they could empathise with a person who has self-
28 harmed and 71% believing that their contact was helpful to people who self-
29 harm.

30
31 There are a number of factors that may promote negative attitudes, such as
32 the busy nature of the ward, service users being seen as an obstacle to the
33 ward and challenging behaviour. For instance, in a study carried out by
34 Hopkins (2002) the above factors were highlighted when observing two
35 medical wards and interviewing two healthcare professionals from each
36 ward. In particular, the service users were seen as blocking beds as their
37 needs meant beds were occupied for longer than expected. These service
38 users were deemed to have challenging behaviours as they had different
39 requirements than medical patients. While the study had a small sample (only
40 four participants) to draw these conclusions from, they were supported by the
41 additional observations made (Hopkins, 2002). In fact, many healthcare
42 professionals feel that people who self-injure are a difficult group to work
43 with, and this may partially explain the prominence of negative attitudes
44 (Gibb *et al.*, 2010; Smith, 2002; Thompson *et al.*, 2008; Whitlock *et al.*, 2009).
45

1 One explanation for this, is that self-harm is often comorbid with many other
2 challenging clinical presentations such as borderline personality disorder and
3 depressive and anxiety disorders, disordered eating, and a history of trauma
4 and abuse (Whitlock *et al.*, 2009). Other possible explanations include the
5 perceived addictive nature of the behaviour and uncertainty about how to
6 best treat or manage self-injurious behaviour (Whitlock *et al.*, 2009). Finally in
7 a study by Gibb and colleagues (2010), healthcare professionals indicated that
8 their greatest difficulties in working with people who self-harm included
9 repetitive self-harm, frustrating and difficult behaviour, communication
10 difficulties, lack of knowledge about mental illness, a lack of effective
11 interventions and time pressure.

12
13 A study carried out by Wheatley and Austin-Payne (2009) on nurses provides
14 some additional insight into why they viewed people who self-harm more
15 negatively than other patients. Interestingly, they found that nurses who
16 reported feeling more negative about people who self-harm reported more
17 worry about working with this group. Furthermore, there were non-
18 significant trends suggesting that nurses who reported feeling more effective
19 in their work with people who self-harm reported less negativity and worry
20 about working with this group, although this was not necessarily the case for
21 female nurses. A study carried out by Gibb and colleagues (2010) found that
22 negative attitudes were significantly associated with higher levels of burnout,
23 through high emotional exhaustion and low personal accomplishment.
24 Finally, unqualified nursing staff reported more negativity and worry in
25 working with people who self-harm than qualified nurses, suggesting that
26 knowledge and education plays an important role in attitudes towards self-
27 harm (Wheatley & Austin-Payne, 2009).

28
29 The literature review carried out by Saunders and colleagues (in press)
30 highlighted a number of additional characteristics that play an important role
31 in influencing attitudes such as job role and gender. For example, within
32 general hospital staff, those who were closer to the frontline were increasingly
33 likely to hold negative viewpoints about and behave negatively towards
34 people who self-harm. Furthermore, negative attitudes towards people who
35 self-harm were more prevalent in doctors compared with nurses. Where this
36 was not found the majority of the studies had a participant population which
37 included psychiatric staff. Three studies found that psychiatrists had a more
38 positive attitude towards self-harm, compared to their colleagues of other
39 specialities and the same effect was found in non-medical psychiatric staff
40 and their colleagues (Platt & Salter, 1987; Treloar & Lewis, 2008a; Lonnqvist &
41 Suokas-Muje, 1986). This indicates that psychiatric training and experience
42 goes some way to moderating the effect of job role on healthcare
43 professionals' attitudes. In line with this, exposure of psychiatric staff to
44 people who self-harm was found to improve healthcare professionals'
45 attitudes. Nevertheless, the opposite effect was found in general hospital staff.

1 Another potentially moderating effect, identified by the review, was the
2 influence of gender on attitudes. Three studies found that the attitude of male
3 staff towards self-harm were significantly more negative compared to those of
4 female staff. However, authors do highlight that the strong gender-role
5 association, with the tendency for male doctors and female nurses, make
6 results from these studies difficult to interpret.

7
8 In a study carried out by O'Donovan (2007), an additional area influencing
9 negative attitudes was the impact of the health professionals' views of the
10 differences between their expected and actual roles. In semi-structured
11 interviews O'Donovan (2007) revealed that healthcare professionals felt the
12 focus of their role was prescribing medication rather than developing
13 therapeutic relationships within acute mental health wards. This prevents
14 people from being able to address the reasons for their self-harm and
15 developing alternative coping strategies.

16
17 Another justification for negative attitudes portrayed by healthcare
18 professionals is the lack of training and education in the area of self-harm
19 provided to them. A literature review of the factors affecting attitudes to self-
20 harm (McHale & Felton, 2010) found that a lack of education was the primary
21 rationale for negative attitudes which appeared in 18 out of the 19 papers
22 reviewed. Additionally, a recent study carried out by Treloar & Lewis (2008a)
23 on professional attitudes of mental health clinicians and emergency room staff
24 highlighted the importance of training and education on healthcare
25 professionals' attitudes. They found that mental health clinicians had a
26 significantly more positive attitude towards borderline personality disordered
27 patients who self-harm compared to clinicians working in emergency
28 medicine. Another significant finding was that the female clinicians across
29 both mental health and emergency medicine service settings had more
30 positive attitudes towards patients with BPD, although this difference was not
31 significant when controlling for other factors. However, factors such as the
32 frequency of contact with patients with BPD, level of university training
33 completed, and years of clinical experience held by the clinicians across
34 mental health and emergency medicine were not associated with attitude
35 ratings towards such patients. As predicted, clinicians across the mental
36 health and emergency department service settings who had attended prior
37 training specifically in the area of BPD demonstrated significantly more
38 positive attitudes towards working with this patient group (Treloar & Lewis,
39 2008a).

40
41 As well as healthcare professionals' characteristics, the varying characteristics
42 of people who self-harm were also identified as moderating factors on
43 healthcare professionals' attitudes (Saunders *et al.*, in press). For example,
44 negative attitudes were more likely to be expressed towards people who
45 repeatedly self-harm. Negative attitudes are also linked to the professional's

perceptions of service users' control of self-harm. Mackay & Barrowclough (2005) asked questions about attitudes within four hypothetical situations offering different control and stability features. The findings indicated that where the problems specified leading to self-harm were within the control of the service user then elevated disapproval was shown. This may imply that feelings of incompetence lead to negative attitudes (Hopkins, 2002; Smith, 2002; Mackay & Barrowclough, 2005; O'Donovan, 2007; Patterson *et al.*, 2007). Service users presenting frequently at hospital challenge healthcare professionals and their ability to cope with such situations. This could affect their confidence, which further contributes towards negativity (McHale & Felton, 2007). Ramon, Bancroft and Skrimshire (1975) found that the lethality of self-harm is also an influencing factor on nursing and medical staff's attitudes towards self-harm, with sympathy and lethality being positively correlated. This finding was mirrored in a US study (Ansel & McGee, 1971) and an Australian study (Bailey, 1994), both of which found that positive attitudes were more likely to be displayed towards clearly suicidal or despairing patients. Furthermore, Saunders and colleagues (in press) found that healthcare professionals felt more hostility towards people who self-harm than those with a physical illness. This was attributed to distinctions that professionals between legitimate and illegitimate needs, with self-harm being considered illegitimate compared with physical illness and, therefore, less worthy of care.

The emotional impact on healthcare professionals who work with people who self-harm

The literature also highlighted the emotional and psychological impact that working with people who self-harm can have on healthcare professionals (Duperouzel & Fish, 2007; Reece, 2005; Redley, 2010; Thompson *et al.*, 2008). Similar to carers' experiences, self-harm elicited strong emotional reactions in healthcare professionals. Many participants talked about how frustrating and hopeless the work could be, which was linked to service users not getting better or relapsing (Thompson *et al.*, 2008) or when service users continued to self-harm following attempts to talk about their behaviour (Duperouzel & Fish, 2007):

I suppose it's just like beating your head against a brick wall. You still trying to, you're trying to help her and sort her through and sort her life out and she basically just throws it back in your face. That's how it seems; she's throwing it back in your face.

The sense of nurse helplessness in dealing with self-harm was a common feature of the nurses' interviews in one study (Reece, 2005). However, the way in which this helplessness was managed varied with some expressing feelings of frustration and others were expressing feelings of distress. In particular, many of the male nurses conveyed distress and powerful emotional reactions

1 in response to self-harm incidents (Reece, 2005). Participants also felt
2 inadequate and this was mainly attributed to a lack of resources, lack of time
3 and a feeling of futility (Cooke *et al.*, 2009). For others, there was anger
4 towards patients for being 'manipulative'. Furthermore, some participants felt
5 that seeing the physical effects of patients' self-harm were distressing,
6 shocking and at times they felt disgusted (Thompson *et al.*, 2008). However,
7 despite the challenging nature of working with people who self-harm, most
8 participants also felt that '*It can be very rewarding*' (Thompson *et al.*, 2008). Both
9 service users' and carers' feelings of guilt and blame were key concerns for
10 healthcare professionals. They explained that, when someone self-harms, they
11 feel personal guilt alongside an institutional pressure and blame culture
12 (Duperouzel & Fish, 2007):

13
14 *If we did allow self-harm and something went wrong we'd be dead meat, for*
15 *want of a better word. It could be said as negligent*
16

17 With the exception of one participant they all talked about the fear of being
18 blamed for their actions if a patient dies '*Am I gonna have to account for what I*
19 *have done?*' Feeling responsible was exacerbated by time pressures, having
20 limited resources and feeling unsupported by other statutory services
21 (Thompson *et al.*, 2008). Therefore, not surprisingly, all participants except for
22 one found working with this patient group '*very anxiety provoking*' and on
23 occasion described this anxiety as spilling over into their personal lives
24 (Thompson *et al.*, 2008). Interestingly, service users demonstrated an
25 awareness of this blame-culture but felt it was unfair to hold healthcare
26 professionals responsible for their self-injurious behaviour (Duperouzel &
27 Fish, 2007). Despite most healthcare professionals feeling personally
28 responsible for helping service users get better, there was a clear recognition
29 that - '*It's about putting the responsibility back to them*'. The patient should be
30 seen to have ultimate responsibility for their behaviour and nurses felt it was
31 important to work collaboratively with the patient.

32 *Healthcare professionals' experiences of services and treatments for* 33 *people who self-harm*

34 An additional finding that emerged from the healthcare professional
35 literature was their experiences of services and treatments available for
36 people who self-harm (Cooke *et al.*, 2009; Smith, 2002; Whitlock *et al.*, 2009).
37 With regard to services available, healthcare professionals explained that
38 other priorities prevented them from giving service users time and space to
39 explore their self-harm (Smith, 2002). Cooke and colleagues (2009) discovered
40 that many of the nurses were uncomfortable with referrals, particularly
41 because it involved weighing up a breach of confidentiality with a duty of
42 care. They were also uncomfortable with the threshold of specialist services
43 because this often resulted in them having to deal with situations they did not
44 feel equipped to handle. Uncertainty about how to best treat the behaviour

1 was common, with only 28.3% of respondents saying that they knew enough
2 to treat people who had self-injured effectively and three-quarters agreeing
3 that this is a subject about which they need more information (Whitlock *et al.*,
4 2009). The majority of practitioners reported using CBT or DBT treatment
5 approaches and the majority reported that these treatments are only
6 sometimes effective (Whitlock *et al.*, 2009). Moreover, many reported having
7 changed their approach to treatment over time, typically in favour of DBT
8 (Whitlock *et al.*, 2009). Acquisition of coping mechanisms, improvement of life
9 circumstances and enhanced ability to reflect on the underlying causes of
10 distress were identified as the most common reasons for self-harm cessation
11 following treatment (Whitlock *et al.*, 2009). Furthermore, healthcare
12 professionals making assumptions and being too focused on the physical
13 manifestations, rather than the associated psychological complexities, of self-
14 harm was another central issue (Cooke *et al.*, 2009). In particular, alternative
15 strategies in place of the self-harm behaviour were seen as 'futile' by some
16 healthcare professionals:

17
18 *I feel silly telling them alternative strategies...like to hold an ice cube. They*
19 *seem futile and I feel like I lose credibility...It seems inadequate – how could it*
20 *help?*
21

22 Similar to both carers and service users, healthcare professionals expressed a
23 need for continual support and additional training (Gibb *et al.*, 2010; Smith,
24 2002; Thompson *et al.*, 2008). Experienced community psychiatric nurses all
25 described the importance of supervision and informal support (Thompson *et al.*,
26 2008). Most participants felt that they could rely on their colleagues for
27 reassurance and advice. However, there was also a sense that as the team
28 were extremely busy that they wouldn't want to burden others, so they may
29 not seek support as often as needed (Thompson *et al.*, 2008). In relation to
30 support for service users, healthcare professionals agreed that peer group
31 support is beneficial as '*to know that other people have had similar experiences can*
32 *be really helpful*' (Smith, 2002). Further suggestions for improvement, as
33 identified in by the Saunders and colleagues (in press) literature review and
34 by a study conducted by Gibb and colleagues (2010), included further training
35 and an increase in resources such as advice, support, facilities, staff levels,
36 faster assessment and greater flexibility with patient allocations. Healthcare
37 professionals identified a specific training need with regards to taking a
38 psychosocial history of self-harm patients and referring them onto psychiatric
39 services. Healthcare professionals also felt that separating the facilities for
40 people with physical health problems and people who self-harm would be
41 beneficial because of the differing needs of the two groups.

42 ***Views on harm minimisation***

43 Three studies also captured staff views on harm minimisation strategies
44 (Duperouzel & Fish, 2007; Reece, 2005; Thompson *et al.*, 2008) (see Chapter 7

1 for more information on harm minimisation). Some healthcare professionals
2 felt that self-injuring should be permitted because it reduced the risk of more
3 dangerous behaviours (Duperouzel & Fish, 2007):

4
5 *I don't have a problem with it. I would let them cut as long as it was done, you*
6 *know what I mean, where there is less risk of infection. Because, to me, if she'd*
7 *been allowed to cut she wouldn't have started swallowing. She wouldn't have*
8 *started doing the inserting things like that. Which to me is more life*
9 *threatening than cutting.*

10
11 Many nurses expressed a desire for the service users to stop self-harm, but
12 some knew that realistically they, as nurses, could not stop it from happening,
13 only attempt to contain it (Reece, 2005). In a study performed on experienced
14 community psychiatric nurses, all talked about the need to minimise and
15 'contain risk' and that their role was not necessarily about helping a patient to
16 stop self-harm (Thompson *et al.*, 2008):

17
18 *I don't actually see it as my aim to stop somebody kind of self-harming. I*
19 *perhaps see it as maybe acknowledging well that's kind of the way that they're*
20 *functioning. Maybe we can look at reducing this and making that behaviour*
21 *as kind of safe as possible*

22
23 O'Donovan (2007) interviews also raised the area of risk management
24 including the removal of property and one-to-one observations. Nurses
25 acknowledged necessity to ensure safety of service users. However, they felt
26 the measures taken were inappropriate and were contravening people's
27 rights. This conflict results in healthcare professionals feeling uncomfortable
28 with the roles that they are required to work within for service user safety.

29 *Views on training and education*

30 Another finding arising from the literature was the need for training and
31 education in issues relating to self-harm (Cooke *et al.*, 2009; Duperouzel &
32 Fish, 2007; Roberts-Dobie & Donatelle, 2007; Simm, *et al.*, 2007; Smith, 2002;
33 Wheatley & Austin-Payne, 2009). The majority of healthcare professionals
34 believed that they were able to do their job adequately, however, in order to
35 provide better care they suggested that they needed additional training
36 (Smith, 2002). Likewise, in a study carried out by Cooke and colleagues (2009)
37 the need for training in self-harm was raised as an important issue amongst
38 the school nurses, with a number of participants feeling ill-equipped to deal
39 with self-harm issues in an appropriate way. Similarly, in a study carried out
40 by Duperouzel & Fish (2007) service users and healthcare professionals
41 highlighted the need for more staff training in order to understand the
42 behaviour and methods of caring for people who self-harm. It was felt that
43 better understanding would, in turn, improve communication, as service
44 users often felt that healthcare professionals avoided discussing self-harm

1 behaviour with them, despite the value that service users placed on this
2 interaction. Mirroring the views of service users themselves, healthcare
3 professionals also felt that communication about self-harm was difficult, and
4 this was attributed to a lack of confidence, something which training could
5 address (Duperouzel & Fish, 2007):

6
7 *Training should include lots and lots of different ideas why people – why and*
8 *what research tell us what causes people to self-harm, because I don't think*
9 *that it is very well understood. And I also think that we should have training*
10 *in how to deal with it. And when it is happening there and then, rather than,*
11 *not just going off your instincts but following what other people are doing.*
12

13 All healthcare professionals expressed a desire for general mental health and
14 self-harm training and particularly practical tips on management of self-harm
15 (Cooke *et al.*, 2009). Moreover, it was felt to be of importance to look at
16 healthcare professionals' thoughts and feelings surrounding the topic of self-
17 harm (Smith, 2002). Supervision was also thought to be essential, as was peer
18 group support and working as a team (Smith, 2002). Other training
19 suggestions included increasing knowledge levels especially with regard to
20 alternative strategies and general awareness of self-harm, practical tips for
21 managing young people who self-harm, information regarding organisations
22 who deal with self-harm issues, counselling, and learning about different
23 types of self-harm (Cooke *et al.*, 2009). Another key area that was highlighted
24 by school nurses was further education on referrals and in particular,
25 understanding when it's appropriate to refer people onto specialist services,
26 when to seek help and when to refer to child protection services. Finally,
27 training was considered necessary in issues of confidentiality. Specifically,
28 when to inform parents, family support and when to break confidentiality.
29 Most of those who had previously attended training said it had helped
30 increase their confidence in dealing with these issues (Cooke *et al.*, 2009). It
31 was also suggested that involving people who self-harm in the training may
32 help to address the issues of guilt and blame felt by healthcare professionals
33 (Duperouzel & Fish, 2007). Further evidence suggesting more training is
34 necessary is apparent within research completed by Jeffery & Warm (2002).
35 Medical staff and psychiatrists showed limited awareness about self-harm
36 when tested about facts and myths surrounding self-harm. The respondents
37 who had appropriate training were clearer about self-harm which suggest this
38 would be evidence in practice. In an additional study carried out by Roberts-
39 Dobie & Donatelle colleagues (2007) the most commonly identified need
40 expressed by school counsellors in the US was building their knowledge and
41 skills. In addition to more information, counsellors wanted policies and
42 procedures to follow when working with people who self-harm. Learning
43 mentors interviewed in a study carried out by Simm, Roen, & Daiches (2007)
44 described how they had gained new understandings of self-harm from a
45 training course on self-harm. Equally, they felt that colleagues who had little

1 training in this area were not as aware. Particular gaps in knowledge found
2 were in relation to subgroups of the population who are at higher risk of self-
3 harm. Additionally, the findings suggested that training and support to help
4 unqualified staff feel less negative and concerned about working with people
5 who self-harm may be particularly important (Wheatley & Austin-Payne,
6 2009).

7 **4.4.11 From evidence to recommendations**

8 *Service user experiences of self-harm*

9 The evidence from the qualitative literature provides an insight into the
10 experience of people who self-harm and their carers and healthcare
11 professionals. For many people self-harm is an indication of an underlying
12 problem and the reasons for self-harm vary considerably. For some, self-harm
13 is related to traumatic life events, childhood abuse, psychiatric illness or
14 troubled relationships. For others, self-harm was an important coping
15 mechanism for dealing with feelings of frustration, loneliness or distress. It
16 was also described in the literature as a cry for help, an escape, or as a means
17 of gaining support. Others mentioned that they engaged in self-harm in order
18 to feel alive or relieve themselves of dissociation. Also, the meaning and
19 motivation behind each act may differ considerably from one incident to the
20 next. There were fourteen studies in the literature reviewed that looked at
21 reasons behind self-harm behaviour. Most of the studies were qualitative and
22 used semi structured interviews of mostly adult female participants, and one
23 study had participants as young as 14 and four as young as 16. The mean
24 study sample size was around thirty seven participants and the recruitment
25 varied considerably from inpatient and hospital recruitments to
26 advertisements, self help websites and email interviews. In summary, health
27 and social care professionals should explore the meaning of self-harm for the
28 person, and recognise that each person self-harms for individual reasons.

29
30 Self-harm may co-exist with other destructive behaviours such as drug or
31 alcohol misuse. Two particular studies highlighted these destructive
32 behaviours, however, the participants varied from a large sample (n=76) of
33 female subjects who self-injured to male and female subjects (n=20) who had
34 stopped self-harm for at least 2 years. The literature also mentions that these
35 coexisting behaviours may be interchangeable, however, this finding came
36 from a small study of seven participants.

37
38 There are mixed attitudes towards ending self-harm and the process of
39 recovery. Some people wanted to stop, whereas others valued it as a vital
40 coping mechanism. There were three studies in the literature that looked at
41 the views of people, both who currently self-injured and those who had
42 stopped.

1 There is a paucity of evidence that looked at experience of self-harm in males.
2 The male literature implies that there is an expectation that men are '*stronger*'
3 and '*able to cope*' and as a result they may resort to self-harm as an expression
4 of their underlying emotions. There is also a suggestion from the literature,
5 that men tend to injure themselves more severely and are more likely to
6 display public and violent self-harm, but due to the small numbers of studies
7 available these findings need to be replicated in future research. There were
8 only two studies that looked at the experience of self-harm in males and both
9 of these included a small sample size of less than ten participants.

10 *Access, engagement and barriers to services*

11 Although there is considerable variation in the literature, service user's
12 experiences of services are predominantly negative in nature. Service users
13 reported poor access to services including delayed referral for psychosocial
14 assessment and long waiting lists for therapy. Service users reported feeling
15 frustrated when organising their own after care as often they could not reach
16 services through the telephone numbers provided. Health and social care
17 professionals should ensure that people who self-harm (including children
18 and young people, older adults, adults from black and minority ethnic
19 groups, and people with mild learning disability) have access to the full range
20 of assessment and services.

21
22 Service users face problems with regards to communication with
23 professionals, due to inadequate sharing of information by medical staff.
24 Individuals were not given the opportunity to be involved in decision making
25 about their treatment, as little information was shared. This informed the
26 recommendation that health and social care professionals should ensure
27 service users are fully involved in decision-making about their care, and that
28 they foster service users' autonomy wherever possible. Service users reported
29 a lack of rapport in their relationships with healthcare professionals and poor
30 continuity of care. There were seven studies that highlighted these specific
31 experiences, but care needs to be taken when interpreting these results as the
32 sample sized ranged from three participants to 84. Nevertheless, health and
33 social care professionals should maintain continuity of therapeutic
34 relationships wherever possible, and aim to develop a supportive and
35 engaging relationship with people who self-harm.

36 *Experience of treatment*

37 The evidence suggested that the use of an empathetic, non-judgemental
38 approach by practitioners may be associated with a more positive experience
39 of assessment and treatment by service users. The importance of the
40 therapeutic relationship is echoed in a total of eight studies of which the
41 sample size ranged from only three participants to 76 participants, most of
42 which were women from a wide variety of different settings. It is also

1 apparent from the findings that the opportunity to talk was a vital aspect of
2 aftercare for many service users, but not all. This finding is supported by 12
3 studies, of which the total sample size ranged from three participants to 89
4 participants, with the majority having a small to medium sample size
5 recruited from a variety of settings. The population consisted of a mixture of
6 males and females but was mostly young females with an age range of
7 between eight and 60 years old and included a mixture of those who self-
8 injured and self-poisoned. This suggested there is more evidence to support
9 the importance of developing trusting and supportive relationships with
10 people who self-harm.

11
12 Service users emphasised the need for professionals to discuss the risks and
13 benefits associated with various medications in order for them to make a
14 more informed decision. This finding is supported by four studies, which
15 were conducted in a variety of non-UK settings. The number of participants
16 ranged from three to 12 participants and included a mixture of males and
17 females, however, they were predominantly young females. This finding
18 might not be applicable to UK.

19 *Social support*

20 Social support in the form of community support groups, support from
21 family and friends and web-site support groups appeared to be important for
22 people who self-harm as feelings of isolation, low self-esteem and alienation
23 are very common amongst this group. However, these voluntary support
24 groups and websites may be destructive if not well moderated and managed.
25 It should be noted that this possible limitation of support groups came from
26 the view of one individual who attended a voluntary support group a
27 number of years ago. There were a total of eight studies that examined the
28 importance of social support for people who self-harm with a sample size
29 ranging from six to 89 participants, including a mixture of males and females
30 with ages ranging from 14 to 44. These were conducted in a wide variety of
31 different settings and included those who self-poisoned and self-injured.
32 Health and social care professionals could offer advice about local and
33 national resources regarding additional support for people who self-harm.

34
35 Overall, there is a lack of evidence examining young people's experiences of
36 self-harm and their experiences of care. It should also be noted that most of
37 the evidence examines the experiences of those who self-injure rather than
38 those who self-poison and thus the findings may not generalise to this
39 population.

40
41 Carers' experiences were reported by a total of seven studies, but in some the
42 sample size was very small, with a range of six to 72 participants. Many
43 parents felt excluded from their children's care planning and treatment.
44 Carers highlighted the need for more information about suicidal behaviour in

1 young people, skills for parenting and advice on managing further incidences.
2 Therefore, when carers are involved in supporting the service user, health and
3 social care professionals should provide written and verbal information on
4 self-harm, as well as information on how to support the person. Similar to
5 service users, carers highlighted the lack of continuity of care and specifically
6 the long duration spent waiting during CAMHs appointments. Finally, many
7 carers found carer support networks and other forms of social support to be
8 helpful in coping with their distress. Health and social care professionals can
9 also support carers by providing information about carer support groups and
10 provide information and contacts in case of a crisis. It is important to note,
11 however, that the majority of the carer literature focused on parents
12 (especially mothers) of young people (in particular young women) and thus
13 these findings may not generalise to other types of carers or service users.
14 Moreover, these findings may not apply to parents of people who self-harm
15 who have not come to the attention of services. Where appropriate, health
16 and social care professionals should ask directly whether the service user
17 wants their families or carers to be involved, subject to the service users'
18 consent and right to confidentiality.

19 *Healthcare professionals' attitude, knowledge and experience*

20 A total of 16 studies reported findings on healthcare professionals' attitudes,
21 knowledge and experience, with sample sizes ranging from only four
22 participants to 290, and a mean sample of 83. Caution must be taken when
23 interpreting the findings of these studies as they were mostly drawn from
24 convenience samples and of the few that reported response rates, these
25 ranged from only 12 to 64%. However, the healthcare professionals in the
26 studies came from a wide variety of professional backgrounds and most
27 included a mixture of male and female staff. The attitudes of staff in the
28 literature reviewed were predominantly negative in nature. People who self-
29 harm were often described by staff as 'attention seekers' and a difficult group
30 to work with.

31
32 The literature also highlighted the emotional and psychological impact that
33 working with this group can have on staff members. Some staff members felt
34 that seeing the physical effects of self-harm were distressing and many
35 reported anxiety, frustration and negativity when working with people who
36 self-harm. This is supported by four studies, but the sample size was typically
37 small ranging from nine to 14 healthcare professionals. Caution in
38 interpreting these findings must be taken as the settings varied widely with
39 one study being conducted with healthcare professionals in a medium secure
40 unit for people with mild to moderate learning disabilities who self-injure.
41 Finally, health and social care professionals, service users and families and
42 carers all highlighted the lack of training and education on self-harm
43 provided to professionals, and professionals expressed a need for continual
44 support. This led to the GDG making a recommendation that all health and

social care professionals should be trained in the process of caring for people who self-harm, which includes assessment, treatment and management. They should have routine access to supervision and support. In particular, they should consider the emotional impact of self-harm on both the professional and their capacity to practice competently and empathetically.

4.5 RECOMMENDATIONS

Working with people who self-harm

4.5.1.1 Health and social care professionals working with people who self-harm should:

- aim to develop a trusting, supportive and engaging relationship with them
- be aware of the stigma and discrimination sometimes associated with self-harm, both in the wider society and the health service, and adopt a non-judgemental approach
- ensure that people are fully involved in decision-making about their treatment and care
- aim to foster people's autonomy and independence wherever possible
- maintain continuity of therapeutic relationships wherever possible
- ensure that information about episodes of self-harm is communicated sensitively to other team members.

4.5.1.2 Health and social care professionals who work with people who self-harm should be:

- familiar with local and national resources, as well as organisations and websites that offer information and/or support for people who self-harm, and
- able to discuss and provide advice about access to these resources.

Access to services

4.5.1.3 Children and young people who self-harm should have access to the full range of treatments and services recommended in this guideline within child and adolescent mental health services (CAMHS).

4.5.1.4 Ensure that children, young people and adults from black and minority ethnic groups who self-harm have the same access to services as other people who self-harm based on clinical need and that services are culturally appropriate.

4.5.1.5 When language is a barrier to accessing or engaging with services for people who self-harm, provide them with:

- information in their preferred language and in an accessible format

- 1 • psychological or other interventions, where needed, in their preferred
- 2 language
- 3 • independent interpreters.

4 *Self-harm and learning disabilities*

5 **4.5.1.6** People with a mild learning disability who self-harm should have
6 access to the same age-appropriate services as other people covered
7 by this guideline.

8 **4.5.1.7** When self-harm in people with a mild learning disability is managed
9 jointly by mental health and learning disability services, use the Care
10 Programme Approach (CPA).

11 **4.5.1.8** People with a moderate or severe learning disability and a history of
12 self-harm should be referred as a priority for assessment and
13 treatment conducted by a specialist in learning disabilities services.

14 *Families, carers and significant others⁷*

15 **4.5.1.9** Ask the person who self-harms whether they would like their family,
16 carers or significant others⁷ to be involved in their care. Subject to the
17 person's consent and right to confidentiality, encourage the family,
18 carers or significant others to be involved where appropriate.

19 **4.5.1.10** When families, carers or significant others⁷ are involved in
20 supporting a person who self-harms:

- 21 • offer written and verbal information on self-harm and its management,
22 including how families, carers and significant others⁷ can support the
23 person
- 24 • offer contact numbers and information about what to do and whom to
25 contact in a crisis
- 26 • offer information, including contact details, about family and carer
27 support groups and voluntary organisations, and helping families,
28 carers or significant others⁷ to access these.
- 29 • inform them of their right to a formal carer's assessment of their own
30 physical and mental health needs, and how to access this.

31 **4.5.1.11** CAMHS professionals who work with young people who self-harm
32 should balance the developing autonomy and capacity of the young
33 person with perceived risks and the responsibilities and views of
34 parents or carers.

35 *Training and supervision for health and social care professionals*

⁷ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

1 **4.5.1.12** Health and social care professionals who work with people who self-
2 harm (including children and young people) should be:

- 3 • trained in the assessment, treatment and management of self-
4 harm⁸ and
- 5 • educated about the stigma and discrimination usually associated
6 with self-harm and the need to avoid judgemental attitudes.
7

8 **4.5.1.13** Health and social care professionals who provide training about self-
9 harm should:

- 10 • involve people who self-harm in the planning and delivery of training
- 11 • ensure that training specifically aims to improve the quality and
12 experience of care for people who self-harm
- 13 • assess the effectiveness of training using service user feedback as an
14 outcome measure.⁹

15 **4.5.1.14** Routine access to senior colleagues for supervision, consultation and
16 support should be provided for health and social care professionals
17 who work with people who self-harm. Consideration should be given
18 of the emotional impact of self-harm on the professional and their
19 capacity to practice competently and empathically.¹⁰

20 **Managing endings and supporting transitions**

21 **4.5.1.15** Anticipate that the ending of treatment, services or relationships, as
22 well as transitions from one service to another, can provoke strong
23 feelings and increase the risk of self-harm. Plan in advance these
24 changes with the person who self-harms and provide additional
25 support, if needed, with clear contingency plans should crises occur.
26 Record plans for transition to another service and share them with
27 other health and social care professionals involved. Give copies to the
28 service user and their family, carers or significant others¹¹ if this is
29 agreed with the service user.

30 **4.5.1.16** CAMHS and adult health and social care professionals should work
31 collaboratively to minimise any potential negative effect of
32 transferring young people from CAMHS to adult services.

- 33 • Time the transfer to suit the young person, even if it takes place after
34 they reach the age of 18 years.

⁸ This recommendation also appears in section 5.5 where the data regarding training is presented.

⁹ This recommendation also appears in section 5.5 where the data regarding training is presented.

¹⁰ This recommendation also appears in section 5.5 where the data regarding training is presented.

¹¹ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

- 1 • Continue treatment in CAMHS beyond 18 years if there is a realistic
2 possibility that this may avoid the need for referral to adult mental
3 health services.
- 4 **4.5.1.17** Mental health trusts should work with CAMHS to develop local
5 protocols to govern arrangements for the transition of young people
6 from CAMHS to adult services, as described in this guideline.
- 7

5 TRAINING

5.1 INTRODUCTION

Until about 30 years ago (Hawton, Gath & Smith, 1979), there was little training in the management of self-harm offered to healthcare professionals in mental health, still less to healthcare professionals in acute hospitals or other services. In many services, the only “training” available was experiential “on the job” training. Typically, responsibility for assessing people who had harmed themselves fell to the most junior trainee psychiatrists, who would receive little supervision or support. These inexperienced trainees would often face people who were in the extremes of distress, and who posed difficult management problems. Within mainstream mental health services there was little training on offer to healthcare care professionals that had to care for people, with an ongoing mental health problem, who continued to harm themselves.

A similar situation also developed in acute hospitals, where people who required hospital treatment as a result of their self-harm, received much of their care from junior doctors and nurses, often with little support from their more senior colleagues.

Over the past 15 years, a wider range of clinical disciplines have become involved in working with people who self-harm. There has been a significant growth in Liaison Psychiatry services, which often have assumed responsibility for delivering care to this group. In some areas, the local crisis services take this role. The development of these new services has generally been associated with improved supervision, support and training of the healthcare professionals involved. The publication of the guideline for the management of self-harm in the first 48 hours (NICE, 2004) highlighted the need for improved training of healthcare professionals. It also stimulated efforts to improve services, such as the project “Improving Services to People who Self-harm” (Palmer, *et al.*, 2006). Specific training for health and social care professionals who work with people who self-harm remains patchy. In this section we review studies directly related to training of healthcare professionals who work in this area, or healthcare professionals who work in emergency departments.

5.1.1 Evidence search

A comprehensive search was developed based on the clinical question (Does the provision of healthcare professionals training improve outcomes?)

Table1: Databases searched and inclusion/exclusion criteria for clinical evidence.

Electronic databases	CINAHL, EMBASE, MEDLINE, PSYCINFO, CENTRAL
Date searched	Database inception to 25 Jan 2011
Study design	RCTs
Population	Health care professionals who work with people who self-harm
Outcomes	Healthcare professionals attitudes, knowledge and psychological impact. Also service user outcomes.

An existing systematic review on healthcare professionals' attitudes (Saunders *et al.*, in press) was identified and studies that were relevant were also reviewed.

5.1.2 Studies considered

A systematic review carried out by Saunders and colleagues (in press) examined attitudes, experience and training needs of healthcare professionals who deal with people who self-harm. This review included both quantitative and qualitative studies, and the systematic search was conducted between 1971 and March 2009. Saunders and colleagues (in press) identified 11 studies that were relevant to training. From this, ten studies (Botega *et al.*, 2007; Crawford *et al.*, 1998; Holdsworth *et al.*, 2001; Gask *et al.*, 2006; May, 2001; McAllister *et al.*, 2009; Patterson *et al.*, 2007; Treloar & Lewis, 2008b; Turnbull & Chalder, 1997; Samuelsson & Asberg, 2002) were selected for inclusion within the current guideline. One study was excluded (Sun, *et al.*, 2007). This study was not included in our review because the training was provided to non-clinical staff.

In addition to the review, a search was conducted based on the clinical question. A total of 1497 references were retrieved from the search. The search identified 14 primary studies which were not already included in the Saunders and colleagues (in press) review. From this, eight studies were included (Appleby *et al.*, 2000; Berlim *et al.*, 2007; Chan *et al.*, 2009; Gask *et al.*, 2008; Morriss *et al.*, 1999; Morriss *et al.*, 2005; Pfaff *et al.*, 2001; Walker & Osgood, 1996) but none of them were RCTs.

Six studies were excluded based on reading the full text (Cross *et al.*, 2007; Issac *et al.*, 2009; Ramberg & Wasserman, 2004; Tierney, 1994; Tompkins *et al.*, 2009; Wyman *et al.*, 2008). These studies were excluded because they related to training in non-clinical populations or training in a non-clinical setting (i.e. prisons) or the training was carried out in a non-UK setting (Ramberg & Wasserman, 2004).

Within the included studies, the focus of training is identified as training focused on knowledge, attitudes and emotional impact of working with individuals who self-harm (Section 5.2) or training focused on risk and needs assessment (Section 5.3)

1 The GDG felt it was necessary to distinguish between self-harm training for
2 general medical healthcare professionals, mental health professionals and
3 healthcare professionals who work in emergency department because their
4 level of existing training would vary significantly and may not be comparable
5 across groups. Also, despite training for healthcare professionals who work in
6 emergency departments being more related to the short-term management of
7 self-harm this group also deal with repeat presentations of self-harm in
8 emergency settings, and therefore it is important to examine the impact of
9 training on them. The results from studies have, therefore, been divided
10 initially according the type of training (knowledge and attitudes versus risk
11 assessment) and within that by the healthcare professionals group who were
12 the target of the training. The initial results refer to knowledge and attitudes
13 training (Section 5.2) and the second set of results refer to risk and needs
14 assessment training (Section 5.3).

15
16 Fifteen studies which look at training have utilised an uncontrolled study
17 design that report the self-report score change before and after training. Four
18 studies have used a control group. See Appendix 15 for details of the
19 individual study designs. Of note, it is important to be cautious in the
20 interpretation of results of studies where no control group has been used, as it
21 is difficult to be clear about the explanation of the results given the high
22 possibility of the presence of selection and performance bias.

23
24 These studies were reviewed narratively.
25

26 **5.2 TRAINING ON HEALTHCARE PROFESSIONALS** 27 **KNOWLEDGE AND ATTITUDES**

28 **5.2.1 The impact of training: non mental health professionals**

29 *Impact of training on knowledge, understanding and skills: non* 30 *mental health professionals*

31 The impact of training on knowledge, understanding and skills in non mental
32 health professionals was examined by four studies (Berlim *et al.*, 2007; Botega
33 *et al.*, 2007; Chan *et al.*, 2009; & Walker & Osgood, 2000). Berlin and colleagues
34 (2007) conducted a three hour training session, comprising of oral
35 presentations and groups discussions, which emphasised the acquisition of
36 knowledge about suicidal behaviour in clinical and non-clinical hospital staff,
37 as measured by the Suicide and Behaviour Attitude Questionnaire (SBAQ).
38 Following training, both sets of participants felt more capable of helping
39 individuals who attempted suicide (clinical staff pre-training score = 5.56(3.1)
40 and post-test score = 6.8(SD 2.6), $p < 0.0001$; non-clinical staff pre-training score
41 = 5.3(SD 3.2) and post-training score = 6.95(SD 2.5), $p = 0.001$), and reported

an improved ability to perceive suicidal behaviours (clinical staff pre-training score = 5.08(SD 2.9) and post-test score = 6.6(SD 2.5), $p < 0.0001$; non-clinical staff pre-training score = 3.68(SD 2.9) and post-training score = 5.49(SD 2.9), $p = 0.001$). Healthcare professionals also felt less helpless when facing suicidal individuals (clinical staff pre-training score = 5.54(SD 3.0) and post-test score = 4.49(SD 2.6), $p = 0.002$; non-clinical staff pre-training score = 4.9(SD 3.2) and post-training score = 3.38(SD 3.1), $p = 0.005$) and were less anxious about enquiring about a service user's suicidality (clinical staff pre-training score = 4.15(SD 3.2) and post-test score = 2.29(SD 2.7), $p < 0.0001$; non-clinical staff pre-training score = 4.58(SD 3.1) and post-training score = 2.54(SD 3.1), $p = 0.001$). Another area of knowledge improvement, identified by authors, was the understanding of the link between suicidality and mental disorders. Before training, participants in both groups estimated that less than 50% of suicidal service users were suffering from a mental disorder. Training improved this figure to approximately 75% for the clinical, and 67% for the non-clinical personnel. This finding was backed up by similar results from Botega and colleagues (2007) who found that, participants' estimations of the presence of mental disorders within those who died by suicide increased significantly from 40% to 60%. The impact of training on confidence was examined in a qualitative interview by Chan and colleagues (2009). They found that, following training, participants had acquired an increased awareness of the problem of suicide and were more confident in caring for service users with suicide risk. The participants agreed that the programme had helped them to re-examine their existing practices and gain new perspectives on the concept of holistic care.

Additionally, after participating in the education programme, the participants considered themselves more competent in assessing people with suicide risk. Chan and colleagues (2009) also found an increase in knowledge about suicidal behaviour; however, this was not statistically significant at post-training or at six month follow-up.

Work from Walker and Osgood (2000) focused on the development and effectiveness of a 3-hour suicide prevention training programme for long-term care staff working with the elderly. The outcomes measures assessed included knowledge of suicide and suicide prevention, and healthcare professionals' use of prevention practices. The overall mean pre-training score (12.49 (SD 3.9)) was statistically lower than the overall mean post-training score (17.44 (SD 3.17)) to a p value of $p < 0.001$. Authors report statistically significant gains on 15 of the 24 items on the knowledge subscale of the questionnaire, however they provide no specific data about these items. Reported areas of improvement include identification of the group with the highest suicide rate, identifying the meaning of "suicide ideation" and the most common method of death by suicide among the elderly. Two areas of confusion for participants, even at post-training assessment, were the

1 differences between primary and secondary interventions and the link
2 between fear of Alzheimer's disease and suicide attempts. In terms of the
3 influence that training had on clinical practice, the overall mean pre-training
4 score (42.65 [SD 17.8]) was statistically lower than the overall mean post-
5 training score (42.07 [SD 17.82]) to a p value of $p < 0.05$. Additionally, authors
6 report statistically significant improvements on 2 out of the 19 items. These
7 were an increased likelihood of asking a depressed person if he or she is
8 thinking about suicide ($p < 0.001$) and increased likelihood of taking suicide
9 threats by older people very seriously ($p < 0.01$), , however, again, there is no
10 raw data reported and this is only narratively explained.. Even after the
11 training, however, healthcare professionals were still unlikely to utilise
12 assessment tools, including the Life-Satisfaction Quiz, the Depression Scale
13 and the MAST-G (Walker & Osgood, 2000).

14 *Impact of training on attitudes: non mental health professionals*

15 An assessment of training impact on attitudes was examined by four studies
16 (Berlim *et al.*, 2007; Botega *et al.*, 2007; Chan *et al.*, 2009; & Walker & Osgood,
17 2000).

18
19 Chan and colleagues (2009) found there were statistically significant, positive
20 changes post-training in terms of attitudes towards suicide on the overall
21 Suicide Opinion Questionnaire (SOQ) score (pre-training mean = 155.5(10.90),
22 6 month post-training mean = 159.1(13.71), $p = 0.006$) as well as the Social
23 Disintegration (pre-training mean = 32.46 (3.97), 6 month post-training mean
24 = 33.83(4.40), $p = 0.003$) and Personal Defect subscales (pre-training mean
25 = 37.37(3.28), 6 month post-training mean = 37.85(3.53), $p = 0.035$). Within the
26 qualitative findings, participants spoke of changing their attitude to suicide
27 and gaining a new perspective on care, noting that the programme had
28 helped to clarify myths surrounding suicide and that these clarifications led to
29 changes in their attitude towards suicide. Walker and Osgood (2000) found
30 that scores on 14 of the 21 items on the attitude subscale demonstrated a
31 statistically significant shift in a positive direction, with the overall attitude
32 shift being significant to the level of $p < 0.05$ (pre-training mean = 43.4 (7.6);
33 post-training mean = 40.56 (9.8)). Following training, participants were more
34 likely to recognise the importance of understanding the differences between
35 male and female coping styles ($p = 0.05$), more aware of the relationship
36 between the signs of dementia and the risk of suicide ($p = 0.05$), more likely to
37 recognise that older people react to life events in a different way ($p < 0.05$),
38 more likely to appreciate the importance for older people to find new roles to
39 replace people they've lost ($p < 0.05$) and less likely to believe that
40 hopelessness is a "normal" emotion in elderly people ($p < 0.001$). As noted
41 before, however, these p values were only reported narratively and there was
42 no raw data available in the paper.

Two studies (Berlim *et al.*, 2007; Botega *et al.*, 2007) used the Suicide Behaviour Attitudes Questionnaire (SBAQ) to measure attitude change. Berlim and colleagues (2007) found that attitude change was significantly improved for both clinical and non-clinical staff within the 'Feelings toward the suicidal patient' (clinical staff pre-training score = 4.5 (1.7) and post-test score = 2.7(1.7), $p < 0.0001$; non-clinical staff pre-training score = 4.31(2.0) and post-training score = 2.72(2.1), $p < 0.0001$) and 'Professional Capacity' (clinical staff pre-training score = 4.72(2.2) and post-test score = 6.16(2.0), $p < 0.0001$; non-clinical staff pre-training score = 3.84(2.15) and post-training score = 5.46(2.02), $p < 0.0001$) subscales, but not for the 'Right to Suicide' subscale (clinical staff pre-training score = 6.55(1.40) and post-test score = 6.70 (1.41), $p > 0.01$; non-clinical staff pre-training score = 5.77 (1.30) and post-training score = 6.05 (1.53), $p = 0.001$). A similar result was also found by Botega and colleagues (2007), and the attitude changes remained significant at both 3 and 6 month follow-up.

5.2.2 The impact of training: mental health professionals

Impact of training on knowledge, understanding and skills: mental health professionals

The impact of training on knowledge, understanding and skills in mental health professionals was examined by three studies (Gask *et al.*, 2006; Gask *et al.*, 2008; Samuelsson & Asberg, 2002). Samuelsson and Asberg (2002) conducted a 36 hour suicide prevention training session which involved lectures, discussion and case study vignettes. They found an improvement in knowledge about self-harm following training, demonstrated by a significant increase in participants' estimation of suicide risk for two service users who were featured in the training vignettes (case study 1: pre-training mean = 44.5, post-training mean = 63.3, $p < 0.001$; case study 2: pre-training mean = 78.3; post-training mean = 87.5, $p < 0.01$). Additionally, before the programme, 20% of the healthcare professionals did not think psychiatric care was needed for attempted suicide patients compared with 2% after training.

The impact of training on confidence was examined by Gask and colleagues (2006), who evaluated the effects of the Skills Training On Risk Management (STORM) programme. They found statistically significant improvements in healthcare professionals' confidence on all four questions both immediately after training (Item 1: pre-training mean = 54.99(21.59), post-training mean = 70.56(15.89), $p = 0.00$; Item 2: pre-training mean = 52.94(21.32), post-training mean = 69.27), $p = 0.00$; Item 3: pre-training mean = 59.57(21.88), post-training mean = 74.11(0.83), $p = 0.00$; Item 4: pre-training mean = 52.65(22.00), post-training mean = 69.56(0.88), $p = 0.00$;) and at 4-month follow-up (Item 1: pre-training mean = 60.06(19.70), post-training mean = 68.99(1.54), $p = 0.00$; Item 2: pre-training mean = 55.92(21.25), post-training mean = 68.99), $p = 0.00$; Item

3: pre-training mean =63.62(21.40), post-training mean =74.42(16.22), $p = 0.00$;
Item 4: pre-training mean =55.11(21.68), post-training mean = 70.24(18.63), $p =$
0.00), as measured by a visual analogue scale. This was subsequently
validated by qualitative results from a semi-structured interview. Participants
reported specific ways in which the training had altered their clinical practice,
predominantly in terms of being able to communicate more effectively with
people who have attempted suicide.

Despite the above positive results in terms of confidence and clinical practice,
there was no impact of training on skill level amongst healthcare
professionals, as measured by the Suicide Intervention Response Inventory
(SIRI), either immediately after training or at 4-month follow-up (Gask *et al.*,
2006).

The impact of training on confidence was also examined in a study carried
out by Gask and colleagues (2008), who evaluated the effects of the Skills
Training On Risk Management (STORM) programme on 203 health-care
professionals and service users in the UK. They found that there were
significant improvements in confidence of the participants involved.
Confidence scores increased significantly from baseline and immediately after
training (Item 1: pre-training mean = 47.43 (20.38), post-training mean = 69.62
(14.84), $p = 0.00$; Item 2: pre-training mean = 35.35 (19.93), post-training mean
= 63.82), $p = 0.00$; Item 3: pre-training mean =49.74 (22.72), post-training mean
=69.66 (17.34), $p = 0.00$; Item 4: pre-training mean =41.17 (21.19), post-training
mean = 65.82 (16.91), $p = 0.00$) and at 6-month follow-up (Item 1: pre-training
mean = 51.69 (21.60), post-training mean = 68.83 (16.33), $p = 0.00$; Item 2: pre-
training mean = 37.44 (21.33), post-training mean = 58.05 (20.07), $p = 0.00$;
Item 3: pre-training mean =49.95 (23.14), post-training mean =68.37(16.20), $p =$
0.00; Item 4: pre-training mean =42.75 (21.95), post-training mean = 65.98
(17.16), $p = 0.00$), as measured by a visual analogue scale. This was
subsequently validated by qualitative results from a semi-structured
interview. The interviews showed also that participants felt the training
addressed attitudes and knowledge in a non-threatening way.

Impact of training on attitudes: mental health professionals

Five studies considered the effect of training on healthcare professionals'
attitudes. Patterson and colleagues (2007) aimed to measure how attitudes of
antipathy towards individuals who self-harm change following attendance on
a 15 week academic-level course about self-harm and suicide. The
participants were 69 qualified healthcare professionals, who were mainly
mental health nurses, and antipathy was measured using the Self-harm
Antipathy Scale (SHAS). They found that immediately after training,
healthcare professionals' level of antipathy towards service users that self-
harm was reduced. At 18-month follow-up, this reduction had continued, and
the total reduction from baseline was approximately 20%. A control group

1 was also used in this study and the intervention group demonstrated
2 significantly lower antipathy scores at 18-month follow-up. The results from
3 this study are particularly encouraging due to the long-term follow up that
4 was conducted after the completion of the course, and the use of a control
5 group. However, it should be noted that there were no details of the levels of
6 significance for much of the data, and the report of significant findings is
7 based on authors' description.

8
9 Samuelsson and Asberg (2002) examined the attitudes of psychiatric
10 personnel towards service users who had attempted suicide before and after a
11 training programme in psychiatric suicide prevention. After the training
12 program, there was a significant overall improvement on the USP-scale
13 (Understanding of suicide attempt patients scale) (pre-training mean = 19.8,
14 post-training mean = 17.1, $p < 0.01$). However, there were no significant
15 differences in understanding and willingness to care in the three case
16 vignettes.

17
18 An evaluation of the Skills Training On Risk Management (STORM) training
19 programme (Gask *et al.*, 2006) found a statistically significant improvement in
20 scores on 10 out of the 14 items of the Attitudes to Suicide Prevention Scale
21 (ASPS) immediately after the training. Of these 10 items, 7 of them had
22 maintained significant improvement at 4-month follow-up (Gask *et al.*, 2006).
23 As well as information about the impact of the training, the study also
24 assessed the healthcare professionals' attitudes to the training programme
25 itself. The key findings related to the relevance of the training to different
26 healthcare professionals levels (i.e. qualified and unqualified) and the levels
27 of engagement in the training from different individuals. Some suggested that
28 the training was more appropriate for qualified healthcare professionals given
29 that, in clinical practice, unqualified healthcare professionals would not
30 conduct formal risk-assessments. There was also some disappointment
31 expressed regarding senior healthcare professionals' unwillingness to engage
32 in the role-plays and lead by example.

33
34 The authors postulated that this feedback may be due to the culture of the
35 trust in which the training took place, however, this type of resistance to
36 training may exist in other settings.

37
38 An evaluation of the Skills Training On Risk Management (STORM) training
39 programme (Gask *et al.*, 2008) found a statistically significant improvement in
40 scores on 10 out of the 14 items of the Attitudes to Suicide Prevention Scale
41 (ASPS) immediately after the training. Of these 10 items, four of them had
42 maintained significant improvement at 6-month follow-up (Gask *et al.*, 2008).
43 As well as information about the impact of the training, the study also
44 assessed the healthcare professionals' attitudes to the training programme
45 itself. The key findings related to the impact on clinical practice. With regards

1 to positive views, risk assessment and crisis management modules were
2 highly valued. On the contrary, there was also a viewpoint from some
3 experienced workers that much of the training was being carried out in
4 clinical practice already.

5
6 Appleby and colleagues (2000) conducted a STORM training programme to
7 evaluate its impact on attitudes in three healthcare settings: mental health,
8 primary care and A&E in the UK. There was an overall reduction in negative
9 attitudes in all three professional groups, however, the results were only
10 statistically significant for the A&E staff, who had the most negative attitudes
11 before training.

12 **5.2.3 The impact of training: healthcare professionals working** 13 **in emergency departments**

14 *Impact of training on knowledge, understanding and skills:* 15 *healthcare professionals in emergency departments*

16 Four studies investigated the effect of training on knowledge, understanding
17 and skill developments (Holdsworth *et al.*, 2001; McAllister *et al.*, 2009; Treloar
18 and Lewis, 2008b; Turnbull and Chalder, 1997) in healthcare professionals
19 working in emergency departments. Turnbull and Chalder (1997) conducted
20 training with 37 emergency department and ward healthcare professionals on
21 the nature of suicide and self-harm. Of the 37 who participated in the training,
22 26 participants completed post-training questionnaires. They found that the
23 scores on a self-harm and suicide knowledge questionnaire were significantly
24 higher following training (63% correct answers) compared to the scores prior
25 to training (29% correct responses). Sample topic areas in the questionnaire
26 include epidemiology and risk factors.

27
28 However, a weakness of these results is that the authors do not identify the
29 specific areas of knowledge which were improved, thus making it difficult to
30 identify areas of training that are useful. A study by Holdsworth and
31 colleagues (2001) provided a series of workshops for emergency department
32 healthcare professionals aimed to improve healthcare professionals' risk
33 assessment for suicide and self-harm, and their ability to provide effective
34 short-term management of those risks. Self-reports from nurses indicated that
35 nearly all felt training had increased their knowledge and skill-base in
36 relation to self-harm and suicide. Improvements in knowledge included the
37 relationship between completed suicide and non-fatal self-harm; repetition of
38 self-harm and poor problem-solving skills; and reasons for individuals
39 presentation at hospital and subsequent refusal of treatment. Improvements
40 in skills included being able to elicit intent from the service users, as well as
41 working with the carers to provide appropriate responses to the self-harm. At
42 this stage it is important to note that these findings are based on self-report
43 and were not assessed in any other way. Although it is encouraging that

1 healthcare professionals felt more knowledgeable and skilful after they
2 completed training, these findings were not validated by a knowledge or
3 skill-based questionnaire, casting doubt on the results reported. However,
4 further improvements, which were measured by a pre- and post-test
5 assessment, were also identified in the areas of coping and strain felt by
6 healthcare professionals. They revealed that, despite no alteration in the
7 amount of stress placed on healthcare professionals by self-harm
8 presentations, the perceived demand of these cases was reduced in almost
9 half the participants. Similarly, there was an increase in self-confidence, and
10 ability to cope and engage with self-harm cases, following training.

11
12 Treloar and Lewis (2008b) examined the effects of training in mental health
13 and emergency medicine practitioners who attended a clinical education
14 program on borderline personality disorder (BPD) and attitudes towards
15 working with people who self-harm. Training included: research findings on
16 attitudes to BPD, the prevalence, diagnostic criteria, aetiological factors, rates
17 of self-harm and suicide and therapeutic responses to BPD. They found that
18 specific subscales, which related to skill acquisition, demonstrated the
19 strongest impact of training. These included confidence in assessment and
20 referral, and ability to deal effectively with service users with BPD. In
21 comparison, the effect of training on empathic approach and knowledge of
22 hospital regulations was minimal.

23
24 McAllister and colleagues (2009) also report on the positive effect of training
25 on healthcare professionals' ability to respond appropriately to people who
26 self-harm. The training involved two hours of interactive discussion, focussed
27 on understanding self-harm, followed by an hour of training in solution-
28 focussed nursing, which works to help healthcare professionals learn to
29 engage with, support and encourage optimism in people who self-harm.
30 Participants felt that the understanding gained from training had allowed
31 them to effectively alter their response and coping styles when dealing with
32 people who self-harm. This was demonstrated through an increased use of
33 strategic assessment and proactive response skills, as well as improved
34 communication ability. A key element underlying the changes in healthcare
35 professionals' behaviour was the shift from focussing on the present situation
36 (i.e. injury containment and trying to provide an immediate cure) to focussing
37 on the long-term (i.e. the overall complexities of the behaviour, its cyclical
38 nature and strategies to alter it). It appears that training has a positive impact
39 on knowledge about self-harm and suicide both within the wider, clinical
40 population and within specific groups (BPD). However, none of these studies
41 had a long follow up; therefore, this effect may not have been maintained
42 after training.

43 *Impact of training on attitudes: A&E healthcare professionals in*
44 *emergency departments*

1 The effect of training on healthcare professionals' attitudes was examined in
2 five studies (Crawford *et al.*, 1998; May, 2001; McAllister *et al.*, 2009; Treloar &
3 Lewis, 2008b; Turnbull & Chalder, 1997). McAllister and colleagues (2009)
4 found that, following training, nurses from an emergency setting reported a
5 positive attitudinal shift towards individuals who self-harm. In particular,
6 participants felt that the training had highlighted the complexity of self-harm
7 and that this, in turn, reduced the likelihood of them dismissing the service
8 user's care needs or placing blame on them. Participants also recognised how
9 important it is to ensure that service users feel that they can ask for help and
10 that they do not perceive themselves as a burden. This positive finding was
11 backed up by Crawford and colleagues (1998) who found that, following
12 training, there was a decrease in the number of healthcare professionals who
13 believed that 'patients who had a past history of repeated self-harm were less
14 likely to kill themselves than those who had only tried once'. However, the
15 psychometric properties of the questionnaire utilised to test the knowledge
16 and attitudes of healthcare professionals has not been tested, which casts
17 some uncertainty on the findings reported.

18
19 Treloar and Lewis (2008b) examined the effect of a BPD education
20 programme on healthcare professionals' attitudes about self-harm within this
21 specific population, and found an overall improvement in attitudes, with a
22 small to medium effect size. Authors identified some demographic
23 information which potentially moderates the effects of training. They found
24 that female healthcare professionals were more likely to experience a positive
25 attitudinal shift following training, compared to male healthcare
26 professionals. The same was found for healthcare professionals who had
27 previously engaged in undergraduate and postgraduate university training
28 compared to those who had been trained in hospital. Individuals who worked
29 with people who self-harm on a regular basis (i.e. at least fortnightly) and had
30 less than 15 years experience were also more likely to benefit from training.

31
32 However, not all studies found a significant influence of training on attitudes.
33 May (2001) used a controlled study design to assess whether the attitudes of
34 emergency department healthcare professionals towards suicidal behaviour
35 could be improved through the use of poster displays and an information
36 pack. The rationale being that these education tools are suitably flexible
37 alternative to formal training as they take into account the time constraints
38 and practical difficulties of offering this to healthcare professionals who work
39 in busy emergency departments. Results demonstrated an improvement in
40 attitudes for the questionnaire subgroup 'Morality and Mental Illness', which
41 contained 5 out of the 16 questions in the outcome measure. However, there
42 was no significant difference in post-intervention attitudes between the
43 control and experimental groups in terms of the other outcome measure
44 subgroups, or the questionnaire as a whole. This indicates that, overall, the
45 educational tools had no effect on improving attitudes. Within the discussion,

1 the author suggests that a hands-on method may be a more appropriate
2 education technique.

3
4 Results from a study carried out by Turnbull and Chalder (1997) also indicate
5 that no alteration took place between pre-training and post-training attitudes
6 within healthcare professionals who work in emergency departments
7 however, authors suggest that this may be a result of a high attitudinal scores
8 at the baseline assessment; therefore leaving little room for improvement.
9 Again, the training format may explain the ineffectiveness of the programme
10 as it provides little opportunity for active learning, discussion or relation of
11 the information in the lecture to personal experience (Patterson *et al.*, 2007). In
12 general, the effect of training on attitudes was positive.

13
14 Although two of the studies found that training resulted in a positive shift in
15 attitudes, the non-significant findings from May (2001) and Turnbull and
16 Chalder (1997) indicate that the format and method of the training may be an
17 important consideration.

18 *Impact of training on emotional impact: healthcare professionals in* 19 *emergency departments*

20 A frequently reported problem identified in the Experience of Care chapter
21 (Chapter 4) on healthcare professionals' attitudes, knowledge and experience
22 was the emotional impact that people who self-harm had on the healthcare
23 professionals who work with them; feelings of helplessness, anxiety and
24 anger were repeatedly reported. Two studies looked at these negative
25 emotions, and the influence that training had on them (Holdsworth *et al.*,
26 2001; McAllister *et al.*, 2009). Holdsworth and colleagues (2001) reported that
27 training helped to decrease healthcare professionals' feelings of anxiety,
28 helplessness and, most dramatically, irritation. However, these results should
29 be interpreted with caution as the same size was too small to reliably test their
30 significance. McAllister and colleagues (2009) found that, by shifting the
31 treatment-focus of the healthcare professionals from immediate solutions to
32 long-term interventions, training allowed them to understand the importance
33 influence that nursing has on an individual's recovery process.

34
35 They felt that having knowledge and utilising a framework to guide care
36 (CARE model) allowed them to feel like they had a bigger role to play in the
37 long term recovery process. They also mention how important it is that not
38 just individuals but all healthcare professionals need to practice and adhere to
39 a framework. This may, then, lead to an improvement in emergency practice.

5.3 TRAINING ON CONDUCTING RISK AND NEEDS ASSESSMENT

Impact of risk assessment training: non mental health professionals

Pfaff and colleagues (2001) aimed to determine the effectiveness of a training programme for general practitioners (GPs) in recognising, assessing and managing suicidal ideation in young people. Participants were assessed six weeks post-workshop on their ability to improve the frequency of recognition of at-risk individuals; their frequency of enquiry about suicidal ideation; their accuracy in assessing the degree of risk present; and the frequency and appropriateness of their service user-management strategies. Following training, GP's recognition rate of service users scoring above the cut-off on the CES-D and GHQ-12 increased significantly (by 39.5% and 48% respectively). Moreover, post-training, GPs rated significantly higher proportion of their service users as at risk for suicide (75.5% increase). This occurred despite a lower proportion of post-workshop service users scoring above the cut-off on the DSI-SS. Participants increased their level of enquiry about suicidal ideation between the pre- and post-workshop audits by 32.5%, although the increase was not statistically significant. Relatively, the GPs' ability to accurately identify those service users above the cut-off on the DSI-SS more than doubled during the post-training period. Of note is the substantial reduction of false negative cases identified by GPs between the two audit periods, with a minimal increase in false positive cases, demonstrating greater precision in detecting service users reporting suicidal ideation. There was little difference between pre- and post training samples in the proportion of participant-identified psychologically distressed service users who received follow-up clinical management. Psychologically distressed service users were significantly more likely to receive clinical management if the GP also rated them at risk for suicide. During the post-workshop phase, four-fifths of the service users judged to be at risk of suicide received clinical management, compared with just over half of the psychologically distressed service users deemed not at risk of suicide. The results demonstrate that enhanced recognition rates do not necessarily imply accompanying changes in service user management and this must be taken into account in future training endeavours.

Impact of risk assessment training: healthcare professionals in emergency departments

Crawford and colleagues (1998) examined the impact of a one-hour teaching session for emergency department healthcare professionals on the quality of psychosocial assessment of service users who self-harm, as measured by examining emergency department case notes. There was an overall improvement in the quality of the psychosocial assessment conducted by the

1 emergency department healthcare professionals, as measured by the
2 completeness of individuals' records. Additionally, there was a substantial
3 increase in the numbers of healthcare professionals who felt that they had the
4 necessary skills in the assessment and management of people who self-harm.

5
6 Morriss and colleagues (1999) examined whether training, via role play,
7 modelling, video feedback and group discussion, improved emergency
8 department healthcare professionals' interview skills in suicide risk
9 assessment, management and confidence in dealing with suicidal service
10 users at a one to two month follow-up. Overall, the risk assessment and
11 management skills were retained for at least one month after training. Neither
12 training nor the assessment procedures themselves brought about any
13 changes in general interview skills of the healthcare professionals. However,
14 there were significant improvements in risk assessment with a median score
15 of 4 one month after training compared to a median score of 0.5 one month
16 before training. There was also significant improvements observed in risk
17 management scores of the suicidal service users at one month post training
18 (median = 5.8) compared to pre-training scores (median = 3) but not for those
19 who received no training. Performance was less satisfactory in relation to the
20 management of the immediate crisis. There was an improvement in the
21 provision of immediate support but only one healthcare professional in each
22 training condition removed potentially lethal weapons. There are a number of
23 limitations that must be noted as they may alter the interpretation of the
24 findings reported. Firstly, the self-assessments may have overestimated the
25 training effects of the package through a halo effect and secondly the
26 assessments made in role played interviews may differ from those carried out
27 in clinical practice.

28 *Impact of risk assessment training: mixed healthcare professionals* 29 *groups*

30 McAuliffe and Perry (2007) conducted two-day workshops of Applied Suicide
31 Intervention Skills Training (ASIST) for mental health professionals, non-
32 mental health professionals (e.g. rehabilitation therapists) and healthcare
33 professionals and students from local community mental health and social
34 service agencies in Canada. The training programme consisted of a
35 standardised workshop for assessing and responding to suicide risk, and
36 aimed to provide healthcare professionals with a greater understanding of
37 suicide and an opportunity to practice conversing with the suicidal person.
38 Authors found there was an increase ranging from 14-21% in the
39 identification of suicidal risk and a decrease in admissions which healthcare
40 professionals attributed to the clearer process of exploring reasons for dying,
41 reasons for living and an increased focus on reinforcing the service user's
42 protective factors in the community. There was also a 14.5% reduction in the
43 average length of stay for service users admitted with suicidal ideation or
44 attempt. Furthermore, more healthcare professionals assessed their clients for

1 suicide risk, with a 13% increase in the number of healthcare professionals
2 who reported assessing the majority of their service users. The proportion of
3 healthcare professionals that agreed that they had adequate ongoing training
4 in assessment and management of service users with suicide risk increased
5 from 30 to 80%. However, only 24% 'strongly agreed' with this statement
6 demonstrating that suicide assessment and intervention is an area in which
7 healthcare professionals want a great deal of ongoing educational support.
8 Finally, informal feedback from healthcare professionals indicated that
9 having standardised training and a common language regarding risk
10 assessment has resulted in improved inter-professional communication.

11
12 Appleby and colleagues (2000) conducted a STORM training programme in
13 three health care settings; mental health, primary care and A&E in the UK.
14 The primary aims of the study were to assess the feasibility of health district-
15 wide training in the assessment and management of people at risk of suicide;
16 and to assess the impact of training on assessment and management skills.
17 Twenty eight staff attending training agreed to make videotapes of interviews
18 with suicidal 'patients' (played by actors according to pre-determined
19 vignettes). Videotapes were made pre-training and 1-2 months post-training,
20 interview skills being rated by a psychiatrist blind to whether tapes were
21 made or after training, according to criteria corresponding to the content of
22 the training package. Training had a significant impact on overall on skills
23 obtained, however only clinical management improved significantly post-
24 training. The Suicide Intervention Response Inventory was completed on both
25 occasions by 72 professionals, however, no differences were found between
26 pre-and post training scores.

27
28 A follow up of the above study was carried out by Morriss and colleagues in
29 2005 to assess its effects on the reduction of suicide rates from 1994-2000.
30 There were no significant reductions in suicide rates post-training.

31 **5.4 FROM EVIDENCE TO RECOMMENDATIONS**

32 The evidence surrounding training is inconclusive. Moreover, they are studies
33 of poor quality and many studies do not have a control group. Therefore, the
34 results are subject to many biases and the results should be interpreted with
35 caution. In general, there may be a self-report positive effect on healthcare
36 professionals' knowledge, skills, attitudes and the psychological impact of
37 suicide and self-harm. However, due to the nature of the outcome measures
38 used, there is no assessment of whether this translated into real change in
39 healthcare professionals' behaviour and management. The small number of
40 studies considered in this section also reduces the power of the findings.

41
42 An important aspect to consider, when interpreting the findings in the
43 training section, is that the results from all of the training studies rely, in some

1 capacity, on self-report measures and do not independently assess the effect
2 of training on healthcare professionals. The most notable gap in this respect is
3 the lack of service user assessment of healthcare professionals pre and post-
4 training and the lack of randomised controlled studies. Therefore, although
5 healthcare professionals generally report a positive effect of training, it is not
6 possible to know whether this results in actual changes in healthcare
7 professionals behaviour and the management they provide for their service
8 users. Future research should consider a better quality study design (RCT),
9 with objective outcome measures including both self-report and service users'
10 reported outcomes.

11
12 Secondly, the length of follow-up used is problematic. The studies with
13 healthcare professionals who work in emergency departments used a
14 particularly short follow-up time and, therefore, it is difficult to know the
15 long term impacts of training programmes on knowledge, skills, attitudes and
16 the emotional impact of suicide and self-harm. Future research should include
17 longer term follow-up period.

18
19 Thirdly, the longer-term follow up in the above studies have all got a high
20 attrition rate that might also be differential in nature which may lead to
21 ascertainment bias and assessments are usually performed in volunteer
22 samples of staff who may be quite different in terms of skills, attitudes and
23 knowledge compared to other staff who do not volunteer, which may have
24 led to selection bias.

25
26 Finally, the format of the training varies and it is uncertain what the key
27 element of training is. Given the differences in training models presented
28 within the chapter, other methods for addressing the deficits in care for
29 service users who self-harm should be considered. Investigation into the
30 value of education and supervision would be valuable, particularly if it was
31 guided by service user input.

32
33 On the other hand, drawing from the literature in the previous chapter, the
34 need for some form of staff training is clearly displayed by both service users
35 and staff with many participants from these studies suggesting that training
36 may lead to more positive attitudes amongst staff members, increased
37 knowledge and confidence.

38
39 On the basis of the poor quality of evidence, it is not possible to make any
40 recommendation about the particular form of training that should be
41 provided, except that just using information e.g. posters is probably
42 unhelpful. Given that the evidence surrounding training is inconclusive these
43 recommendations are based on service user experience and GDG consensus.
44

1 **5.4.1 Health economic evidence**

2 No evidence on the cost effectiveness of experience of care for people who
3 self-harm or training for healthcare professionals was identified by the
4 systematic search of the economic literature. Details on the methods used for
5 the systematic search of the economic literature are described in Chapter 3.

6 **5.5 RECOMMENDATIONS**

7 *Training and supervision for health and social care professionals*

8 **5.5.1.1** Health and social care professionals who work with people who self-
9 harm (including children and young people) should be:

- 10 • trained in the assessment, treatment and management of self-
11 harm¹² and
- 12 • educated about the stigma and discrimination usually associated
13 with self-harm and the need to avoid judgemental attitudes.¹³

14 **5.5.1.2** Health and social care professionals who provide training about self-
15 harm should:

- 16 • involve people who self-harm in the planning and delivery of training
17 • ensure that training specifically aims to improve the quality and
18 experience of care for people who self-harm
19 • assess the effectiveness of training using service user feedback as an
20 outcome measure.¹⁴

¹² This recommendation also appears in section 4.5 where the data regarding the experience of care is presented.

¹³ This recommendation also appears in section 4.5 where the data regarding the experience of care is presented.

¹⁴ This recommendation also appears in section 4.5 where the data regarding the experience of care is presented.

1 **5.5.1.3** Routine access to senior colleagues for supervision, consultation and
2 support should be provided for health and social care professionals
3 who work with people who self-harm. Consideration should be given
4 of the emotional impact of self-harm on the professional and their
5 capacity to practice competently and empathically.¹⁵

6 **5.6 RESEARCH RECOMMENDATIONS**

7 **5.6.1.1 The effectiveness of training compared with no formal training in** 8 **assessment and management for healthcare professionals who** 9 **work with people who self-harm**

10 For healthcare professionals who work with people who self-harm, does the
11 provision of training in assessment and management improve outcomes
12 compared with no additional specialist training?

13
14 A well-powered randomised controlled trial should examine the effectiveness
15 of training. Researchers should consider the format and length of training.
16 The outcomes chosen should include both healthcare professionals' and
17 service users' evaluation of the training, and the effect on subsequent
18 knowledge, attitude and behavioural changes. It should include longer-term
19 follow-up of 12 months or more.

20 **Why this is important**

21 Current studies of training have been limited in their assessment of changes
22 in healthcare professionals' knowledge, attitudes and behaviour. Crucially no
23 studies have examined whether training has any impact on service users'
24 experience and outcomes. Healthcare professionals frequently report that
25 treating service users who self-harm is challenging and they are likely to find
26 training helpful as it provides an opportunity to think about and understand
27 this aspect of their work. Studies to date, however, have not looked beyond
28 these initial outcomes of training, which are more indicative of satisfaction
29 with training rather than addressing whether training has had an impact on
30 practice, service user experience and outcomes. Future research should
31 consider a wider range of outcomes – for example, attitudes, changes in
32 assessment practice, changes in interventions and improvement in service
33 user experience and outcomes. The longer-term impact of training should also
34 be assessed.

¹⁵ This recommendation also appears in section 4.5 where the data regarding the experience of care is presented.

6 PSYCHOSOCIAL ASSESSMENT

6.1 INTRODUCTION

The term “Psychosocial assessment” as used here refers to a comprehensive assessment including an evaluation of risk and needs. The assessment of needs is designed to identify those personal psychological and environmental (social) factors that might explain an act of self-harm. This assessment should lead to a formulation, from which a management plan can be developed. This chapter aims to undertake a thorough review of risk and protective factors and the utility of risk assessment scales. The practical aspects of conducting a psychosocial assessment are also discussed.

6.2 RISK AND PROTECTIVE FACTORS

6.2.1 Introduction

Many researchers have investigated risk factors for self-harm (Fliege, *et al.*, 2009; Gratz 2003; Owens, 2002) and for suicide (McLean, *et al.*, 2008; Nock, *et al.*, 2008). However, these studies do not often distinguish risk factors for a first episode of self-harm from those risk factors for repetition of self-harm. Knowledge of those factors associated with self-harm can provide an understanding of the characteristics of those who repeat self-harm or who go on to die by suicide. There will be an overlap between individual risk factors and risk assessment scales (see Section 6.3) which may include combinations of risk factors. Aside from traditional risk factors, we will also consider those factors that may protect against repeated self-harm or suicide. Establishing causal relations between risk factors and outcome is difficult because many studies have been observational. In addition there is often a strong association between different risk factors and measuring one may be a proxy measure for another. However this section is aimed at giving guidance on factors to consider in a clinical assessment, not for predicting risk.

6.2.2 Clinical review protocol

The review protocol, including the review questions, information about the databases searched, and the eligibility criteria used for this section of the guideline, can be found in Appendix 8 (further information about the search strategy can be found in Appendix 9).

Table 5: Clinical review protocol for the review of case identification tools

Component	Description
Review question	What are the risk and protective factors amongst people who

	self-harm that predict outcomes?
Population	People who self-harm (8 years old or above)
Critical outcomes	Non-fatal repetition; fatal repetition
Electronic databases	CINAHL, EMBASE, MEDLINE, PsycINFO
Date searched	Inception to 25 Jan 2011
Study design	Prospective cohort studies

1

2 **6.2.3 Studies considered¹⁶**

3 49 prospective cohort studies (out of 6077 references generated by the search)
4 providing relevant clinical evidence met the eligibility criteria for this review.
5 The GDG decided to include only prospective cohort studies for three main
6 reasons. First, prospective studies are less subject to selection bias and
7 participants' recall bias than retrospective studies. Second, prospective cohort
8 studies could identify temporal relationships between risk factors and
9 outcome which might have implications for management. The third reason
10 was a practical one in order to ensure that the number of studies was
11 manageable within the timeframe of this guideline. Of the 49 studies all were
12 published in peer-reviewed journals. In addition, 41 studies were excluded
13 from the analysis. Further information about both included and excluded
14 studies can be found in Appendix 15.

15

16 28 out of 49 prospective studies that reported effect measures such as relative
17 risks, odds ratios or hazard ratios (together with confidence intervals) were
18 selected for possible meta-analysis. These are presented as clinical evidence in
19 Section 6.2.4 (risk factors for non-fatal repetition), 6.2.5 (risk factors for fatal
20 repetition) and 6.2.9 (risk factors for children and young people).

21

22 The process for selection of studies for meta-analysis is described below:

- 23 • A list of risk factors examined in each of these 28 studies was drawn
24 up.
- 25 • The studies that reported the effect measure for the same risk factor
26 were grouped together.
- 27 • For each risk factor, a meta-analysis was conducted for studies that
28 reported the same type of effect measure together with 95% confidence
29 interval (e.g. two studies that reported the odds ratio of depression
30 were pooled). If not, a narrative synthesis was presented for those
31 studies that could not be pooled.

32

33 Other risk factors that were not reported in such a way as to allow outcomes
34 that could be extracted are included in narrative reviews presented in Section
35 6.2.6, Section 6.2.7 and Section 6.2.10. These studies either did not report 95%

¹⁶ Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is in press or only submitted for publication, then a date is not used).

confidence intervals, reported effect measures by sub-groups only (e.g. male or female; single ethnic group), reported p-values only, or a mixture of people who self-harmed for the first time or repeatedly self-harmed (in which results were not separable).

For the section concerning children and young people, studies were included that recruited participants up to the age of 20 and for the section concerning older adults, one study was identified which included participants of 60 years old or above. These age range were wider than those that might be used in clinical services, but this age range was used because of the age cut offs included in these studies.

6.2.4 Clinical evidence for risk factors for repetition (non-fatal outcome)

All studies in this section included clinical populations recruited after presenting to hospital following an index episode of self-harm. Therefore, the factors examined are those associated with a higher risk of *repetition* of self-harm.

As mentioned in section 6.2.3, all risk factors reviewed below are findings from prospective studies only.

The quality of evidence is presented according to following criteria:

- Study sample – Is the study representative of the population of interest with regard to key characteristics, and is sufficient to limit potential bias to results?
- Loss to follow up – Is the loss to follow up unrelated to key characteristics, and is sufficient to limit potential bias?
- Putative risk factor – Has this been adequately measured in study participants?
- Outcome of interest – Has this been adequately measured in study participants?
- Potential confounders – Have the important confounds been appropriately accounted for, limiting potential for spurious association?
- Statistical analysis – Has the study used appropriate design of study, which limited the potential for presentation of invalid results?

Evidence from each important outcome and the overall quality of evidence are presented. The study characteristics, associated forest plots, and quality assessment items can be found in Appendix 15, Appendix 16 and Appendix 17, respectively.

History of previous self-harm as a risk factor for repetition

Pooled adjusted data

A history of previous self-harm is associated with higher risk of repetition. Three studies (COLMAN2004, JOHNSTON2006 and McAULIFFE2008) were pooled in the meta-analysis and their combined adjusted odds ratio was 2.7 (95% CI 2.13 to 3.42) with approximately 5000 participants.

The repetition rate for self-harm during follow up (up to 2 years) was as follows; 25% (COLMAN2004), 11% (JOHNSTON2006) and 30% (McAULIFFE2008).

The majority of participants in COLMAN2004 (66%), JOHNSTON2006 (55%) and McAULIFFE2008 (59%) had a prior history of self-harm. Specifically, most participants in COLMAN2004 received a psychiatric diagnosis, half of the participants in JOHNSTON2006 had received previous psychiatric treatment, and a number of participants in McAULIFFE2008 had alcohol problems. Three papers varied in the extent to which they adjusted for current symptoms related to depression. The adjusted factors can be found in Table 6.

Table 6: History of self-harm - adjusted factors

	COLMAN2004	JOHNSTON2006	McAULIFFE2008
Depression	Yes		Hopelessness
Age	yes		Yes
Gender	Yes		Yes
Previous psych treatment		Yes	
Suicide intent			Yes
Method of SH			Yes
Schizophrenia	Yes		
Physical Health	Yes		
Marital Status		Yes	Yes
Employment		Yes	
Ethnic %		Yes	
Education			Yes

The follow-up period ranged from one to two years. The three studies were conducted in Canada, UK and European countries. There was no significant heterogeneity after pooling these studies.

Attenuation of the association following adjustment was examined in the two papers (COLMAN2004 and McAULIFFE2008) which reported both unadjusted and adjusted odds ratio. The pooled unadjusted odds ratio was 5.86 (95% CI 3.23 to 10.65). After adjusting for depression, age and gender, the adjusted odds ratio decreased to 3.81 (95% CI 1.98 to 7.35).

Quality of evidence

<i>Study Sample</i>	All 3 studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	2 of 3 studies meet criteria
<i>Outcome of interest</i>	All 3 studies meet criteria
<i>Potential Confound</i>	1 study meet criteria
<i>Statistical Analysis</i>	All 3 studies meet criteria

1 **Pooled unadjusted data**

2 Five studies (JOHHNSSON1996, OWENS1994, BILLE-BRAHE1994,
3 McAULIFFE2008 and COLMAN2004) provided raw data and a pooled
4 unadjusted odds ratio of 3.09 (95% CI 1.99 to 4.8), an observed heterogeneity
5 ($I^2=52\%$) was calculated. It is important to note that, unadjusted ratios do not
6 take confounding variables into consideration and thus findings may result
7 from association with another unmeasured risk factor.

8 **Narrative review**

9 Aside from the studies reviewed above, a narrative synthesis of seven other
10 studies (HAW2007, ALLGULANDER1990, KAPUR2006, DIESERUD2000,
11 SIDLEY1999, VAN AAIST1992 and PETRIE1992) with approximately 23,000
12 participants reported a prior history of self-harm as a risk factor for repetition.
13 Of these seven studies, two studies adjusted for confounding variables
14 (HAW2007, KAPUR2006) while the remaining five did not.
15

16 ***Depressive symptoms as a risk factor for repetition***

17 **Pooled adjusted data**

18 People with depressive symptoms are associated with higher risk of
19 repetition. Three studies (COLMAN2004, DIESERUD2003 and
20 CHANDRASEKARAN2008) with about 700 participants were pooled and
21 reported an adjusted odds ratio of 2.63 (95% CI 1.72 to 4.04).
22

23 The repetition rate during follow up was 25% (COLMAN2004), 16%
24 (DIESERUD2003) and 23% (CHANDRASEKARAN2008).
25

26 A lifetime psychiatric diagnosis was reported in the majority of participants in
27 COLMAN2004 (66% major depression), and a few participants in
28 CHANDRASEKARAN2008 (26% depression) at baseline. The breakdown of
29 psychiatric diagnosis was not reported in DIESERUD2003, and depressive
30 symptoms were measured by Beck Depression Inventory in this study. The
31 majority of participants in COLMAN2004 and DIESERUD2003 had prior
32 history of self-harm. In CHANDRASEKARAN2008, only participants

presenting who reported their index episode as their first episode of self-harm were included. Those factors adjusted for in each study are found in Table 7.

Table 7: Depressive symptoms - adjusted factors

	COLMAN2004	DIESERUD2003	CHANDRASEKARAN2008
Self-Harm History	Yes	Yes	Included only participants with no history of prior self-harm.
Age	Yes	Yes	
Gender	Yes	Yes	
Suicide intent		Yes	
Schizophrenia	Yes		
Physical Health	Yes		
Other		Self efficacy and esteem	Global assessment of functioning

The follow-up period ranged from one to two years. They were conducted in three different countries. There was no significant heterogeneity reported after pooling the three studies.

Attenuation following adjustment was examined in two of these papers (COLMAN2004 and DIESERUD2003) which reported both unadjusted and adjusted odds ratio. The pooled unadjusted odds ratio was 2.98 (95% CI 0.9 to 9.85). After adjusting for history of prior self-harm, age and gender, the adjusted odds ratio decreased to 2.19 (95% CI 1.25 to 3.81).

Quality of evidence

<i>Study Sample</i>	2 of 3 studies meet criteria
<i>Loss to follow up</i>	1 study meet criteria
<i>Putative risk factor</i>	2 of 3 studies meet criteria
<i>Outcome of interest</i>	All 3 studies meet criteria
<i>Potential Confound</i>	1 study meet criteria
<i>Statistical Analysis</i>	All 3 studies meet criteria

Narrative review

The narrative findings from four studies (SCOLIERS2009, CHRISTIANSEN2007, KAPUR2006 and SIDLEY1999) with about 12,000 participants also found that having depressive symptoms, scoring high on a scale measuring hopelessness, and the current use of antidepressants all increased the risk of repetition of self-harm.

KAPUR2006 and SCOLIERS2009 reported an unadjusted hazard ratio of 1.28 (95% CI 1.14 to 1.44) and relative risk of 1.85 (1.23 to 2.78), respectively. The majority of participants (over 50%) in most studies had a history of prior self-harm. The use of antidepressants (CHRISTIANSEN2007) as a risk factor was controlled for other confounds, while being hopeless and having other depressive symptoms (SCOLIERS2009, KAPUR2006 and SIDLEY1999) was not controlled for other confounds. SIDLEY1999 reported hopelessness as a short term predictor of repetition (within 6 months).

Psychiatric history as a risk factor for repetition

Pooled unadjusted data

Two studies (JOHNSSON1996 and OWENS1994) with approximately a thousand participants reported raw data that could be used to calculate a pooled unadjusted odds ratio. The pooled unadjusted odds ratio was 3.46 (95% CI 2.26 to 5.3). This showed people with psychiatric history might be at a higher risk of repetition, bearing in mind this had not been adjusted for confounders. Neither study specified a diagnosis. Data was collected objectively from local psychiatric services' case register in OWENS1994, and from psychiatric records of psychiatric hospital in JOHNSSON1996.

Repetition rate was reported as 40% (JOHNSSON1996) and 12% (OWENS1994) respectively. 48% (JOHNSSON1996) and 35% (OWENS1994) of participants had prior self-harm history before index admission. JOHNSSON1996 reported a breakdown of diagnosis (68% with personality disorder, 35% with major depressive disorder), while OWENS1994 reported 33% of participants had past psychiatric contact. None of the aforementioned variables were adjusted for in the pooled ratio. There might be confounding factors that limit the strength of findings.

JOHNSSON1996 conducted the study in Sweden for five years and OWENS1994 followed up participants for one year in UK.

Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None meet criteria
<i>Putative risk factor</i>	All studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	None meet criteria
<i>Statistical Analysis</i>	None meet criteria

1 Narrative review

2 Five other studies with approximately 20,000 participants reported
3 narratively having a psychiatric history (without specifying diagnosis) as a
4 risk factor. Three studies reported separately psychiatric treatment
5 (JOHNSTON2006 and KAPUR2006) and admission to a mental health
6 hospital (CHRISTIANSEN2007) as a significant risk factor even after adjusting
7 for confounding variables. Two studies (HAW2007 and SIDLEY1999)
8 reported the same but only reported unadjusted effects. In HAW2007,
9 psychiatric diagnosis as a risk factor was only reported in participants who
10 were admitted following their first self-harm attempt (not following
11 subsequent episodes).

12 *Alcohol misuse as a risk factor for repetition*

13 Two studies (KAPUR2006 and WANG2006) reported alcohol misuse as a risk
14 factor for repetition. KAPUR2006 defined misuse as “harmful use or
15 consumed over 7 units daily”. WANG2006 did not report how was this factor
16 measured. They could not be meta-analysed as the reported outcomes were
17 not comparable. Both reported adjusted estimates with suicide intent adjusted
18 for in both studies WANG2006 reported an adjusted effect measure of 2.57
19 (95% CI 1.05 to 6.55). KAPUR2006 reported both unadjusted 1.49 (95% CI 1.34
20 to 1.66) and adjusted (1.3 95% CI 1.16 to 1.45) hazard ratios. Slight attenuation
21 was observed after adjusting for history of prior self-harm, suicide intent,
22 methods of self-harm, hallucinations, current psychiatric treatment and
23 unemployment.

24 Narrative review

25 In two studies (SIDLEY1999 and CHRISTIANSEN2007) the outcomes were
26 not extractable for meta-analysis. CHRISTIANSEN2007 reported alcohol or
27 drug abuse as an independent risk factor being adjusted for other confounds,
28 while SIDLEY1999 reported this as risk factor without adjusting for
29 confounds.

30 *Schizophrenia related symptoms as a risk factor for repetition*

31 Outcomes were extracted for two studies; however, they could not be pooled.
32 KAPUR2006 reported hallucinations at an unadjusted hazard ratio of 1.82
33 (95% CI 1.56 to 2.14) and COLMAN2004 reported a lifetime history of
34 schizophrenia had an unadjusted odds ratio of 4.24 (95% CI 2.3 to 7.79). After
35 adjusting for prior history of self-harm, depression, age, gender and physical
36 health problem , the adjusted odds ratio became 3.43 (95% CI 1.77 to 6.66).

37 Narrative review

38 Three other studies (CHRISTENSEN2007, VAN AAIIST1992 and WANG2006)
39 with about 2,857 participants reported that schizophrenia related symptoms
40 were associated with higher risk for repetition. These three studies' findings

were not adjusted for confounds, and should be subject to cautious interpretation. A diagnosis of schizophrenia (VAN AAI1992), hallucinations (KAPUR2006) and presence of any psychotic symptom (WANG2006) were reported as risk factors in these studies.

Employment status as a risk factor for repetition

Being unemployed might be a risk factor for repetition. Outcomes were extracted from three studies (JOHNSTON2006, OWENS1994 and KAPUR2006), however, they could not be pooled because they were not comparable. JOHNSTON2006 reported being unemployed as a risk factor with an adjusted odds ratio of 1.41 (95% CI 1.06 to 1.87), adjusted for prior history of self-harm, previous psychiatric treatment, marital status. KAPUR2006 reported an unadjusted hazard ratio of 1.77 (95% CI 1.56 to 2.02), after adjusting for prior history of self-harm, current psychiatric treatment, alcohol misuse, suicide plans and hallucinations, the adjusted ratio lowered to 1.38 (95% CI 1.2 to 1.59). OWENS1994 provided raw data and an unadjusted odds ratio was calculated with 2.44 (95% CI 1.36 to 4.38).

Similarly, JOHNSTON2006 and KAPUR2006 reported “registered sick” as a risk factor for repetition. An adjusted odds ratio of 1.67 (95% CI 1.12 to 2.51) was reported and KAPUR2006 reported unadjusted hazard ratio of 2.17 (95% CI 1.83 to 2.57). After adjustment, the adjusted hazard ratio attenuated to 1.42 (95% CI 1.18 to 1.71).

Narrative review

Three other studies (BILLE-BRAHE1994, DIESERUD2000, PETRIE1992) with approximately 1,537 participants reported being unemployed as a risk factor. These studies reported unemployment as a risk factor without adjustment for other confounds.

One study (BILLE-BRAHE1994) also reported early retirement as a risk factor for repetition.

Gender as a risk factor for repetition

Pooled adjusted data

Two studies (CHEN2010 and SCOLIERS2009) reported females were at a higher risk for repetition. They were pooled resulting in an adjusted risk ratio of 1.96 (95% CI 1.22 to 3.15). Adjusted factors can be found in Table 8.

Table 8: Gender – adjusted factors

	CHEN2010	SCOLIER2009
Self-harm History		
Depression		Yes
Age	Yes	Yes
Method of self-harm	Yes	
Anxiety		Yes
Education		Yes
Other		SCL-90 symptoms

The pooled *unadjusted* risk ratio of the same two studies was 1.8 (95% CI 1.2 to 2.71). CHEN2010 reported repetition rate of 9.5% over 4 years, while SCOLIERS2009 reported overall repetition rate of 30% over 5 years.

34% of participants had prior self-harm history in SCOLIERS2009. CHEN2010 did not report this information. The majority of participants were younger than 40 years old (SCOLIERS2009) and mean age was 37 years old (CHEN2010). Most of the participants were married and have less than 10 years of education (CHEN2010). Other important demographics such as employment or clinical variables were not reported in CHEN2010. SCOLIERS2009 reported that 61% of their participants had high anxiety scores and 46% had high depression scores at follow up, but these factors were adjusted for in the statistics model.

Both studies followed up participants for about 5 years. CHEN2010 was conducted in Taiwan and SCOLIERS2009 was conducted in Belgium.

Quality of evidence of the meta-analysis

<i>Study Sample</i>	1 of 2 studies meet criteria
<i>Loss to follow up</i>	None meet criteria
<i>Putative risk factor</i>	1 of 2 studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	None meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

Pooled unadjusted data

Four studies (JOHNSSON1996, KRARUP1991, OWENS1994 and CHANDRASEKARAN2008) reported raw data that could be used to calculate unadjusted odds ratio. However, the pooled unadjusted odds ratio had a wide confidence interval and thus there was no clear indication of the direction of the effect if any. (OR unadjusted 1.01 (95% CI 0.5 to 2.04)). A

1 moderate heterogeneity was also observed ($I^2=53\%$), which might be
2 explained by the uncontrolled confounding variables.

3 **Quality of evidence of pooled, unadjusted odds ratio**

<i>Study Sample</i>	3 of 4 studies meet criteria
<i>Loss to follow up</i>	1 study meet criteria
<i>Prognostic factor</i>	3 of 4 studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	None meet criteria
<i>Statistical Analysis</i>	1 of 4 meet criteria

4 **Narrative review**

5 In studies where outcomes were not extractable, Z AHL2004 reported young
6 female multiple repeaters (more than 2 episodes) were at higher risk
7 compared with repeaters with 2 or less episodes and this finding only applies
8 to females.

9
10 On the contrary, one study (CHRISTIANSEN2007) reported being male was
11 at higher risk of repetition of suicide attempt. Another (HEATH2008)
12 suggested there were no gender differences in risk of repetition, based on a
13 female majority college sample. However, the finding was unadjusted for
14 potential confounds, which should be subject to careful interpretation.

15 *Marital status as a risk factor for repetition*

16 **Pooled unadjusted data**

17 Not being married or single status might be at higher risk of repetition. Four
18 studies (BILLE-BRAHE1994, CHANDRASEKARAN2008, JOHNSSON1996
19 and OWENS1994) with approximately 1,700 participants reported raw data
20 that could be used to calculate a pooled unadjusted odds ratio. The finding
21 was not significant, with an unadjusted OR 1.36 (95% CI 0.85 to 2.16), and
22 subject to heterogeneity ($I^2=63\%$). Both BRAHSE1994 and OWENS1994
23 reported not being married as a risk factor. Nevertheless, the reported
24 statistics in both studies were limited as they were unadjusted.

25 **Quality of evidence**

<i>Study Sample</i>	3 of 4 studies meet criteria
<i>Loss to follow up</i>	1 of 4 studies meet criteria
<i>Putative risk factor</i>	3 of 4 studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria

<i>Potential Confound</i>	None meet criteria
<i>Statistical Analysis</i>	2 of 4 of the studies meet criteria

1 **Narrative review**

2 Three other studies (JOHNSTON2006, KAPUR2006 and DIESERUD2000) with
3 about 15,000 participants narratively reported not being married as a risk
4 factor. Findings from KAPUR2006 and DIESERUD2000 were unadjusted for
5 confounds and therefore of limited conclusiveness. JOHNSTON2006 reported
6 an adjusted odds ratio of 1.39 (95% CI 1.09 to 1.76), which was adjusted for
7 prior self-harm history, psychiatric treatment, employment status and
8 ethnicity.

9 *Suicide intent as a risk factor for repetition*

10 **Pooled unadjusted data**

11 Two studies (OWENS1994 and DIESERUD2003) were pooled to report an
12 unadjusted odds ratio of 0.9 (95% CI 0.32 to 2.52) providing no conclusive
13 evidence there was also substantial heterogeneity of the studies ($I^2=78\%$).
14 Suicide intent was defined as suicide threat or leaving note in OWENS1994,
15 and a cut off score on the suicide intent scale was used in DIESERUD2003.

16 **Quality of evidence**

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None meet criteria
<i>Putative risk factor</i>	All studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	None meet criteria
<i>Statistical Analysis</i>	1 of 2 studies meet criteria

17 **Narrative review**

18 Two studies with about 10,000 participants reported associations with having
19 a suicidal plan (KAPUR2006), and carrying a suicide letter (WANG2006) is
20 associated with higher risk of repetition. Both studies were adjusted for
21 different sets of confounding factors.

22

23 However, two studies (HAW2003a, HARRISS2005) did not find lethality nor
24 intent scores at the index episode associate with repetition of self-harm.
25 HARRISS2005 reported the association between repetitions and suicide intent
26 scores was different for male and female patients.

6.2.5 Clinical evidence for risk factors for completed suicide

All studies in this section included clinical populations recruited after presenting to hospital following an index episode of self-harm and followed prospectively. Therefore, the factors examined are associated with higher risk for repetition of self-harm, leading to fatal outcome.

All risk factors reviewed below are findings from prospective studies only.

Quality of evidence is presented according to following criteria:

- Study sample – Is the study representative of the population of interest with regard to key characteristics, and is sufficient to limit potential bias to results?
- Loss to follow up – Is the loss to follow up unrelated to key characteristics, and is sufficient to limit potential bias?
- Putative risk factor – Has this been adequately measured in study participants?
- Outcome of interest – Has this been adequately measured in study participants?
- Potential confounders – Have the important confounds been appropriately accounted for, limiting potential for spurious association?
- Statistical analysis – Has the study used appropriate design of study, which limited the potential for presentation of invalid results?

Evidence from each important outcome and overall quality of evidence are presented. The study characteristics, associated forest plots, and quality assessment items can be found in Appendix 15, Appendix 16 and Appendix 17, respectively.

History of prior self-harm as a risk factor for completed suicide

Pooled adjusted data

Two studies (NORDENTOFT1993, SUOKAS2001) with 1992 participants were pooled and reported an adjusted hazard ratio of 2.17 (95% CI 1.53 to 3.09) with the general population as reference group. As comparison, COOPER2005 reported an unadjusted hazard ratio of 2.97 (95% CI 1.6 to 5.5).

10.5% (NORDENTOFT1993) and 6.7% (SUOKAS2001) of the participants respectively completed suicide during the follow-up since their index episode.

48% of participants (SUOKAS2001) had prior history of self-harm before the index episode, and the exact percentage was not reported in the other study.

60% of participants (SUOKAS2001) had previous psychiatric treatments, 28%

had a diagnosis of alcoholism and 15% had a personality disorder (NORDENTOFT1993). Nevertheless, in another study 40% reported no history of mental health problems (NORDENTOFT1993). Adjusted factors can be found in Table 9.

Table 9: History of self-harm – adjusted data

	NORDENTOFT1993	SUOKAS2001
Age	Yes	
Gender		Yes
Previous psychiatric treatment		Yes
Suicide intent		“wish to die”
Living alone	Yes	

Data were collected from death register and records. The follow-up period ranged from 10 to 14 years.

Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	All studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	None of them meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

Narrative review

Eight other papers (HAWTON1988, ALLGULANDER1990, CHRISTIANSEN2007, COOPER2005, HAW2007, SKOGMAN2004, SUOKAS1991 and ZAHL2004) with approximately 39,000 participants narratively reported a prior history of self-harm as risk factor for completing suicide. Four studies (CHRISTIANSEN2007, COOPER2005, HAW2007 and SKOGMAN2004) had adjusted this finding for other confounding variables. Two papers suggested prior self-harm history was gender specific. One paper (SKOGMAN2004) reported male repeaters were at higher risk of completing suicide, by contrast, another reported (HAW2007) female repeaters were at higher risk as opposed to females with less episodes of self-harm. Three other papers (HAWTON1988, ALLGULANDER1990, SUOKAS1991 and ZAHL2004) reported this as an unadjusted factor.

Suicide intent as a risk factor for competed suicide (repetition with fatal outcome)

1 Pooled adjusted data

2 Three studies (SUOKAS2001, BJORNAAS2009 and COOPER2005) with
3 approximately 10,000 participants were pooled. Suicide intent was defined
4 differently in the three studies (see Table 10). Nevertheless, there was
5 evidence of increased risk for those with high intent with a pooled hazard
6 ratio of 2.7 (95% CI 1.91 to 3.81) being observed.

8 Table 10: Suicide intent – adjusted factors

	SUOKAS2001 -wish to die	BJORNAAS2009 -subjective intent is suicidal	COOPER2005 -avoidance of discovery
Self-Harm History	Yes		
Gender	Yes	Yes	
Previous psychiatric treatment	Yes	Seen by psychiatrist	Yes
Alcohol misuse		Yes	
Physical health	Somatic disease		Yes
Substance abuse		Yes	Alcohol misuse
Socioeconomic status		Yes	
Others			Not living close with relatives

9 Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	2 of 3 studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	1 of 3 studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

10 Narrative review

11 Six studies with approximately 8279 participants narratively reported suicide
12 ideation as risk factor for subsequent completed suicide. Meta-analysis was
13 not appropriate because none of the outcomes were comparable. Findings
14 from three studies (SKOGMAN2004, SUOKAS2001, BJORNAAS2009) had
15 been adjusted for confounds. The reported wish to die (SUOKAS2001) and
16 suicidal motive (BJORNAAS2009) were reported as risk factors, and suicidal
17 ideation was found to be a risk factor for females only in SKOGMAN2004.
18 Three studies (SUOKAS1991, LONNQUIST1991, HARRISS2005) did not adjust
19 for confounds. Of which, SUOKAS1991 reported the severe intention to die
20 was predictive of subsequent suicide during follow up. HARRISS2005

1 reported suicide intent was associated with higher risk of subsequent suicide,
2 especially during the first year and amongst female patients.

3 *Being male as a risk factor for completed suicide*

4 **Pooled adjusted data**

5 Two studies (CHEN2011 and SUOKAS2001) with 2000 participants were
6 pooled to report an adjusted hazard ratio of 2.66 (95% CI 1.72 to 4.11).
7

8 Suicide following index episode of self-harm was 4.4% (CHEN2011) and 6.7%
9 (SUOKAS2001). All participants at index episode were admitted for self-
10 poisoning in SUOKAS2011, and 43% were admitted for overdose in
11 CHEN2011.

12 48% had prior history of self-harm and 60% received previous psychiatric
13 treatment (SUOKAS2001). No such information was provided in CHEN2011.
14

15 The two papers varied in the factors they adjusted. The adjusted factors can
16 be found in Table 11.
17

18 **Table 11: Male – adjusted factors**

	CHEN2011	SUOKAS2001
Prior history of self-harm		Yes
Age	Yes	
Previous psychiatric treatment		Yes
Suicide intent		Yes
Method of self-harm	Yes	
Physical Health		Somatic disease

19
20 The follow up period ranged from 7 to 14 years, with one conducted in
21 Taiwan and the other in Finland. There was no significant heterogeneity after
22 pooling these studies.

23 **Quality of evidence**

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	1 of 2 studies meet criteria
<i>Putative risk factor</i>	All studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria

<i>Potential Confound</i>	None of them meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

1 **Pooled unadjusted data**

2 Two studies (CHEN2011 and COOPER2005) reported unadjusted hazard ratio
3 and a pooled unadjusted hazard ratio of 2.72 (95% CI 1.78 to 4.16) was
4 calculated. It is important to note that, unadjusted ratios do not take
5 confounding variables into consideration and thus findings may result from
6 association with another unmeasured risk factor. Only one study (CHEN2011)
7 reported both adjusted and unadjusted hazard ratio. After adjusted for age
8 and methods of self-harm, attenuation was observed from unadjusted hazard
9 ratio of 3.46 (95%CI 1.92 to 6.26) to adjusted hazard ratio of 2.47 (95% CI 1.28
10 to 4.75).

11

12 *Narrative review*

13 SKOGMAN2004 reported an adjusted odds ratio of 1.92 (95% CI 1.08 to 3.39),
14 adjusted for history of prior self-harm.

15

16 Six other studies with about 17306 participants reported men were at higher
17 risk of completing suicide after they have been admitted following their index
18 episode. One study (HOLLEY1998) was adjusted for confounds, and four
19 others (HAWTON1988, LONNQUIST1991, SUOKAS1991, HAWTON2003b)
20 were unadjusted for confounds. One study (RYGNESTAD1997) separately
21 analyzed men and women samples, and found males were at higher risk of
22 subsequent suicide if they were over age of 30 and divorced. One study
23 (HAW2007) reported female frequent repeaters were at increased risk of
24 completed suicides as opposed to less frequent repeaters and non-repeaters.

25 *Physical health problem as a risk factor for completed suicide*

26 **Pooled adjusted data**

27 Two studies (COOPER2005 and HOLLEY1998) with approximately 8800
28 participants were pooled to report adjusted hazard ratio of 1.59 (95% CI 0.93
29 to 2.72) with the general population as reference group. HOLLEY1998 defined
30 physical health problem as chronic, high mortality and significant impairment
31 to functioning. It was not specified in the other study.

32

33 Less than 1% of participants (COOPER2005) and 6% (HOLLEY1998)
34 completed suicide during follow up, while 15.5% repeated self-harm
35 (COOPER2005).

36

37 51% of participants (COOPER2005) had prior history of self-harm, and it was
38 not reported in the other study. 69% of participants had major depression,
39 24% had neuroses, and 35-43% reported the use of alcohol as a factor

identified in the attempt (HOLLEY1998). None of the psychiatric diagnosis information was provided in COOPER2005. At least 67% participants were unemployed (HOLLEY1998). Adjusted factors can be found in Table 12.

Table 12: Physical health – adjusted factors

	HOLLEY1998	COOPER2005
Self-Harm History	Yes	
Previous psychiatric treatment	Previous psychiatric admission	Yes
Gender	Yes	
Suicide intent		Avoided discovery
Alcohol misuse	“Alcohol as a factor”	Yes
Method of Self-harm	Violent method used	Cutting
Psychiatric diagnosis	Yes	
Marital status	Yes	
Socioeconomic status	Yes	
Others		Not living close to relatives

Data were collected from death register and records, while risk factors assessed were collected from assessment forms. The follow-up period varied from about 4 years (COOPER2005) to 13 years (HOLLEY1998).

Only COOPER2005 reported also an unadjusted hazard ratio of 2.68 (95% CI 1.3 to 5.5), while HOLLEY1998 did not.

Another study (HAWTON1988), which could not be meta-analysed with the above studies, also reported poor physical health as a risk factor for increased risk of subsequent suicide.

Quality of evidence

<i>Study Sample</i>	1 of 2 studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	All studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	1 of 2 studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

Alcohol abuse as a risk factor for completed suicide

Pooled adjusted data

Two studies (BJORNAAS2009 and COOPER2005) with approximately 9,000 participants were pooled to report an adjusted hazard ratio of 1.42 but the wide confidence interval included the possibility of a small protective effect

(95% CI 0.7 to 2.8), there was also high heterogeneity observed. ($I^2=65\%$). COOPER2005 reported an unadjusted hazard ratio of 2.11 (95% CI 1.23 to 3.63) and BJORNAAS2009 did not.

Table 13: Alcohol abuse – adjusted factors

	COOPER2005 – Alcohol misuse	BJORNAAS2009– Alcohol abuse
Self-Harm History		
Previous psychiatric treatment	Yes	Seen by psychiatrists before
Gender		Yes
Suicide intent	Avoided discovery	Yes
Method of Self-harm	Cutting	
Socioeconomic status		Yes
Others	Not living close to relatives	Level of consciousness

Less than 1% of participants (COOPER2005) and 7% (BJORNAAS2009) completed suicide during follow up.

51% of participants (COOPER2005) had prior history of self-harm, and it was not reported in BJORNAAS2009. BJORNAAS2009 reported 12% were addicted to opiates, and 53% had no alcohol abuse history. None of the psychiatric diagnosis information was provided in COOPER2005. Both studies adjusted for participants' psychiatric history as confounding variables. BJORNAAS2009 adjusted for gender and participants' socioeconomic status.

Data were collected from death register and records, while alcohol misuse or abuse assessed were collected from psychiatric assessments. The follow-up period varied from about four years (COOPER2005) to 20 years (BJORNAAS2009), which might explain the heterogeneity.

Attenuation was examined in two of these papers (COOPER2005 and BJORNAAS2009) which reported both unadjusted and adjusted odds ratio. The pooled unadjusted odds ratio was 1.52 (95% CI 0.79 to 2.94). After adjusting for previous psychiatric history, and suicide intent, the adjusted odds ratio was attenuated to 1.42 and the confidence interval included no effect (95% CI 0.7 to 2.88). Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	1 of 2 study meet criteria

<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	1 of 2 studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

1 **Narrative review**

2 One study (BECK1989) reported an association reporting both adjusted and
3 unadjusted odds ratio (which could not be pooled with the above hazard
4 ratio). However, its wide confidence interval limits the conclusions that can
5 be drawn from this study.

6
7 There is lack of evidence to show association between the time of alcohol
8 consumption and the index episode of self-harm. HOLLEY1998 reported an
9 adjusted hazard ratio of 1.1 (95% CI 0.6 to 2.3), providing no evidence of
10 whether there was an effect. This study did not specify the time period
11 between alcohol consumption and the episode of self-harm either. 69% of
12 participants had major depression, 24% had neuroses, and 35-43% reported
13 the use of alcohol as a factor at the attempt (HOLLEY1998). Data was based
14 upon A&E records of whether alcohol was used as a factor in the suicide
15 attempt.

16
17 Another study (HAW2001b) compared people with alcohol dependence and
18 self-harmed and those without alcohol dependence. This was a prospective
19 study conducted in UK for about 1-2 years. Participants were admitted to
20 hospital for self-harm. Forty out of 150 patients with alcohol disorders were
21 selected for analysis. 80% of these 40 patients had previous self-harmed, 90%
22 had comorbid psychiatric diagnosis (mostly depression). Repetition was 45%
23 for those with alcohol dependence, and 29% for those without. More
24 participants with alcohol dependence had consumed alcohol within six hours
25 of the index episode and those with alcohol dependence were more
26 aggressive, impulsive, and had poorer problem-solving skills.

28 *Psychiatric history as a risk factor for completed suicide (repetition* 29 *with fatal outcome)*

30 **Pooled adjusted data**

31 Two studies (COOPER2005 and HOLLEY1998) with approximately 9,000
32 participants found no evidence of association with adjusted hazard ratio of
33 1.22 (95% CI 0.56 to 2.64), and a high heterogeneity was observed ($I^2=62\%$).
34 Therefore, the meta-analysis result was inconclusive. COOPER2005 reported
35 an unadjusted hazard ratio of 2.11 (95% CI 1.22 to 3.65), and it was not
36 reported in the other study.

1 Table 14: Psychiatric history – adjusted data

	HOLLEY1998	COOPER2005
Self-Harm History	Yes	
Gender	Yes	
Suicide intent		Avoided discovery
Alcohol misuse	“Alcohol as a factor”	Yes
Method of Self-harm	Violent method used	Cutting
Physical health problems	Yes	Yes
Marital status	Yes	
Socioeconomic status	Yes	
Others		Not living close to relatives

2 Quality of evidence

<i>Study Sample</i>	1 of 2 studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	1 of 2 studies meet criteria
<i>Outcome of interest</i>	All studies meet criteria
<i>Potential Confound</i>	1 of 2 studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

3 Narrative review

Seven studies reported with approximately 12,000 participants narratively reviewed psychiatric history as risk factor for completed suicide. Four studies (LONNQUIST1991, SKOGMAN2004, SUOKAS2001 and CHRISTIANSEN2007) have adjusted their findings for confounds and therefore were more robust in its result. These studies did not report a specific psychiatric diagnosis, of which, past psychiatric contact (SKOGMAN2004) and being admitted to mental health hospitals (CHRISTIANSEN2007) were also regarded as similar factors. The other three papers (HAWTON1988, SUOKAS1991, LONNQUIST1991) reported psychiatric history as a risk factor without adjusting their findings. HAWTON1988 reported the diagnosis of schizophrenia was more common than other diagnosis amongst the survivors and those who completed suicide..

16 6.2.6 Narrative review – risk factors for repetition

Studies included in this section concern risk factors that cannot be included in meta-analysis because outcomes reported are not suitable. These studies either did not report 95% confidence intervals, reported effect measures by sub-groups only (e.g. male or female; Asians or non-Asians etc), reported p-values only, or a mixture of people who self-harm for the first time or repeatedly self-harm (in which results were not separable). However, these factors should not be overlooked.

Age as a risk factor for repetition

A meta-analysis was not possible due to the difference in age range reported in different studies (CHEN2010, SCOLIERS2009 and WANG2006).

Narrative review

Eight studies reported youth as a risk factor for repetition; however their definition of “youth” had a wide age range. CHEN2010 reported the lowest age range (below 25) as a risk factor. SCOLIERS2009 defined youth as an age range of between 20 to 49 (majority of population age below 40), HAW2007 reported age range below 45 and WANG2006 reported age range below 40. However, two studies (CHEN2010 and HAW2007) did not provide information on psychiatric diagnosis which might be a confounding factor. Four earlier studies (ALLGULANDER1990, JOHNSSON1996, KRARUP1991 and VAN AAI1992) reported young age as a risk factor, without defining the age range. The mean age of two studies was approximately 40 (ALLGULANDER1990 and JOHNSSON1996), and the majority of participants in KRARUP1991 were aged between 20 to 39. However, findings from three studies (all except ALLGULANDER1990) were unadjusted for confounds, which limited the strength of the evidence.

Method of self-harm as a risk factor for repetition

Two papers reported different self-harm methods as a predictor of future repetition. The findings from all papers were adjusted for age, and one paper (CHRISTIANSEN2007) adjusted for some psychiatric disorders. The two papers reported gassing as an important predictive factor, followed by self-cutting (CHRISTIANSEN2007) or self-poisoning (CHEN2010). LILLEY2008b reported people who self-cut are more likely to have a prior history of self-harm, and more likely to repeat (47%) compared with people who self-poison (31%). Of those who repeated, a third of them switched methods.

Ethnicity as a risk factor for repetition

COOPER2006a and COOPER2008 reported the rates of self-harm was higher in South Asian females aged 16 to 24 years old compared to white females in same age group. But the results was not statistically significant.

JOHNSTON2006 reported a higher repetition in areas of high non-white ethnic density.

COOPER2010 reported young black women in three UK cities were more likely to self-harm, however, the risk in young South Asian people varied between the three cities in which they conducted their study. The study showed ethnic minority groups for both genders were less likely to present to emergency departments after an episode within the study hospitals with further episodes of self-harm. However, ethnic minority groups may have

1 higher rates of other risk factors such as unemployment; therefore unadjusted
2 associations should be interpreted cautiously.

3 *Living situation as a risk factor for repetition*

4 Three studies reported living alone as a risk factor for repetition. People who
5 were not living with family or friends (KAPUR2006), not living at home
6 (VAN AAI1992), and living alone (PETRIE1992) were at higher risk of
7 repetition. However, these factors were not being adjusted for confounds.
8 One study reported people living alone on the day of attempt
9 (CHRISTIANSEN2007) were also at higher risk.

10 *Other risk factors for repetition*

11 The following risk factors were supported by a smaller evidence base from
12 two studies or only one. Clinical risk factors include personality disorders
13 (HAW2007and JOHNSSON1996), anxiety disorders
14 (CHRISTIANSEN2007and SCOLIERS2009) and substance (drug and alcohol)
15 misuse (DIESERUD2000 and CHRISTIANSEN2007). Demographic risk factors
16 include a lower education level (CHRISTIANSEN2007 and SCOLIERS2009).
17 Personal history risk factors include having a criminal record (HAW2007and
18 SIDLEY1999), history of abuse (KAPUR2006 and YEO1993), poor parents'
19 mental health or family history of suicide (JOHNSSON1996 and VAN
20 AAI1992), and unhappy childhood (KRARUP1991). Individual
21 psychological characteristics risk factors include poor problem-solving
22 capacity (DIESERUD2003 andMCAULIFFE2008), low self-appraisal and self-
23 efficacy (DIESERUD2003) and poor emotion regulation (HEATH2008).
24 Common current problems as risk factors are stress
25 CHANDRASEKARAN2008), poor physical health (COLMAN2004),
26 relationship problems with partner or friends (HAW2007 and KAPUR2006),
27 problems at work (KAPUR2006), and moving from a rural area to an urban
28 city (WANG2006).

29 **6.2.7 Narrative review – risk factors for completed suicide**

30 Studies under this section cannot be included in meta-analysis because
31 outcomes reported are not suitable. These studies either did not report 95%
32 confidence intervals, reported effect measures by sub-groups only (e.g. male
33 or female; Asians or non-Asians etc), reported p-values only, or a mixture of
34 people who self-harm for the first time or repeatedly self-harm (in which
35 results were not separable). However, these variables should not be
36 overlooked as possible risk factors.

37 *Depressive symptoms as a risk factor for completed suicide*

38 Three studies reported depressive symptoms as a risk factor for suicide
39 following index episode of self-harm. Variables include depression
40 (SKOGMAN2004), high hopelessness scores (COOPER2005) and use of

antidepressants (CHRISTIANSEN2007). Only one study (COOPER2005) did not adjust for confounds.

Older age as a risk factor for completed suicide

Seven studies with approximately 24,842 participants narratively reported age as a risk factor for completing suicide. However, all of them reported different age ranges. Moreover, meta-analyses were not appropriate because none of the outcomes were comparable. Three studies adjusted for confounds. Of which, SKOGMAN2004 defined those aged over 50 were at higher risk, RYGNESAD1997 defined those aged over 30 were at higher risk, and NORDENTOFT1993 reported an “increasing age” without specifying age range. The other four studies did not adjust for confounds. They reported that people aged above 35 years old (COOPER2005), “advancing age” (SUOKAS1991, HAWTON2003b) and “advancing age in females” (HAWTON1988) were at higher risk of completing suicide.

Violent index attempt as a risk factor for completed suicide

Four papers with approximately 52,000 participants reported that a violent attempt is indicative of subsequent suicide. RUNESON2010 compared different methods of self-harm. RUNESON2010 reported self-cutting and self-poisoning had similar risk level. They reported those who attempted suicide by hanging, strangulation or suffocation had the worst prognosis after adjusting for age, gender, education, coexisting psychiatric morbidity. HOLLEY1998 had also adjusted for the same confounds, in addition to marital status, socioeconomic status, prior self-harm history and physical comorbidity. However, SKOGMAN2004 reported this association was restricted to men. LONNQUIST1991 did not adjust for its finding, and reported the degree of lethality was a risk factor predicting subsequent suicide.

Other risk factors for completed suicide

The following risk factors were supported by a smaller evidence base that had less than two studies as support. A non-impulsive index attempt (SUOKAS1991), the method of self-harm (jumping off from heights) (CHRISTIANSEN2007 and RUNESON2010) and avoidance of discovery of attempt (COOPER2005) may be risk factors. Living alone (NORDENTOFT1993) or not living with close relatives (COOPER2005), being homeless (COOPER2005), living in a lower income area (HOLLEY1998), having no link to parents (CHRISTIANSEN2007) and having legal problems (COOPER2005) may also be risk factors for repetition of self-harm with a fatal outcome.

6.2.8 Clinical evidence summary - adults

Risk factors for non-fatal repetition of self-harm

1 Key factors with pooled quantitative evidence

2 Prior self-harm and depressive symptoms are the two risk factors with most
3 support from quantitative and narrative evidence. The majority of
4 participants had self-harmed prior to their index episode. The pooled
5 adjusted or unadjusted odds ratios of prior self-harm as a risk factor are above
6 two. For depressive symptoms, there is a somewhat smaller evidence base.
7 The pooled adjusted or unadjusted odds ratio varied, yet there was still an
8 association. This association should also be interpreted cautiously since a
9 number of different measures of depressive symptoms were used in studies.

10 Other factors with pooled quantitative evidence

11 Unspecified psychiatric history has been one of the most commonly reported
12 risk factors. Pooled quantitative synthesis showed some support for this but
13 the findings were not adjusted for important confounds such as age and
14 gender. It is notable key risk factors such as previous self-harm and
15 depression identified above may overlap with this factor. Moreover, these
16 studies did not specify or define what they mean by psychiatric history,
17 therefore uncertainties remained. Nevertheless, there was reasonable support
18 from the studies' reported narrative findings.

19
20 Although being female is another commonly reported risk factor for non-fatal
21 repetition, the evidence is mixed and of relatively poor quality. Two studies
22 reported a similar pooled adjusted and unadjusted risk ratio. However, one
23 important limitation is none of the studies adjusted for participants' previous
24 history of self-harm, which is itself an important risk factor. Being female is
25 often reported as associated with self-harm. The increase in relative risk of
26 repetition in females maybe a consequence of its association with a first
27 episode of self-harm, rather than a repeat episode. By contrast, one study
28 found being male was at higher risk of repetition. Being female maybe a
29 generic risk factor for self-harm, but it may not necessarily be associated with
30 a higher risk of repetition.

31
32 There is evidence suggesting being unemployed and registered sick are
33 associated with higher risk of repetition. Although the studies were not
34 pooled quantitatively, each study reported statistically significant relative
35 risk. Similarly, evidence from narrative reviews support this as a risk factor as
36 well.

37
38 There is mixed evidence about marital status as a risk factor for repetition of
39 self-harm. Pooled quantitative evidence did not support this as a risk factor.
40 However, there are narrative reviews that suggest an association between not
41 being married and repetition of self-harm.

- 1 There is mixed evidence suggesting the possession of a suicide letter or plan may mean the individual is at higher risk for non-fatal
 2 repetition. The pooled quantitative evidence did not support this, however, some narrative review support this as a risk factor.
 3 From other narrative reviews, there is evidence suggesting a more violent method of index attempt is also predictive of further
 4 repetition. Attempts that are regarded as violent include hanging, strangulation, suffocation, and jumping from heights.
 5

Table 15: Summary of risk factors for self-harm population in adults

Risk factors	Outcome	Evidence base	Pooled data	Prevalence of risk factor (range)	Duration of follow up (range)
History of previous self-harm	Repetition	3 studies, N=5264	Adjusted OR 2.70 [2.13, 3.42]	55-66%	6 months - 24 months
		5 studies, N=1947	Unadjusted OR 3.09 [1.99, 4.80] (I ² =52%)	35-66%	1 year - 5 years
	Suicide following self-harm	2 studies, N=1992	Adjusted hazard ratio 2.17 [1.53, 3.09]	48%	10 - 14 years
Depressive symptoms	Repetition	3 studies, N=1693	Adjusted OR 2.63 [1.72, 4.04]	26-66%	18 - 24 months
Psychiatric history (past history, treatments, admissions from records)	Repetition	2 studies, N=1034	Unadjusted OR 3.46 [2.26, 5.3]	33-48%	1 - 5 years
	Suicide following self-harm	2 studies, N=8844	Adjusted hazard ratio 1.22 [0.56, 2.64] (I ² =62%)	7-24%	4 - 13 years
Alcohol misuse	Suicide following self-harm	2 studies, N=8914	Adjusted hazard ratio 1.42 [0.7, 2.88] (I ² =65%)	25-26%	4 - 20 years
Physical health problems	Suicide following self-harm	2 studies, N=8844	Adjusted hazard ratio 1.59 [0.93, 2.72]	7-21%	4 - 13 years

Gender - Female	Repetition	2 studies, N=1331	Adjusted RR 1.96 [1.22, 3.15]	57-63%	5 years
		4 studies, N=1426	Unadjusted OR 1.01 [0.50, 2.04] (I ² =53%)	28-61%	1 - 5 years
Gender - Male	Suicide following self-harm	2 studies, N=2098	Adjusted hazard ratio 2.66 [1.72, 4.11]	37-47%	6 - 14 years
	Suicide following self-harm	2 studies, N=9048	Unadjusted hazard ratio 2.72 [1.78, 4.16]	37-43%	4 - 6 years
Marital status - single	Repetition	4 studies, N=1719	Unadjusted OR 1.36 [0.85, 2.16] (I ² =63%)	16-85%	1 - 5 years
Suicide intent	Repetition	2 studies, N=2023	Unadjusted OR 0.90 [0.32, 2.52] (I ² =78%)	35%	12 - 18 months

1

1 **Factors from studies reviewed narratively**

2 *Demographics*

3 Youth is a commonly reported risk factor. Data were not synthesised
4 quantitatively because different studies reported different age ranges. It is
5 unclear how some studies define “youth”. It is important to note this factor
6 should not be convoluted with the higher prevalence of self-harm amongst
7 young people. Being at risk of self-harm may not be equivalent to being at
8 risk for repeating self-harm.

9 *Specific psychiatric diagnosis*

10 There is a substantial evidence base which suggests schizophrenia and related
11 symptoms maybe a risk factor for repetition. There was some quantitative
12 support which could not be meta-analysed, and remained robust after being
13 adjusted for separately in two studies. Although the evidence base has only
14 been narratively reviewed, schizophrenia as a factor should be considered.
15 Also, alcohol misuse is an additional risk factor with a strong narrative
16 evidence base, as well as unpooled quantitative support.

17 **Risk factors for suicide following self-harm**

18 *Key factors with pooled quantitative evidence*

19 Prior self-harm is again reported as a key risk factor for completed suicide.
20 Although the evidence base was weaker than repetition (non-fatal outcome),
21 the quantitative synthesis finding was robust. One limitation from the
22 quantitative evidence is that no common confound was being adjusted for in
23 the studies. Both adjusted and unadjusted relative risks were over two.
24 Nevertheless, a number of studies provide narrative support for this factor.
25 More than half of those studies had individually adjusted for confounds.

26
27 Another risk factor, suicide intent is also supported by pooled quantitative
28 evidence, associated with higher risk of suicide following self-harm. The
29 studies might have different definitions but all expressed the intent to die or
30 not be discovered. All studies in the pooled analysis adjusted for participants'
31 previous psychiatric treatment. However, unadjusted data was not provided.
32 Nevertheless, a number of studies provide narrative support for this risk
33 factor.

34

1 It is commonly reported that men are at a higher risk of suicide following self-
2 harm. This is supported by pooled quantitative data. Both adjusted and
3 unadjusted relative risks showed significance. A number of studies in the
4 narrative review also provided support for this factor.

5 *Other factors with pooled quantitative evidence*

6 Physical health problems may be a risk factor for completed suicide.
7 Quantitative synthesis suggested mixed evidence for this factor depending if
8 it was adjusted for other factors. The findings did not adjust for both
9 important risk factors such as psychiatric disorder and prior self-harm. In
10 another study, a physical health problem was reported as a risk factor but was
11 not adjusted for other confounds.

12
13 It is unclear whether alcohol abuse is a risk factor for completed suicide.
14 Pooled quantitative synthesis does not provide strong evidence. However,
15 other studies which could not be pooled reported higher risk for people who
16 abuse alcohol. It has little support from narrative evidence. The evidence is
17 inconclusive. In addition, the context in which alcohol is used in the self-harm
18 episode is unclear.

19
20 Psychiatric history has a reasonable amount of support from narrative
21 evidence, which was reasonably robust with findings being controlled for in
22 majority of the studies. However, a pooled quantitative synthesis did not
23 provide conclusive evidence of an association.

24 *Factors from studies reviewed narratively*

25 It is commonly reported that older age increases the risk of completing
26 suicide. From the existing evidence, the age range varied widely. Some
27 defined as over 30, some as over 50. Some did not define an age range. The
28 number of studies provides reasonable evidence to suggest older age is
29 associated with a higher risk of suicide following self-harm.

30
31 There is evidence from narrative reviews showing violent methods of self-
32 harm associated with a higher risk of suicide following self-harm. Methods
33 may include hanging, strangulation or suffocation.

34
35 **6.2.9 Clinical evidence for risk factors in young people**

36 *Prior self-harm as a risk factor for repetition in young people*

37 **Pooled adjusted data**

38 Four studies (CHITSABESAN2003, MIRANDA2008, HULTEN2001 and
39 WONG2008) with about 2,700 participants were pooled to report an adjusted
40 odds ratio of 3.27 (95% CI 2.46 to 4.34). No heterogeneity was observed. Two

studies (MIRANDA2008 and WONG2008) reported self-endorsed attempts and recruited community sample. The pooled adjusted odds ratio was 4.09 (95% CI 1.72 to 9.74), which was higher than the pooled adjusted odds ratio calculated from the two clinical studies (3.18 (95% CI 2.35 to 4.29) (CHITSABESAN2003 and HULTEN2001).

Table 16: prior self-harm – adjusted factors

	MIRDANA2008	HULTEN2001	WONG2008	CHITSABESAN2003
Depression			Depressive symptoms	Yes
Age	Yes	Yes		
Gender	Yes	Yes		
Suicide intent			Yes	Yes
Anxiety			Yes	
Substance abuse			Yes	
Psychiatric diagnosis	Yes			
Ethnicity	Yes			
Others			Life stress	parent's mental health; family functioning

15% (CHITSABESAN2003) and 17.2% (HULTEN2001) repeated and 4.5% (WONG2008) and 22.5% (MIRANDA2008) self-reported repetition during follow up.

29% (CHITSABESAN2003) and 38% (HULTEN2001) had a history of self-harm. 15% self-reported multiple suicide attempts in MIRANDA2008. Self-reported prior self-harm was the recruitment criteria in WONG2008. Therefore, all participants self-endorsed past suicide attempts, of which, 2% attempted within the past year the survey was conducted.

The majority of participants were diagnosed with depression and substance abuse problems in CHITSABESAN2003. About a quarter of participants had various mood and anxiety disorders (MIRANDA2008 and WONG2008). Psychiatric diagnosis was not reported in HULTEN2001. Adjusted factors can be found in Table 14.

Two studies were long term studies ranging in duration from four to six years (MIRANDA2008 and HULTEN2001). The other two were short term studies ranging from 6-12 months (WONG2008, CHITSABESAN2003). Three studies reported an average age of 15, whilst the remaining studies' participants ranged from 15-19 years old.

Quality of evidence

<i>Study Sample</i>	3 of 4 studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	2 of 4 studies meet criteria
<i>Outcome of interest</i>	2 of 4 studies meet criteria
<i>Potential Confound</i>	All studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

1 **Narrative review**

2 One study (GROHOLT2006) suggested prior self-harm history as an
3 independent risk factor (unadjusted hazard ratio 2.8 (95% CI 1.39 to 5.64),
4 which has not been adjusted for.

5 ***Depressive symptoms as a risk factor for repetition in young people***

6 **Pooled adjusted data**

7 Two studies (CHITSABESAN2003 and WONG2008) with approximately 1,200
8 participants were pooled to report a marginally significant adjusted odds
9 ratio of 1.05 (95% CI 1.00 to 1.11). However, one study was conducted in a
10 school setting, where students self-report past suicide attempts and related
11 outcomes in a questionnaire. Despite the difference in setting where the
12 studies were conducted, no heterogeneity was found.

13
14 15% repeated (CHITSABESAN2003) and 4.5% self-reported repetition
15 (WONG2008) during follow up.

16
17 29% had prior history of self-harm (CHITSABESAN2003). Self-reported prior
18 self-harm history was the recruitment criteria in WONG2008. Therefore, all
19 participants self-endorsed past suicide attempts, of which, 2% attempted
20 within the past year the survey was conducted.

21
22 The majority of participants were diagnosed with depression and substance
23 abuse problems in CHITSABESAN2003. A quarter of participants had
24 depressive symptoms and a fifth of them had anxiety symptoms in
25 WONG2008. Adjusted factors can be found in Table 17.

Table 17: Depressive symptoms – adjusted factors		
	CHITSABESAN2003	WONG2008
Self-Harm History	Yes	Yes
Suicide intent	Yes	Yes
Anxiety		Yes
Substance abuse		Yes

Others	parent's mental health; family functioning	Life stress
--------	--	-------------

Both studies were conducted over a relatively short duration ranging from six months (CHITSABESAN2003) to one year (WONG2008). Both studies' participants' average age was 15 in UK and Hong Kong respectively.

One study (GROHOLT2006) suggested depressive symptoms as an independent but marginal risk factor (unadjusted hazard ratio 1.05 (95% CI 1.02 to 1.08)), which has not been adjusted for.

Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	None of them meet criteria
<i>Outcome of interest</i>	1 of 2 studies meet criteria
<i>Potential Confound</i>	All studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

Narrative review

Three other studies (BRENT1993, NOVAKOVIC2006, GROHOLT2006) with approximately 400 participants reported depression as a risk factor. BRENT1993 reported the diagnosis of major depression at baseline, and affective disorder carried throughout the follow up period predicted repetition in young people. While NOVAKOVIC2006 reported that depressive, anxious and phobic tendencies predicted repetition. GROHOLT2006 reported hopelessness as a risk factor after adjusting for confounds, whereas depression diagnosis was found to be an independent risk factor in this study.

Gender as a risk factor for repetition in young people

Pooled unadjusted data

Three studies (HAWTON1992, MIRANDA2008, WONG2008) with approximately 3,600 participants reported raw data for calculation of unadjusted odds ratio of 1.24 (95% CI 0.7 to 2.17) for the age range of 10 to 19 years old (moderate heterogeneity, $I^2=62\%$). The result found no evidence of an association. MIRANDA2008 reported an adjusted odds ratio of 2.7 (95% CI 0.4 to 16.4), the very wide confidence interval means no conclusion can be drawn on the direction or size of any association.

Repetition rate was reported as 9% (HAWTON1992) and 22.5% (MIRANDA2008) respectively. 20% reported prior self-harm, and 16% had psychiatric treatment history in HAWTON1992 and about a quarter of participants had various mood and anxiety disorders in MIRANDA2008.

As the result was not significant, and confounds such as prior self-harm and psychiatric diagnosis may affect the influence of gender. Evidence for gender as a risk factor for repetition in young people is inconclusive.

Quality of evidence

<i>Study Sample</i>	2 of 3 studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	2 of 3 studies of them meet criteria
<i>Outcome of interest</i>	2 of 3 studies meet criteria
<i>Potential Confound</i>	2 of 3 studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

Narrative review

In a narrower age range of 12 to 14, HAWTON2008 reported raw data for the calculation of an unadjusted odds ratio of 1.14 (95% CI 0.66 to 1.98). This has not been pooled with the above study due to the difference in age range.

Age as a risk factor for repetition in young people

Narrative review

One study (HAWTON1992) provided raw data for the comparison of repetition rates between younger adolescents (age 10-14) and older adolescents (age 15-19). The unadjusted odds ratio was 1.09 (95% CI 0.88 to 1.35). The result was insignificant.

Repetition rate for age 10-14 was 7.6% and 9.1% for age 15-19. As the evidence base was weak (only one study), further breakdown of age as a risk factor in a population of young people is required in future research.

Suicide intent as a risk factor for repetition in young people

Pooled adjusted data

Two studies (WONG2008 and CHITSABESAN2003) with approximately 1,200 participants were pooled and there was no evidence of an association with an adjusted odds ratio of 1.45 (95% CI 0.63 to 3.37), and there was considerable heterogeneity ($I^2=84\%$).

Table 18: Suicide intent in young people – adjusted factors

	WONG2008	CHITSABESAN2003
Self-Harm History	Yes	Yes
Depression	Depressive symptoms	Yes
Gender	Yes	
Suicide intent	Yes	Yes
Alcohol misuse		Yes
Anxiety	Yes	
Others	Life stress	Parents mental health and family functioning

Quality of evidence

<i>Study Sample</i>	All studies meet criteria
<i>Loss to follow up</i>	None of them meet criteria
<i>Putative risk factor</i>	None of them meet criteria
<i>Outcome of interest</i>	1 of 2 studies meet criteria
<i>Potential Confound</i>	All studies meet criteria
<i>Statistical Analysis</i>	All studies meet criteria

6.2.10 Narrative review – young people

Studies under this section cannot be included in an meta-analysis because the outcomes reported are not suitable. These studies either did not report 95% confidence intervals, reported effect measures by sub-groups only (e.g. male or female; Asians or non-Asians etc), reported p-values only, or a mixture of people who self-harm for the first time or repeatedly self-harm (in which results were not separable).

However, these factors should not be overlooked as risk factors.

Anxiety as a risk factor for repetition in young people

Three papers (MIRANDA2008, O'CONNOR2009 and NOVAKOVIC2006) narratively reported anxiety symptoms or a diagnosis of anxiety as a risk factor for repetition in young people. Meta-analysis was not appropriate because none of the outcomes were comparable. O'CONNOR2009 was the only study that adjusted its finding for potential confounds such as sexual abuse history, self-esteem, family history or self-harm and sexual orientation worries. NOVAKOVIC2006 reported anxiety symptoms were an independent risk factor, while MIRANDA2008 reported diagnosis of anxiety disorder as an unadjusted finding but no evidence of association following adjustment.

Other risk factors for repetition in young people

The following risk factors were supported by a smaller evidence base that had only two or fewer studies as support. Clinical variables include any psychiatric diagnosis (MIRANDA2008 and GROHOLT2006), affective disorders (BRENT1993), personality disorders (GROHOLT2006), substance use (WONG2008, MIRANDA2008), 'psychoticism' and 'neuroticism' (NOVAKOVIC2006) and suicidal inpatients (BRENT1993). Those who used violent methods of self-harm (HULTEN2001), and those who were not admitted or referred to psychiatric services after index episode (HAWTON1992) might be at higher risk of repeating. A number of risk factors relating to family were highlighted, such as parents' poor mental health (CHITSABESAN2003 and NOVAKOVIC2006), the death of relative (BRENT1993), family financial problems (BRENT1993 and NOVAKOVIC2006), not living with parents (O'CONNOR2009), and violence in family (NOVAKOVIC2006). Relationship problems with friends (HAWTON2008 and O'CONNOR2009) and migration (NOVAKOVIC2006) might be risk factors. Sexual abuse history and sexual orientation worries were reported in (O'CONNOR2009) as risk factors. Two studies (O'CONNOR2009 and GROHOLT2006) also reported self-esteem might also be a risk factor.

6.2.11 Clinical evidence summary – young people

Based on the evidence review, risk factors for young people are similar to those reviewed in the adults section.

Key factors with pooled quantitative evidence

A history of self-harm is the key risk factor with most support from quantitative synthesis and narrative evidence. The studies have been adjusted for different confounds, yet each study still found significance in this factor. Despite the difference in follow up length and context in which studies were conducted, the risk was similar for all studies. This finding is regarded as quite robust.

Other factors with pooled quantitative evidence

Depression may be a risk factor for repetition. Quantitative synthesis reported only a marginal significant result, after adjusting for important confounds. One limitation of this finding was the difference in settings in which the studies were conducted.

There is a general lack of evidence for gender as a risk factor for repetition in young people. The quantitative synthesis result was not significant and it was not adjusted for confounds. There is no other narrative evidence that supports

1 gender as a risk factor. Thus, gender as a risk factor in young people remains
2 unknown.
3

1

2 **Table 19: Summary of risk factors for young people who self-harm**

Risk factors	Outcome	Evidence base	Pooled data	Prevalence of risk factor (range)	Duration of follow up (range)
History of previous self-harm	Repetition (combined)	4 studies, N=2738	Adjusted OR 3.27 [2.46, 4.34]	2-38%	6 months - 6 years
	Repetition (clinical)	2 studies, N=1411	Adjusted OR 3.18[2.35,4.29]	29-38%	6 months - 4 years
	Repetition (community)	2 studies, N=1327	Adjusted OR 4.09[1.72,9.74]	2-20%	1 - 6 years
Depressive symptoms	Repetition (combined)	2 studies, N=1246	Adjusted OR 1.05 [1.00, 1.11]	66%	6 - 12 months
	Repetition (clinical)	1 study, N=147	reported adjusted OR 1.85 [0.44, 7.74]	66%	6 months
	Repetition (community)	1 study, N=1099	reported adjusted OR 1.05 [0.99, 1.1]	not reported	12 months
Gender - Female	Repetition (combined)	3 studies, N=3609	Unadjusted OR 1.24 [0.70, 2.17] (I ² =62%)	33-73%	1 - 14 years
	Repetition (clinical)	1 study, N=2282	reported unadjusted OR 1.05 [0.75, 1.47]	73%	14 years

	Repetition (community)	2 studies, N=1327	Unadjusted OR 1.33 [0.45, 3.92] (I ² =71%)	33-63%	1 - 6 years
Suicide intent	Repetition (combined)	2 studies, N=1246	Adjusted OR 1.45 [0.63, 3.37] (I ² =84%)	14%	6 - 12 months
	Repetition (clinical)	1 study, N=147	reported adjusted OR 1.01 [0.99, 1.02]	not reported	6 months

1

2 *Factors from studies reviewed narratively*3 **Psychiatric diagnosis**

4 A diagnosis of anxiety had some evidence supporting it as a risk factor in young people. However, a major limitation is that most
5 findings had not been adjusted for confounding variables. Substance use had little narrative evidence reporting it as a risk factor.
6 However, it was based on self-report questionnaires conducted in school settings. There is little evidence that support a general
7 psychiatric diagnosis (such as affective disorders) as a risk factor.

8 **Relational problems**

9 There are some risk factors relating to family and friendships that may be unique for young people.

6.2.12 Narrative review for older adults

One study (HAWTON2006) conducted a prospective study in UK with 20 years of follow up, recruiting 730 older adults of 60 years old or above who presented to the general hospital in Oxford following a self-harm episode. 47% of participants were aged between 60-69. 24% had previously self-harmed. Only 15% of the sample received psychiatric care at time of their episode. Of the 149 participants who reported suicidal intent scores, nearly two-thirds of the participants (65.1%) scored in the high or very high range of the Beck Suicide Intent Scale. Repetition rate was 15.3%. It was suggested a previous history of self-harm was the independent risk factor for suicide, with some evidence showing previous psychiatric treatment and high suicidal intent being risk factors as well. This finding was confirmed by a recent, large multicentre cohort study conducted in the UK (MURPHY in press). This study had 1177 participants aged 60 or above, presenting to six emergency departments in Oxford, Derby, and Manchester. It was reported that 12.8% of the participants repeated within 12 months of presentation, and 1.5% committed suicide within 12 months. This study concluded that previous self-harm, previous psychiatric treatment and age 60-74 years old were risk factors for repetition. There were no direct comparisons of risk factors for older adults and working age adults. However, based on this study, it appeared the risk factors amongst older adults were similar to risk factors for working age adults.

6.2.13 Clinical evidence for risk factors in subgroups

Nine studies with psychiatric diagnosis subgroups were narratively reviewed. Participants in these studies were at risk of self-harm, but may or may not have self-harmed before. Study characteristics for each study can be found in Appendix15.

Depression

OQUENDO2004

This was a prospective study conducted in the US over 2 years and recruited participants who were seeking treatment for depressive problems. 79% had depressive disorder and 21% had bipolar disorder. Of the psychiatric population, 53% engaged in self-harm. 14% of the sample self-harmed during follow up (with mixture of first episodes or re-attempt). The study reported that a prior history of self-harm, high score on self-reported depression scale and smoking predicted future episodes of self-harm. Pessimism and aggression or impulsivity also had an additive effect. It was also reported that repeaters of self-harm were younger, more pessimistic, impulsive, and had a history of abuse and were frequently comorbid with substance use disorder.

1 *SOKERO2005*

2 This was a prospective study conducted in Finland for 1.5 years screened for
3 patients with depression. All participants had a diagnosis of depression, and
4 32% engaged in self-harm. The majority of the sample had a psychiatric
5 comorbidity, with anxiety disorder being the most common co-morbidity
6 (54%). 8% of the sample self-harmed during follow-up (with mixture of first
7 episodes or re-attempt). The study reported prior self-harm, lack of a partner
8 (that is, being single) and chronicity of depression as the most robust risk
9 factors for repetition. They were adjusted for age and gender.

10 *HOLMA2010*

11 This was a prospective study conducted in Finland for 5 years recruiting
12 participants from a hospital that provides secondary care psychiatric services.
13 All participants had DSM-IV diagnoses of Major Depressive Disorder.
14 During follow up 14.5% (n=36/249) of subjects attempted suicide. 73% of
15 these attempts took place during a major depressive episode, 19% during
16 partial remission and 8% during full remission. When looking at the
17 incidence rate of suicide attempts, the study reports an incidence rate of 332
18 per 1,000 patient-years during major depressive episodes, 62 per 1,000
19 patient-years during partial remission and 16 per 1,000 years during full
20 remission. The risk of attempting suicide was highest during the first year of
21 observation and furthermore, the amount of time spent in major depressive
22 episodes was also higher in the first year of observation. There are various
23 sociodemographic and clinical factors that are also associated with a high
24 incidence of suicide attempts such as age, lower perceived social support and
25 previous suicide attempt as well as time spent in partial remission but the
26 most robust predictor was time spent in major depressive episodes.

27 *BOLTON2010*

28 This was a prospective study conducted in the US over 4 years. Participants
29 were diagnosed with MDD and were part of a nationally representative
30 epidemiologic sample. During a 3 year follow up, 2.7% (169/6,004) of the
31 sample had made a suicide attempt (incident or recurrent). 1.2% (63/6,004) of
32 the individuals with major depression had made an incident suicide attempt.
33 For this group, significant predictors were age (being younger than 45 years)
34 and anxiety disorders such as panic disorder and post-traumatic stress
35 disorder ($p<0.01$), as well as some personality disorders. For all suicide
36 attempts after follow-up, respondents with factors such as age (less than 45
37 years) and never being married were more likely to attempt suicide. The
38 study also reports that specific features of MDD such as lifetime suicide
39 ideation and lifetime suicide attempt are associated with suicide attempts, as
40 well as anhedonia, feelings of worthlessness and guilt and the amount of
41 depressive symptoms endorsed.

Mood disorders*NORDSTROM1995*

This was a prospective study conducted in Sweden for approximately six years. Participants were recruited from hospitalised patients with mood disorders. 27% engaged in self-harm. The study reported mood disorder patients with self-harm episodes were at a higher risk than those without a mood disorder for completing suicide. Neither age nor gender were found to be a risk factor predicting subsequent suicide. However, it should be noted that findings from this study had not been adjusted for confounds.

Alcohol dependence*PREUSS2003*

This was a prospective study conducted in the US for five years recruiting participants seeking treatment for alcohol dependence. A large majority of the sample had a substance induced psychiatric disorder (mostly depression). 15% had a history of self-harm. Repetition rate was 29%. The study reported prior self-harm predicts repetition. Being young, being diagnosed with alcoholism or substance misuse induced depression were at a higher risk of self-harm. These factors were adjusted for confounds. Being female and unemployed at baseline were not predictive of repetition; however, they were associated with prior self-harm. We should take note that those who were not followed up were less likely to be Caucasian, had a later onset of alcohol dependence and a higher intake of drinks per day. These could be potential confounds.

Borderline personality disorder*SOLOFF2008*

This study was a prospective study conducted in the US for 2 to 5 years. Participants were recruited from both in and outpatient services for borderline personality disorders. 82.5% of the population engaged in self-harm. 19% attempted suicide within a year of study, of which, 92% were prior attempters. The study reported predictors changed over time. In the short term (12 months), a comorbid depression and poor social adjustment increased risk. In the intermediate term (12-18 months), psychiatric hospitalization prior to any attempts, together with poor social adjustment, increased risk. In the long term (2-5 years), psychiatric hospitalization remained a significant risk factor, whereas outpatient medication visits decreased risk. As poor social adjustment carried through short and intermediate period as a risk factor, it was suggested interventions for this population should focus on social adjustment to prevent self-harm.

Schizophrenia

CARLBORG2010

This was a prospective study conducted in Sweden, which followed participants with schizophrenia spectrum psychosis for 25 years to assess suicide attempts and suicide risks. Participants were recruited from hospital psychiatric wards and 32% had a history of attempted suicide. During the follow up, 8% (18/224) participants died by suicide. There was a strong association ($p<0.001$) between those who had made a previous suicide attempt and completed suicide during follow up. This paper also reported gender specific specificity, sensitivity, positive predictive values and negative predictive values of attempted suicide and for suicide. The probability for dying by suicide with a previous suicide attempt is 28% in males and 14% in females (and 18% in the total sample). The negative predictive value indicated that there is a low probability that a person with no history of suicide attempt will complete suicide.

6.2.14 Clinical evidence summary – subgroups

The evidence base for risk factors amongst psychiatric subgroups is limited. The population were recruited on the basis of treatment of psychiatric problems, they may or may not have self-harmed before. Therefore, the risk factors may not be indicative of a further repetition of self-harm. It could be a generic risk factor for self-harm. One common risk factor shared across all diagnosis subgroup is prior self-harm. People with psychiatric problem with previous history of self-harm may be more likely to self-harm in the future. In addition, people with diagnosed depression, or other psychiatric induced depression may be associated with higher risk of self-harm.

6.2.15 Prevalence of psychiatric disorder in patients who self-harm

A systematic review conducted by Hawton and colleagues (2011) was adopted in this section for narrative review. This review aimed to explore the extent to which self-harm is associated with psychiatric disorders. The authors included 46 studies, of which 7 were UK based. All participants were recruited after presenting their episode of self-harm at the hospital. Diagnosis was made according to DSM-IV for all ages. They excluded studies where assessment was made only for single disorder, or a retrospective diagnosis. Populations with learning disability and those residing in psychiatric hospitals were excluded.

An overall prevalence rate of 84% (95% CI 75-92%) was observed amongst adults or mixed samples with a very high heterogeneity ($I^2=99\%$) in 30 studies. In the young people population (up to age of 25), an overall prevalence of 81% was observed with very high heterogeneity ($I^2=97\%$) from 9 studies. Prevalence for specific disorders were reported: 61% (95% 41-79%)

mood disorders was observed and mostly in females, of which, most frequent diagnosis was depression (52%, 95% CI 43-64%); anxiety had a prevalence of 37% (95% CI 24-52%); substance misuse had a prevalence of 36% (95% CI 22-52%) and alcohol misuse was more common than drug misuse. Prevalence was higher in males for substance misuse; personality disorders had a prevalence rate of 28% (95% CI 18-39%) in all adult populations; adjustment disorders had a prevalence rate of 22% (95% CI 6-45%); lastly psychotic disorders and eating disorders had a prevalence rate of lower than 10% respectively. It was observed that the prevalence rate of multiple diagnosis (94.1%, 95% CI 88-98%) was greater than single diagnosis (75%, CI 63-86%). There were no major gender differences in overall prevalence rates of psychiatric disorders.

The limitations to this review lay in the heterogeneity observed in pooled prevalence rates. This could be due to the variation in diagnostic measures (research or clinical diagnosis) and different definitions of self-harm. And studies were cross-sectional which might be susceptible to unstable diagnosis. Nevertheless, there was a high prevalence rate (around 80 to 90%) of psychiatric disorders (most commonly depression, anxiety and alcohol misuse) amongst people who presented to hospital for self-harm. This underlies the importance of careful needs and psychosocial assessment for people who self-harm, in order to treat the underlying disorders and manage their self-harm.

6.2.16 Clinical evidence for protective factors

In this section, we reviewed studies that look at protective factors that might protect against repeated self-harm or suicide. They might serve as a counterbalance to risk factors.

A meta-analysis was not conducted because the outcomes were not comparable across studies. Therefore, studies were narratively reviewed.

Problem solving skills as protective factor

MCAULIFFE2008

This was a prospective study conducted in Ireland for 12 months amongst patients admitted for self-harm. The repetition rate was 20.4%. It was found that amongst those who had self-harmed for the first time, optional thinking ability (i.e. difficulty generating alternative solutions) was associated with repetition within 12 months. This was not the case for repeaters (i.e. had prior self-harm at baseline). They also reported prior self-harm as a risk factor for repetition. Based on the reported risk and protective factors, the authors suggested interventions involving optional thinking skills should be delivered to people immediately after their first self-harm episode in order to

1 prevent further repetition. Men were significantly older than women and
2 more women were married and highly educated than men. The statistical
3 model had adjusted for these factors; therefore this finding is reasonably
4 robust.

5 **MCAULIFFE2006**

6 This was a prospective study with data collected from 12 European regions
7 for 12 months amongst the clinical population. The repetition rate was 29.6%.
8 The authors reported that the strongest dimension of five problem-solving
9 dimensions associated with repetition was passive-avoidance. Passive-
10 avoidance tendency is characterised by pre-occupation with problems, feeling
11 inability to change the gloomy situation, worry about the past and greater
12 likelihood to give in to avoid difficult situations. This finding had been
13 adjusted for gender and age; however, it was diminished when self-esteem
14 was considered in the model. The next best dimension was active handling of
15 problems, which had been adjusted for age and gender as well. It should be
16 noted that 32% participants had drinking problems and the attrition rate was
17 high (48%). Participants who were not followed up were more likely to be
18 men, had lower education level, and had drinking problems. This study
19 suggested improving passive-avoidance (together with self-esteem) and
20 active handling maybe protective against further self-harm, with noted
21 concerns.

22 **SANTOS2009**

23 This was a prospective study conducted in Portugal for nine months amongst
24 people admitted to hospital for self-harm compared with identical matching
25 group who did not self-harm. The repetition rate was 24%.
26 Compared to the matched control group, participants with better problem-
27 solving skills and self-concept were protected against repetition. However,
28 the findings had not been adjusted for confounding variables. The majority of
29 participants were female (82%) and 60% of those who self-harmed were
30 students. 77% of those who self-harmed mentioned their affective problems
31 and 23.5% of them were on psychotropic drugs. 17.6% participants had
32 psychiatric hospitalization history. The reported outcomes relied on self-
33 report questionnaires completed at home. For these reasons, this study's
34 conclusion should be noted with cautious concerns.

35 **O'CONNOR2011a**

36 This was both a cross-sectional study with data collected at baseline, and
37 prospective study with data collected at follow up in Edinburgh. 550 patients
38 who self-harm were recruited in the community. 320 participants completed
39 the study at a mean follow up period of about 6 months. Repetition rate was
40 46%, of which 31 % repeated more than once between baseline and Time 2.

Results from prospective analysis showed poor problem-solving skills were associated with repetition of self-reported self-harm at six months. This association remained after adjustment for prior self-harm and baseline suicidal ideation. It was also found that being of a younger age and being single were risk factors for repetition. However, all outcomes were collected from self-report questionnaires.

Other protective factors

SPIRITO2003

This was a prospective study conducted in the US for three months amongst youths admitted to children's hospital for self-harm. The repetition rate was 12%. This study reported good family environment characteristics (such as general functioning and communication) serve as a protective factor against repetition. However, the effect was lost when depression was factored into the model. Unlike other common findings, prior self-harm, suicide intent or a psychiatric diagnosis did not predict repetition in this sample. It may be explained by a heterogeneous population as it involved both in and outpatients. Moreover, this was a short term study, which differed from the majority of longer term studies. Repetition rates relied on self-endorsed re-attempts. This study suggested good family functioning and communication may be independently protective against repetition. However, many confounding variables may attenuate the effect.

GROHOLT2006

This study has been included in the narrative review of risk factors amongst a population of children (Section 6.2.11). One of its finding related to protective factors. Parental bonding (particularly with the father) was found to be an important factor adjusted for other variables (such as hopelessness, number of diagnosis).

PETRIE1992

This was a prospective study conducted in New Zealand for six months amongst a clinical population. Repetition rate was 11% and 2% of this included a fatal outcome. This study reported a good sense of coherence was more closely related to future attempts than depression, hopelessness or self-esteem. However, this had not been adjusted for confounding variables. The study also found prior self-harm, unemployment and living alone as risk factors for repetition. In fact, over half of the participants (54%) had a history of self-harm. These risk factors may reduce the effect of sense of coherence when they were considered together in the statistical model. This study suggested sense of coherence maybe independently protective against repetition. However, it is subject to the influence of other potential confounds.

A number of factors may have a protective effect and they were mentioned in Section 6.2.6. Individual psychological characteristics such as problem solving capacity (DIESERUD2003, MCAULIFFE2008), self-appraisal and self-efficacy (DIESERUD2003) and emotion regulation (HEATH2008) may have protective effects.

6.2.17 Clinical evidence summary – protective factors

The evidence base for protective factors is not strong. Some narrative evidence show problem-solving skills are protective for further repetition. It is unclear whether the effect may diminish after adjusting for other confounding variables. In younger populations, there is some evidence regarding a healthy family environment and parental bonding as protective factors for further repetition.

6.2.18 Narrative reviews – social care and adversity as risk factors

It is important to note the absence of some commonly reported social risk factors in the reviews above, such as: childhood experience of physical abuse, sexual abuse, being a ‘looked after child’ and other stressful childhood experiences. These studies are often conducted retrospectively, depending on participants’ recall of their childhood experiences. As a result, these did not meet the inclusion criteria set by the GDG and were not included in the above review. However, these factors cannot be overlooked.

The technical team identified a few relevant systematic or literature reviews that were deemed to cover these risk factors. In addition, some key papers were also provided by some of our GDG members.

It is important to take notice of the limitations to these studies. Retrospective studies are subjected to participants’ recall bias, recalling childhood experiences in particular. Also, the findings from the review and studies did not specify whether these factors are associated with repetition of self-harm or incidence of self-harm behaviour.

Childhood experience of physical abuse

FLIEGE2009 conducted a systematic review targeted at non-suicidal self-harm and found 12 cross-sectional studies reporting association between childhood experiences of physical abuse and self-harm. STEELE2007 systematically searched for literature in the children and young people population and reported a similar association. Similarly, EVANS2005 systematically searched in the literature regarding young people (mostly age 12-20) and found 4 studies reporting an association between physical abuse and self-harm. Of these, 2 studies conducted multivariate analysis which controlled for

1 confounding variables such as age and gender, and an independent
2 association with suicide attempts remained significant.
3 Nevertheless, the mechanism between physical abuse and self-harm is not
4 completely understood. GRATZ2003 concluded that the relation between
5 physical abuse and self-harm being inconclusive. The evidence was mixed for
6 both clinical and non-clinical populations. People with a history of abuse are
7 often associated with various psychiatric problems, which are found to be a
8 risk factor for self-harm. Therefore, an independent and direct relationship
9 between physical abuse and self-harm behaviour remains unclear.

10 *Childhood experience of sexual abuse*

11 One prospective study (YEO1993) was identified. 178 patients who presented
12 at the hospital for self-harm were divided into "abused" (8%) or "non-
13 abused" (92%) groups. They were then followed up prospectively for 6
14 months. 68% of the participants had a history of self-harm, and 54% of them
15 had psychiatric history. An overall repetition of self-harm rate was 15%. The
16 repetition rate of self-harm amongst the sexually abused group was 50% and
17 amongst the non-abused group was 12%. The study concluded that patients
18 with a history of childhood sexual abuse were at a higher risk of repeating
19 self-harm, with a cluster effect of four major risk factors (unemployment,
20 prior self-injury or self-poisoning, and psychiatric illness).

21 **Systematic reviews**

22 FLIEGE2009 found 21 cross-sectional studies reporting associations between
23 childhood experiences of sexual abuse and self-harm. STEELE2007 reported
24 similar findings and suggested sexual abuse maybe a stronger predictor of
25 suicide attempts for male than female young people. EVANS2005 reported
26 associations between sexual abuse and self-harm in 5 studies. In addition, the
27 strength of association may depend on the severity of the abuse. In a
28 multivariate analysis, when the psychiatric outcomes (depression, conduct
29 disorders) were controlled for, the independent association was found only
30 amongst the serious abuse cases (involving sexual intercourse). [The](#)
31 [association with less serious abuse experience was no longer found to be](#)
32 [statistically significant](#) when other confounds were controlled for. A recent
33 review, CHEN2010 conducted a systematic review (of case-control and cohort
34 studies) to assess the association between sexual abuse and a lifetime
35 diagnosis of psychiatric disorders. The review found a significant association
36 between sexual abuse and many psychiatric disorders, including suicide
37 attempts (OR 4.14, 95% CI, 2.98-5.76). When factors such as age and sex were
38 controlled, the association remained the same. Thirty seven studies were
39 reviewed and 27 of these looked at abuse that occurred in childhood, two
40 studies looked at adult and childhood abuse and one study looked at adult
41 abuse only. The majority of the population reviewed was female.

1
2 In fact, KLONSKY2008 conducted a meta-analysis which cast doubts on the
3 degree of association between childhood sexual abuse and self-harm. 43
4 studies were included in the analysis and reported a relatively small
5 association (with significant heterogeneity) between sexual abuse and non-
6 suicidal self-harm. The moderator analysis suggested the heterogeneity was
7 not related to age or gender. It was the type of participants (clinical and non-
8 clinical) moderated the effect, where a stronger relation was found between
9 sexual abuse and self-harm amongst the clinical sample. It was reported that
10 studies which controlled for psychiatric variables no longer found association
11 between childhood sexual abuse and self-harm. The authors indicated the
12 possibility of publication bias which inflate the association between sexual
13 abuse and self-harm.

14
15 Also, two literature reviews (ROGERS2003 and GRATZ2003) doubted the
16 direct association between childhood sexual abuse and self-harm. The
17 definition of childhood sexual abuse was inconsistent in the literature. The
18 source of information were often collected retrospectively from self-reports or
19 semi-structured interviews, which was easily subject to recall bias. Moreover,
20 the selection of samples was often biased towards clinical samples. From the
21 analysis perspective, different studies controlled for different confounding
22 variables, which makes the establishment of a unique association impossible.

23
24 There is evidence to support the link between childhood sexual abuse and
25 self-harm; however, the association is complex as evidence suggests it also
26 interacts with other confounding variables. This may imply childhood sexual
27 abuse can be conceptualized as a proxy risk factor.

28 *Other stressful experiences in childhood*

29 The role of physical and emotional neglect and family history of self-harm
30 maybe risk factors for self-harm but they are relatively less well researched.
31 GRATZ2003 reported the association between neglect and self-harm was
32 inconsistent. However, there was some evidence suggesting emotional neglect
33 has a stronger relation with self-harm compared to physical neglect.
34 STEELE2007 reported the impaired relationship between parents and children
35 increases the risk of suicide attempts; however, this association was no longer
36 significant when controlled for children's psychopathology. Furthermore,
37 some studies examined childhood separation and the affective quality of
38 childhood attachment as risk factors. However, conclusions cannot be drawn
39 from the very limited amount of low quality studies.
40 STEELE2007 echoed the narrative findings from the earlier section, where
41 parental psychopathology was associated with adolescent suicidal behaviour
42 in the retrospective studies. It was reported a family history of suicide is a key

1 risk factor, and some evidence suggest the first-degree relatives of suicide
2 victims were at highest risk.

3
4 Klomek and colleagues (2010) reviewed the association of suicidal behaviours
5 and bullying in 31 cross-sectional and longitudinal studies of children and
6 young people. Studies were identified by electronic literature search of
7 PsycNet and MEDLINE (no date specified in search) and by selecting relevant
8 studies from reference lists of articles. This review reports findings that those
9 involved in bullying, as well as victims of bullying have a high prevalence of
10 suicide ideation and suicide attempts. It is unclear whether there is an
11 association between the gender of bullies and the risk of suicide ideation as
12 this review reports inconsistent findings. There may be an association
13 particularly between the frequency of bullying and suicide ideation or
14 attempts in males and females (Klomek *et al.*, 2007). For example, in females,
15 if bullying is infrequent, there is still a risk of suicide ideation/attempt
16 compared to males, where only frequent bullying is associated with suicide
17 ideation (not attempt). This review also reports findings of studies that look
18 at cyber bullying (via the internet or email), however, there is limited research
19 in this area. The main methodological problem of the studies looked at in this
20 section of the review is that the cross-sectional studies only provide evidence
21 for a *correlation* between bullying and suicidality and cannot establish
22 causality, unlike longitudinal studies. This review reports that there is
23 limited (and inconclusive) evidence in longitudinal studies that look at the
24 long-term consequences of bullying and suicidality. Kim and colleagues
25 (2005) conducted a longitudinal study and found that school bullying is a
26 significant risk factor for suicide ideation or behaviour after 10 months,
27 however, these findings were based on Korean young people so may not be
28 generalisable to all populations. A recent prospective study by Klomek and
29 colleagues (2009) showed that the association between being bullied (as
30 young as 8) and suicidal behaviour later in life is affected by sex. For
31 example, females who were victims of frequent bullying were associated with
32 making suicide attempts and having suicide ideation later in life but this was
33 not found in males, when controlling for childhood conduct and depression
34 symptoms. The main limitation to examining studies in this review was that
35 there was inconsistent terminology used for bullying, peer victimisation,
36 suicidal thoughts and behaviours.

37 *Looked after children*

38 Stanley (2005) aimed to look at the mental health needs of 80 looked after
39 children who were considered to have high levels of need and were aged
40 between 5-16 years in two local authorities in England. Data from social
41 services case files was analysed to look at health and education, experience of
42 before entering and while being in the looked after system, mental health
43 needs and how these needs were met by services. A set of indicators of need

1 was constructed which included emotional, social,
2 behavioural/developmental and high risk indicators. Children who scored
3 highly on all indicators were considered to have high need. The majority of
4 the study group were being looked after in foster care or residential care
5 settings and had entered the looked after system because of a range of abuse
6 (mainly physical abuse) or neglect. When looking at the frequency and
7 severity of mental health needs it was evident that there were high levels of
8 low self-esteem, angry or hostile emotions and aggressive behaviour in as
9 much as 50% of the sample. Less frequent behaviours included drug misuse,
10 bullying and absconding. There were high rates of self-harm in the sample
11 which included 7 cases of overdosing, 12 of cutting and 17 cases of other
12 various forms of self-harm. A limitation to this study was that the sample
13 consisted of children who were considered to have high needs and were
14 challenging to the services. The data was limited to records of social services
15 files and there were a limited number of reports from mental health
16 professionals kept on file. This study highlights the need of exploring the
17 occurrence and management of self-harm in looked after children and the
18 need for support and training for carers to deal with working with children
19 and young people who self-harm.

20
21 Richardson and Lelliott (2003) reviewed the problems faced by looked after
22 children in regards to their mental and physical health and education. Young
23 people who leave care are at particularly high risk of social disadvantages
24 such as ill health and risk-taking behaviours. Saunders and colleagues (1997)
25 conducted a small study looking at 48 young care leavers and found that 35%
26 of them had engaged in self-harm since the age of 15. Nearly double this
27 number of subjects had reported suicide ideation and 4 out of 10 subjects had
28 made a suicide attempt.

29 *Summary*

30 One prospective study identified reported having a history of childhood
31 sexual abuse is a risk factor for repetition of self-harm. This finding was
32 supported by systematic reviews of retrospective studies. Therefore, this risk
33 factor should be considered in assessments bearing in mind the less robust
34 quality of the largely retrospective research evidence. In addition, there is an
35 association between poor mental health and people with history of childhood
36 sexual abuse. Poor mental health may act as a mediator between history of
37 childhood sexual abuse and self-harm.

6.3 RISK ASSESSMENT SCALES

6.3.1 Introduction

There is increasing emphasis on the assessment of risk in clinical services. Risk assessment in mental health is a broad concept which covers a judgement of the likelihood of an adverse outcome such as suicide or self-harm but also of violence, risk to children, risk of exploitation and environmental risks such as safety in the home. This guideline focuses on risk of self-harm and of suicide. Risk assessment in the UK is carried out by undertaking a clinical interview and this often includes a checklist of risk factors derived from an assessment scale. In the UK, there is no consistency in the risk assessment tools used by different mental health services. Despite the widespread use of these instruments, there is no clear evidence that their use makes any difference to patient outcome. The usefulness of any particular risk assessment scale for repeated self-harm depends on the ability to correctly distinguish all those who do go on to self-harm from those who do not. Whilst the risk of repeated self-harm is important, healthcare professionals will be most concerned about the risk of suicide. This is more difficult to predict given the relative rarity of suicide even in a population at high risk such as those who have self-harmed.

Risk assessment is not the same as risk management and simply assessing risk without developing a management plan contingent on the level and nature of the risk is unlikely to improve patient outcomes. Previous guidelines (NICE, 2004) have emphasised that risk scales should not replace a full psychosocial assessment and there is evidence that the latter is associated with better outcomes (Bergen *et al.*, 2010; Hickey *et al.*, 2001; Kapur *et al.*, 2002).

A further issue to consider is the context in which the risk assessment takes place, in the emergency department after an episode of self-harm, in the community or at the point of admission to or discharge from an inpatient unit.

6.3.2 Clinical review protocol

The review protocol, including the review questions, information about the databases searched, and the eligibility criteria used for this section of the guideline, can be found in Appendix 8. (Further information about the search strategy can be found in Appendix 9).

Table 20: Clinical review protocol

Review question	For people who self-harm, does formal risk assessment, needs assessment and psychosocial assessment improve outcomes?
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	(Note: Impact of setting/organizational context and content of assessment to be taken into account if data available)
Electronic databases	CINAHL, EMBASE, MEDLINE, PsycINFO
Date searched	Inception to 25 Jan 2011
Study design	Prospective cohort or case-control studies
Patient population	People who experience self-harm (or suicide ideation, where the study clearly reports a history of self-harm). This includes all types of self-harm, irrespective of motive.
Intervention(s)	N/A
Comparison	N/A
Critical outcomes	Prediction of repeated self-harm or suicide measured by sensitivity and specificity values.

1

2 **6.3.3 Studies considered¹⁷**

3 A total of 7,642 references were identified by the electronic search. Of these
4 references, 7,573 were excluded at the screening stage on the basis of reading
5 the title and/or abstract. The remaining 69 references were assessed for
6 eligibility on the basis of the full text. Sixteen prospective cohort and case-
7 control studies providing clinical evidence for risk assessment measures met
8 the eligibility criteria for this section of the guideline. These are; BECK1985,
9 BECK1999, BISCONER2007, CARTER2002, COOPER2006b, COOPER2007,
10 CORCORAN1997, GALFAVY2008, HARRISS2005, KAPUR2005,
11 NIMEUS1997, NIMEUS2000, NIMEUS2002, OSMAN1999, OSMAN2001 and
12 WAERN2010. Seven studies were identified for psychosocial assessment
13 (BERGEN2010b, HAW2003b, HICKEY2001, KAPUR2003, KAPUR2007,
14 OUGRIN2011 and WITTOUCK2010) and two studies were identified for
15 needs assessment (CEDEREKE2007 and KEENE2005).

16

17 For risk assessment, the inclusion criteria are prospective cohort or case-
18 control studies which report sensitivity and specificity data. The populations
19 used in the studies include people who self-harm, or have suicidal ideation,
20 where the study clearly reports a history of self-harm. The studies used scales
21 or tools (these terms are used interchangeably) to predict a repetition of self-
22 harm or suicide.

23

24 Based on reading the full text of studies for risk assessment scales, 56
25 references were excluded because they were: not a self-harm population; not
26 looking at prediction of self-harm or suicide; they did not report sensitivity or
27 specificity, or did not use a risk scale/tool to predict suicide or self-harm.
28 Studies were also excluded if it was unclear how many people in the

¹⁷ Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is in press or only submitted for publication, then a date is not used).

population self-harmed in the past. Studies that used another scale as a reference standard to measure the outcome of the study were also excluded. Studies that used a case-control design were excluded if the population of the control group was a general and not a self-harm population e.g. give some examples (GUTIERREZ2009 and OSMAN1998). Further information about both included and excluded studies can be found in Appendix 15.

For a full list of the scales reviewed in this chapter and the studies which have reported the predictive validity of these scales, please see Table 21.

Table 21: Risk assessment scales and corresponding study ID

Scale	Study ID
Beck Hopelessness Scale (BHS)	GALFAVY2008
	NIMEUS1997
	BECK1985,1999
Beck Depression Inventory (BDI)	GALFAVY2008
Scale for suicide ideation (SSI)	GALFAVY2008
	BECK1999
Suicide Probability Scale (SPS)	BISCONER2007
Reasons for Living Inventory (RFL)	OSMAN1999
	GALFAVY2008
Adult Suicide Ideation Questionnaire (ASIQ)	OSMAN1999
	BISCONER2007
Edinburgh Risk of Repetition Scale (ERRS)	CARTER2002
	HAWTON1995
Hamilton Depression Rating Scale (HDRS)	GALFAVY2008
Manchester Self-harm Rule (MSHR)	COOPER2006b, 2007
Global Clinical Assessment (GCA)	COOPER2007
	KAPUR2005
Suicide Assessment Scale (SUAS)	NIMEUS2000
	WAERN2010
Suicide Behaviours Questionnaire - Revised (SBQ-R)	OSMAN2001
Suicide Intent Scale (SIS)	NIMEUS2002
	HARRISS2005
Statistical Model	CORCORAN1997

6.3.4 Methods

The psychometric properties of the scales examined included sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV), using pre-defined cut off scores. Sensitivity and specificity can be calculated using true positive (TP), true negative (TN), false positive (FP) and false negative (FN) values.

In this guideline, sensitivity is defined as the proportion of those who go on to repeat self-harm who have been identified as at high risk of self-harm repetition on the basis of their scores on the risk scale or measure. Sensitivity = $TP / (TP + FN)$. Specificity is defined as the proportion of those who do not go on to repeat self-harm who have been identified as at low risk of self-harm repetition on the basis of their scores on the risk scale or measure. Specificity = $TN / (FP + TN)$. Predictive values may be more useful than sensitivity and specificity in clinical practice. Positive predictive validity measures the probability that a person with a positive test result really has self-harmed, $TP / (TP + FP)$. Finally, the negative predictive validity measures the probability that a person with a negative test result really is free of self-harm, $(TN / (FN + TN))$.

The guideline development group agreed that the desired psychometric properties of scales would vary according to the outcome being predicted and the context in which the scale would be used. For example, a scale predicting repetition in routine practice should help healthcare professionals identify a person who is at high risk of repeating an episode of self-harm, without including too many who do not repeat i.e. has a low false positive rate. However for a scale predicting suicide, the consequences of missing individuals who go on to die by suicide are so serious that the false negative rate should be very low.

Each study has been narratively reviewed, and we have included details of the impact of setting/organisational context, if available, and the content of assessment scales.

6.3.5 Scales that predict suicide

The six cohort studies that use scales to predict suicide include BECK1985, BECK99, NIMEUS 1997, NIMEUS2000, NIMEUS2002 and HARRISS2005.

The Beck Hopelessness Scale (BHS: Beck *et al.*, 1974a) is a self-report instrument that consists of 20 true-false statements constructed to measure the extent of positive and negative beliefs about the future during the past week in psychiatric patients. Typical items are 'my future seems dark to me' and 'I might as well give up because there is nothing I can do about making things

1 better for myself'. Each of the 20 statements is scored 0 or 1. Responses are
2 summed to give a score of 0 to 20. The severity of hopelessness is rated as 0-3
3 minimal, 4-8 mild, 9-14 moderate and 15-20 severe.

4
5 BECK1985 used the BHS in a cohort study on 207 psychiatric inpatients
6 hospitalised for suicide ideation. 32% had previously attempted suicide.
7 Participants were followed up for 5 to 10 years. The aim was to see if the BHS
8 could predict the eventual number of suicides. Eleven out of 165 participants
9 used in the analysis died by suicide within the study period. The results
10 showed that with a cut off score of 10 or more, the BHS had a sensitivity of
11 90.9% and a specificity of 50.6% in identifying repetition (reported in Beck *et*
12 *al.*, 1989). Using the results reported in the paper, we calculated a PPV of
13 11.6% and NPV of 98.7%. A limitation to drawing conclusions from this
14 study of those with suicidal ideation with little history of self-harm is that it
15 cannot necessarily be extrapolated to guiding the longer term management of
16 those presenting following an episode of self-harm. Another limitation in the
17 interpretation of the results is that this study uses a lengthy follow-up period
18 of up to 10 years which is not useful in a clinical assessment where the
19 concern is the risk of suicide in the shorter term.

20
21 The Scale for Suicide Ideation (SSI) was designed by Beck and colleagues
22 (1979) to assess the severity of suicide ideation in psychiatric patients. It
23 consists of 19 items and each item consists of three alternative statements
24 graded in intensity using a 3-point scale ranging from 0 to 2. The items assess
25 a person's wish to die, their desire to make an active or passive attempt, the
26 duration and frequency of suicide ideation, sense of control over making an
27 attempt and how much preparation they have contemplated. Responses are
28 summed to give a possible total score of 0 to 38. Higher scores are associated
29 with a greater suicide risk. The scale for suicide ideation – current (SSI-C)
30 measures a person's current intensity of specific attitudes, behaviours and
31 plans to commit suicide (Beck *et al.*, 1979) and the SSI at worst point (SSI-W) is
32 rated when the suicide ideation is at the worst point in their lives. The SSI-C
33 and SSI-W have high internal and good concurrent validity (Beck *et al.*, 1997).

34
35 Beck and colleagues (1999) used the SSI-C, SSI-W and the BHS in a cohort
36 study on 3,701 outpatients evaluated at the Center for Cognitive Therapy in
37 Pennsylvania, USA. 13.3% of the participants made a prior suicide attempt.
38 Participants were followed up for 15 years. The aim was to see if the scales
39 could predict the eventual number of suicides. Thirty out of 3,701
40 participants died by suicide. The results showed that with a cut off score of 2
41 or more, the SSI-C reported a sensitivity of 53%, a specificity of 83% and a
42 PPV of 2.4%. A NPV of 99.5% was calculated from these results. The SSI-W
43 (cut off score of 16 or more) had a sensitivity of 80%, a specificity of 78% and a
44 PPV of 2.8%. A NPV of 99.7% was calculated from these results. The BHS

(cut off score of 8 or more) had a sensitivity of 90%, a specificity of 42% and a PPV of 1.3%. A NPV of 99.7% was calculated from these results. There are a number of limitations that must be addressed before coming to any firm conclusions about using these scales to predict suicide. Firstly, the study uses a sample of outpatients and only a small percentage of them have a history of self-harm. Secondly, this study, along with the previous studies by Beck and colleagues, also has a lengthy follow up period, which is not useful for a clinical assessment.

The Suicide Intent Scale (Beck *et al.*, 1974b) is interview administered and designed to measure the level of intent a person has to complete suicide once they have already attempted it. It takes into consideration, behaviour and attitudes before, during and after an episode. The scale comprises of 15 items which are rated on a 2-point likert scale. The total score ranges from 0 to 30 and is calculated by summing the scores of each individual item. The completion time is approximately 10 minutes and it is administered by a trained clinician. The scale can be divided into 2 parts. Part 1 comprises of the first 8 items which measure the objective circumstances of self-harm. Part 2 comprises of the remaining 7 items which measures the thoughts and feelings of a person at the time of self-harm.

HARRISS2005 examined the SIS in a cohort study on 1,049 males and 1,440 females who presented to a general hospital following self-harm. Participants were assessed by members of the psychiatric service or data was obtained by records completed in the emergency department. Participants were followed up for 3 to 7 years (5.2 mean year follow-up). The aim was to see if the SIS could predict the eventual number of suicides. Thirty male and 24 female participants used in the analysis died by suicide within the study period. The results showed that with a cut off score of 10, the SIS reported a sensitivity of 76.7%, a specificity of 48.8% and a PPV of 4.2% in male participants. In females, using a cut off score of 14, the sensitivity rate was 66.7%, the specificity was 75.3% with a PPV of 4%. Our calculated NPV score was 98.6% (males) and 99.2% (females). The study also provided scores for Part 1 of the SIS in females. The sensitivity was 75% with a cut off score of 6 and the specificity was 72.6%. The PPV remained at 4% and a NPV which we calculated of 99.4%. If the cut off score is increased to 7, this yielded a higher specificity of 80.9% but a lower sensitivity of 66.7%. This paper does not provide results which combined male and female subjects which make it difficult to generalise to a mixed male and female population of people who self-harm.

NIMEUS2002 used the SIS in a cohort study of 555 participants who were evaluated by a psychiatrist within 12 hours to 5 days following a suicide attempt, and most often as an inpatient of the Medical Intensive Care Unit.

1 The participants were followed up from 10 months to 8 years and 10 months
2 (mean time of 4 years and 6 months). Twenty two participants died by
3 suicide during the follow up period. With a cut off score of 19, the reported
4 sensitivity for the SIS was 59%, the specificity was 77% and that PPV was
5 9.7%. According the information in the paper, we calculated the NPV to be
6 97.8%. This study also looked at the predictive value of the SIS with
7 participants who were aged 55 years and above. Ten out of 88 participants in
8 this age group died by suicide during follow up. The reported sensitivity,
9 specificity and PPV were 90%, 60% and 23%, respectively. We calculated the
10 NPV to be 97.9%.

11
12 NIMEUS1997 used the BHS in a cohort study on 212 suicide attempters
13 evaluated in the Medical Intensive Care Unit and during psychiatric
14 hospitalisation. Participants were asked to participate in a suicide research
15 program and were followed up for a mean time of 4 years and 4 months.
16 Thirteen out of 212 participants used in the analysis died by suicide. The
17 results showed that with a cut off score of 9, the BHS reported a sensitivity of
18 77%, a specificity of 42% and a PPV of 8%. Using the results reported in the
19 paper, we calculated a NPV of 96.5%. When a cut off score of 13 was used the
20 sensitivity was still 77% but with a specificity of 61.3% and a PPV of 13%
21 (calculated NPV was 97.6%).

22
23 The Suicide Assessment Scale (SUAS) was developed by Stanley and
24 colleagues (1986) and is a clinician-rated scale designed to measure changes in
25 levels of suicidality over time. It consists of 20 items and each item is rated
26 on a 4 point likert scale. Typical items are: 'sadness and despondency',
27 'hostility' and 'anergia'. Ratings are interview based and the completion time
28 is approximately 20-30 minutes.

29
30 NIMEUS2000 used the SUAS in a cohort study of 191 suicide attempters
31 evaluated in a Medical Intensive Care Unit and asked to participate in a
32 suicide research program. They were followed up for 12 months and 8 out of
33 191 died by suicide during this time. The results showed that with a SUAS
34 cut off score of 39 the sensitivity of the scale was 75%, the specificity was 86%
35 and the PPV was reported as 19.4%. One important note about this study is
36 that due to the low prevalence of suicides, the study used a case control
37 design to calculate the predictive validity, by comparing the suicide cases
38 with a matched control of 40 participants who did not die by suicide. Using
39 data from the study we calculated a NPV of 98.7%. A major limitation to
40 drawing a firm conclusion about the usefulness of this scale to predict suicide,
41 based on this study, is that a case control method was used for the analysis of
42 predictive values and therefore any interpretations cannot be generalised to
43 make a clinical assessment.

6.3.6 Clinical evidence summary of scales that predict suicide

Table 22: Scales that predict suicide

Study ID	Scale (cut-off score)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Prevalence (%)
BECK1985	BHS (≥ 10)	91	50.6	11.6	98.7	11/165 (6)
BECK1999	BHS (≥ 8)	90	42	1.3	99.7	30/3701 (0.8)
	SSI-W (>16)	80	78	2.8	99.7	30/3701 (0.8)
	SSI-C (≥ 2)	53	83	2.4	99.5	30/3701 (0.8)
NIMEUS1997	BHS (9)	77	42	8	96.5	13/212 (6)
NIMEUS2000	SUAS (39)	75	86	19	98.7	8/191 (4)
NIMEUS2002	SIS (19)	59	77	9.7	97.8	22/555 (3)
HARRISS2005	SIS (10 for male)	76.7	48.8	4.2	98.6	30/1049 (2)
	SIS (14 for female)	66.7	75.3	4	99.2	24/1440 (1)

There are six studies (all cohort designs) which looked at predicting a fatal outcome such as suicide in people who have self-harmed. A scale that has a sensitivity of 100% means that there will be zero FN identified by the scale and therefore it will be unlikely to miss any cases that will then go on to die by suicide. The scale that reported the highest sensitivity of 91% and the lowest FN rate of 1 is the BHS used by BECK1985. However, there are major limitations to the interpretations of these results, such as the use of a small sample of mainly suicide ideators and a lengthy follow up period of 5 years. Furthermore, the BHS would identify 76 false positives for every true positive, severely compromising its clinical utility.

Another drawback for these scales is that they all have low PPV (between 1-13%) therefore identifying many false positives which makes them of limited use. The low PPV scores are a result of the low prevalence of suicide. A final point to note is that the follow-up period is extremely long in some studies (between 4 to 15 years), in order to increase prevalence. It is greatest concern to healthcare professionals to be able to predict suicide in the next few weeks and months. In the shorter term, the PPV of these scales will be even lower. For these reasons, the use of scales to predict the risk of suicide cannot be recommended in clinical practice.

6.3.7 Scales that predict a repetition of self-harm

The 6 cohort design studies that look at non fatal outcomes include KAPUR2005, CARTER2002, COOPER2006b, COOPER2007, CORCORAN1997, GALFAVY 2008 and WAERN2010.

1
2 The Manchester Self-Harm Rule (MSHR: COOPER2006b) is a clinician-rated
3 screening tool designed for the initial assessment of self-harm patients in
4 emergency departments. It is comprised of four questions assessing: history of
5 self, past or present psychiatric treatment, and whether the service user has
6 used a benzodiazepine overdose. The assessment of risk is divided into two
7 categories: perceived low risk and perceived moderate/high risk.
8

9 COOPER2006b used the MSHR in a cohort study on consecutive service users
10 who presented themselves to five hospital emergency departments following
11 self-harm. The participants were followed up for 6 months and 373 out of
12 2,095 service users made a repeat attempt of self-harm, 14 of which died by
13 suicide. The reported sensitivity, specificity, PPV and NPV was 97% (95% CI
14 95 to 98), 26% (95% CI 24 to 29), 22% (95% CI 20 to 24) and 97% (95% CI 96 to
15 99), respectively.
16

17 COOPER2007 conducted an analysis on people who self-harm and present to
18 an emergency department, 8,825 of whom completed the MSHR and 8,722 of
19 whom had a Global Clinical Assessment (GCA) completed by emergency
20 department clinicians or mental health specialists. The participants were
21 followed up for 6 months. 1,506 of the MSHR service users and 1,481 of the
22 GCA patients made a repeat attempt of self-harm, 59 of which died by
23 suicide. For the MSHR, the reported sensitivity, specificity, PPV and NPV,
24 was 94% (95% CI 92 to 95), 26% (95% CI 24 to 27), 21% (95% CI 19 to 21) and
25 96% (95% CI 94 to 96), respectively. For the GCA the reported scores were
26 85% (95% CI 83 to 87) sensitivity, 38% (95% CI 37 to 39) specificity, 22% PPV
27 (95% CI 21 to 23) and 92% (95% CI 91 to 93) NPV.
28

29 KAPUR2005 conducted a cohort study using a GCA to examine the risk of
30 repetition in 3,828 people who presented to a hospital emergency department
31 following self-harm. The assessment was done by emergency department
32 clinicians and mental health staff. For the purpose of this guideline, we will
33 present the findings of the mental health staff assessment. Participants were
34 followed for 12 months and 549 patients repeated self-harm, 18 of which died
35 by suicide. The reported sensitivity, specificity, PPV and calculated NPV was
36 17% (95% CI 14.1 to 20.5), 92% (95% CI 90.7 to 92.6), 26% (95% CI 21.3 to 30.2)
37 and 87%, respectively.
38

39 Kreitman & Foster (1991) developed a clinical and research scale to predict the
40 repetition of self-harm within 12 months. The Edinburgh Risk of Repetition
41 Scale (ERRS) has 11 variables which include history of psychiatric treatment,
42 marital status and age between 25-54 years old. A positive answer for each
43 item is scored as one and responses are summed to give a possible total score

1 of 0 to 11. The ERRS for research use has specific weightings for each item
2 when it is scored.

3
4 Hawton & Fagg (1995) conducted two one-year cohort studies on 1,180 people
5 assessed in routine clinical practice at a UK general hospital following a
6 suicide attempt. The study aimed to compare the performance of a clinical
7 version of the ERRS (with non weighted items), a research version (with
8 weighted items) and a shorter version (comprised of 6 items) of a scale
9 developed in Edinburgh in 1974 (Buglass & Horton, 1974). Performance was
10 examined in two ways. Firstly, based on the method used by Kreitman &
11 Foster (1991), that is, based on suicide attempts where a repeat attempt within
12 that year indicated repetition (analysis type a). Secondly, based on individual
13 persons (rather than episodes of attempts) where a repeat attempt within a
14 one-year period indicated repetition, measured by hospital re-admission
15 (analysis type b). The results showed that there was little difference in the
16 performance of the clinical and research versions of the ERRS scales when
17 compared to each other, using analysis type a. These results were compared
18 to analysis type b, where both versions performed more poorly than in
19 analysis type a. The performance for the Buglass and Horton scale was
20 similar to the clinical version of the ERRS, using analysis b. It is important to
21 note that this study does not report sensitivity and specificity data and has
22 been reviewed to illustrate the background and development of the ERRS.

23
24 CARTER2002 used the ERRS scale by rating the items based on clinical
25 interview, service user self-report and case notes. This cohort study used
26 1,317 people who self poisoned and presented for hospital treatment. The
27 participants were followed up for 12 months and 180 participants made a
28 repeated presentation for self poisoning. A cut off score of 8 or more for male
29 subjects and 6 or more for female subjects was used. The ERRS reported a
30 sensitivity of 26%, a specificity of 84%, a PPV of 21%. We calculated an NPV
31 of 86.7%.

32
33 The following scales, as well the BHS and the SSI scales, which have been
34 described above, was used in a study by GALFAVY2008.

35
36 The Hamilton Depression Rating Scale (HDRS: Hamilton, 1960) is a clinician-
37 rated scale and consists of 17-items designed to measure the severity of
38 depressive symptoms in people diagnosed with affective disorder of
39 depressive type. Scores on each item are measured on a 5-point likert scale
40 ranging from 0 to 4 (0 = absent, 1 =mild or trivial, 2 = moderate, 3 = moderate,
41 4 = severe), or they can be measured on a 3-point scale (0 = absent, 1 = slight
42 or doubtful, 2 = clearly present). The total score is the sum of the item scores
43 and can range from 0-53. A score of 0-7 is considered clinical remission, ≥ 20 is
44 low severity. It is advised to have two raters independently score a patient at

1 the same interview and the administration time is approximately 20 to 30
2 minutes.

3
4 The Beck Depression Inventory (Beck & Steer, 1987) is a self-report instrument
5 that consists of 21 items constructed to measure the current severity of
6 depression in psychiatric patients. Each of the items is rated on a four-point
7 scale with scores ranging from 0-3). Responses are summed to give a possible
8 total score of 0 to 63. The severity of depression is rated as 0-9 minimal, 10-16
9 mild, 17-29 moderate and 30-63 severe.

10
11 The Reasons for Living Inventory (RFL: Linehan *et al.*, 1983) is a 48-item self-
12 report measure designed to assess beliefs and expectations for wanting to live
13 as an alternative to suicide in adults and young people. As such, the scale is
14 one of the few instruments that assess protective factors or beliefs buffering
15 against suicidal behaviour, rather than focusing on risk factors. Typical items
16 are: "I believe I can find a purpose in life, a reason to live" and "I believe I can
17 find other solutions to my problems." Each item of the inventory is rated at 6
18 levels of importance ranging from 1 ("not at all important") to 6 ("extremely
19 important"). Based on factor analyses with adults, the RFL consists of six
20 domains of reasons for living: 1) survival and coping beliefs, 2) responsibility
21 to family, 3) child related concerns, 4) fear of suicide, 5) fear of social
22 disapproval, and 6) moral objections. The RFL yields a total score as well as
23 six subscale scores corresponding to each of the above domains.

24
25 GALFAVY2008 conducted a cohort study with 304 depressed psychiatric
26 research centre participants, 54% of whom had a history of previous self-
27 harm. Participants were administered the BHS, SSI, RFL, HDRS and the BDI
28 and were followed up for 2 years. 52 participants made a suicide attempt
29 during follow up, 4 of whom died by suicide. The BHS (cut off score 5) had a
30 sensitivity of 0%, a specificity of 100%. We calculated the NPV as 82.8%. The
31 SSI (cut off score 10) reported a sensitivity of 54%, a specificity of 75%. We
32 calculated the PPV as 30.8% and the NPV as 88.7%. The RFL (0.25 probability
33 cut off) scale reported a sensitivity of 35% and a specificity of 79%. We
34 calculated the PPV as 25.5% and the NPV as 85.4%. The HDRS (cut off 2) had
35 a sensitivity of 4% and a specificity of 94%. We calculated the PPV as 12%
36 and the NPV as 82.5%. The BDI (cut off 16) had a sensitivity of 31% and a
37 specificity of 83%. We calculated a PPV of 27.3% and a NPV of 85.3%. When
38 interpreting these results, it is important to note that this is not a study of a
39 pure self-harm population but a study of depressed people, some of whom
40 have a history of self-harm.

41
42 The SUAS has been described in Section 6.3.5. WAERN2010 used a modified
43 version of the SUAS (Nimeus *et al.*, 2006) in a cohort study on 162 service
44 users admitted to an emergency ward and interviewed following a suicide

1 attempt. Participants were followed up for 6 months and 61 participants
2 repeated a suicide attempt, including 5 suicides. The results showed that
3 with a cut off score of 24 SUAS reported a sensitivity of 61% and a specificity
4 of 40%. Using the results reported in the paper, we calculated a PPV of 38%
5 and NPV of 62.9%.

6
7 CORCORAN1997 used a statistical model created by entering 11 predictor
8 variables into a logistic regression analysis to identify people who are at high
9 risk of repeated self-harm. The variables included items such as any previous
10 act of self-harm, main method of self-harm used, alcohol taken at the time of
11 the act etc. (For more details on the method used for identification of these
12 variables please refer to the original paper). 122 participants were admitted to
13 a general or psychiatric hospital following an episode of self-harm and had
14 their data entered into a computer. Participants were followed up for 6
15 months, in which 26 participants had repeated self-harm. Results were
16 reported for a range of cut-point probabilities, ranging from 0.2 to 0.5. With a
17 cut-point probability of 0.2 (which has the highest sensitivity score) the
18 analysis gave a sensitivity of 96%, a specificity of 81%. Using the results
19 reported in the paper, we calculated a PPV of 60% and NPV of 99%. It is
20 important to note that there was data for 100 participants (from the original
21 sample total of 212 participants) that could not be entered into the analysis as
22 there was incomplete information for at least one of the 11 variables. The
23 study did report, however, that there was no difference between the excluded
24 and included participants in regards to the predictor variables.

25
26 The search identified three case control design studies (BISCONER2007,
27 OSMAN1999, OSMAN2001), which met our inclusion criteria. The studies
28 look at non fatal outcomes and report the sensitivity and specificity of the
29 following scales.

30
31 The Suicide Probability Scale (SPS) by Cull & Gill, (1988) is a 36-item, self
32 report measure designed to measure the probability of suicidal behaviour in
33 adults and young people aged 14 and older. Individuals rate the frequency of
34 their subjective experience and past behaviours using a four-point Likert scale
35 ranging from 'none or a little of the time' to 'most or all of the time'. It has a
36 total weighted score and four subscales based on factor analysis:
37 hopelessness, suicide ideation, negative self-evaluation and hostility. Typical
38 items include: 'I feel so lonely I cannot stand it'; 'In order to punish others I
39 think of suicide', 'Things seem to go well for me'; and 'I feel I tend to be
40 impulsive.' The suicide probability score can be interpreted in relation to an
41 assessed risk level: A score of 0-24 represents a subclinical risk level, 25-49
42 represents a mild risk level, 50-74 represents a moderate risk level, and 75-100
43 represents a severe risk level.

1 The Adult Suicidal Ideation Questionnaire (ASIQ; Reynolds, 1991) is a 25-item
2 self-report measure designed to measure the frequency of suicidal thoughts in
3 clinical and non clinical adult populations. There are 25 descriptions of
4 negative thoughts and behaviours that a person may experience over one
5 month. Individuals rate the frequency of their experience and behaviours
6 using a 7-point likert scale ranging from 0 ("I never had this thought") to 6
7 ("almost every day") and this yields a total score with a corresponding *T*
8 score and percentile score.

10 BISCONER2007 conducted a sensitivity and specificity analysis for the SPS
11 and the ASIQ in a case control study on inpatients from an acute psychiatric
12 hospital. Participants were divided into either Group 1 (n=25) as those who
13 were admitted for suicide ideation or gesture (suicide risk group), or Group 2
14 (n=42) who were admitted for other reasons (comparison group)
15 but also had a history of suicide gestures. The aim was to determine the
16 extent to which the SPS and the ASIQ could correctly classify subjects into
17 their groups. The results showed that with a cut off score of 50, the SPS
18 reported a sensitivity of 52% and a specificity of 78%. We calculated a PPV of
19 70.8% and a NPV of 60.9%. The ASIQ, with a cut off score of 31, reported a
20 sensitivity of 51% and a specificity of 78%. We calculated the PPV of 72% and
21 a NPV of 59.5%.

23 The Suicide Behaviours Questionnaire (SBQ) was designed by Linehan (1981)
24 to measure past suicidal thoughts and behaviour. It is a self-report measure
25 comprising of 34 items. To date many different versions of the SBQ have been
26 used and furthermore, OSMAN2001 validated a revised version, the SBQ-R.
27 This is a self report measure comprising of 4 items, each touching on a
28 different domain of suicidal behaviour. These include; past suicide attempt
29 (Item 1), frequency of suicide ideation (Item 2), threat of suicidal behaviour
30 (Item 3) and finally the likelihood of a future attempt (Item 4). Each item is
31 scored using a weighted summary score and the total score ranges from 3 to
32 18. For Item 1, response is scored on a 4 point likert scale ranging from 1
33 (never) to 4 (I have attempted suicide), the total score, therefore, ranging from
34 1 to 4.

36 OSMAN2001 used the SBQ-R in a case control study on psychiatric
37 inpatients. They grouped adult participants into a suicidal risk subgroup
38 (n=51) based on hospital admission for recent suicide attempts or serious
39 threats, or a non suicidal risk subgroup (n=69) for patients who were
40 admitted for other reasons. The young people were also divided into a
41 suicidal risk and a non suicidal risk subgroup based on this criteria. The
42 analysis used a SBQ-R total score and Item 1 only, from the SBQ-R to
43 distinguish suicidal versus. non suicidal individuals. The results showed that
44 with a cut off score of 8, in adults, the SBQ-R reported a sensitivity of 80%, a

specificity of 91%, a PPV of 87% and a NPV of 86%. In young people, the reported sensitivity was 87%, specificity was 93%, PPV was 90% and the NPV was 99%. For Item 1 of the SBQ, for adults, the sensitivity was 80%, specificity 97%, PPV 95% and NPV was 87%. For young people the reported scores were a sensitivity of 100%, specificity of 96%, PPV of 95% and a NPV of 100%.

OSMAN1999 used the ASIQ and the RFL scale in a case control study on psychiatric inpatients. They grouped the participants into a 'suicide attempter group' (n=75) and a psychiatric control group (n=130). The suicide attempter group had made prior or current suicide attempts with an established intent to die. This was measured from assessments by intake staff using various other scale measures (Minnesota Multiphasic Personality Inventory-2, SIS, BHS, The Positive and Negative Affect Scale) as well as the ASIQ and RFL. Group assignment was further endorsed by a review of medical records. The control group did not have a history of suicide attempt. The results showed that the sensitivity (the proportion of suicide attempters that were correctly identified as suicide attempters) using a cut off score of 14 in the ASIQ identified the maximised sensitivity of 96% and maximised specificity (the proportion of psychiatric controls who were correctly identified as non suicide attempters) of 79%. The reported PPV was 72% and the NPV was 97%. The RFL showed that a cut off score of 3.8 yielded greatest accuracy in giving a sensitivity of 61% and a specificity of 81.5%. The reported PPV was 65.7% and the NPV was 75.5%.

6.3.8 Clinical evidence summary of scales that predict repetition of self-harm

Table 23: Scales that predict repetition of self-harm (prospective cohort studies)

Study ID	Scale (cut-off score)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Prevalence (%)
KAPUR2005	GCA	17	92	26	86.8	549/3828 (14)
CARTER2002	ERRS (>8 for male, >6 for female)	26	84	21	87.6	180/1317 (13)
COOPER2006b	MSHR	97	26	22	97	373/2095 (17)
COOPER2007	MSHR	94	26	21	96	1506/8825 (17)
	GCA	85	38	22	92	1481/8722 (16)
CORCORAN1997	Statistical	96	81	60	99	26/112

	Model (0.2)					(23)
GALFAVY2008	HDRS (2)	4	94	12	82.5	52/304 (17)
	BDI (16)	31	83	27.3	85.3	52/304 (17)
	BHS (5)	0	1	n/a	82.8	52/304 (17)
	SSI (10)	54	75	30.8	88.7	52/304 (17)
	RFL (0.25)	35	79	25.5	85.4	52/304 (17)
WAERN2010	SUAS (24)	61	40	38	62.9	61/162 (37)

1

2 **Table 24:** Scales that predict repetition of self-harm (case-control studies)

Study ID	Scale (cut-off score)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
BISCONER2007	SPS (50)	52	78	70.8	60.9
	ASIQ (31)	51	78	72	59.5
OSMAN1999	ASIQ (14)	96	79	72	97
	RFL (3.8)	61	81.5	65.7	75.5
OSMAN2001	SBQ-R (8) Adults	80	91	87	86
	SBQ-R (8) young people	87	93	90	99

3

4 There were ten studies (3 case control and 7 cohort designed) which looked at
5 predicting a repetition of self-harm. Sensitivity, specificity, PPV and NPV
6 scores from case control studies may be less generalisable to a real world
7 clinical context than those obtained from cohort studies. The GDG came to
8 the consensus that the evidence to recommendations would be derived from
9 studies which used the stronger prospective cohort design.

10

11 The prospective studies were examined in more detail to describe the sample
12 and the sample size so we could assess the utility and generalisability of the
13 findings and precision of the estimates. All studies with the exception of one
14 included participants who presented to an emergency department following
15 self-harm. The length of follow-up used by these studies varied between 6
16 months to 3 years. The tool that reported the highest sensitivity of 97% was
17 the MSHR used by COOPER2006b. The limitation of this tool in terms of its
18 clinical utility was its low specificity of only 26%. All the scales had relatively
19 low positive predictive values ranging from 12% to 60%. This means that
20 many individuals were wrongly identified as people who would repeat self-
21 harm, thus limiting the clinical utility of these scales and possibly resulting in
22 unnecessary intervention in some individuals.

1

2 **6.4 NEEDS ASSESSMENT**

3 **6.4.1 Introduction**

4 While psychosocial assessment includes several components, the most
5 important are the assessment of needs and the assessment of risks. The
6 assessment of needs is designed to identify those personal (psychological) and
7 environmental (social) factors that might explain an act of self-harm. This
8 assessment should lead to a formulation, based upon which a management
9 plan can be developed. The main components of an assessment of need after
10 self-harm therefore include:

- 11
- 12 • Social situation and environmental issues (including current living
- 13 arrangements, work and debt, access to means of self-harm)
- 14 • Family and personal relationships (including recent breakdown of a
- 15 significant relationship)
- 16 • Recent life events and current difficulties
- 17 • Psychiatric history and mental state examination, including any history
- 18 of previous self-harm and alcohol or drug use
- 19 • An assessment of physical health issues
- 20 • Psychological characteristics that are known to be associated with self-
- 21 harm (for example, hopelessness, problem solving ability, impulsivity)
- 22 • Possible protective factors
- 23 • Current episodes of self-harm including motivation for the act
- 24 • Attitudes to help/care
- 25 • Establishment of problem list with service user
- 26 • Exposure to suicide or self-harm by others (family, environment,
- 27 media, internet)

28 Information about the psychiatric, social and psychological factors and
29 contexts of the act can then be brought together into a formulation that
30 describes the antecedents of the episode of self-harm. The formulation should
31 therefore include:

- 32
- 33 • Long-term vulnerability factors including early loss or separation from
- 34 parents, difficult relationships with parents signified by rejecting or
- 35 overprotective parenting styles, or abuse in early life. Although sexual
- 36 abuse has been associated with self-harm, emotional or physical abuse
- 37 are also important. Enduring psychological characteristics and
- 38 psychiatric problems.

- Short-term vulnerability including current difficulties in relationships and lack of social support, work or health-related problems, drug and alcohol misuse, or exacerbation of psychological symptoms.
- Precipitating factors are likely to be stressors experienced in the few days immediately prior to self-harm. Again relationship problems, financial worry, anniversaries, deaths or other losses can act as precipitators to the act of self-harm.

6.4.2 Narrative reviews

The following section summarises two studies identified, which examined the assessment of need in people who self-harm.

CEDEREKE2007 aimed to look at the specific needs of people who have self-harmed by using a comprehensive needs assessment tool - the Camberwell Assessment of Need (CAN). Semi-structured interviews were conducted for participants (N=140) one month and twelve months following emergency treatment for a suicide attempt. The CAN looks at whether a need exists (as rated by a service user) and the severity of the need in 22 areas of 'every-day living'. The most common areas of need were 'safety to self (self-harm), psychological distress and physical health'. The aim of the study was to investigate the help that service users receive from services (formal help) as well as from friends and family (informal help). Also, to examine whether help from services was considered adequate and lastly, whether the amount of help received and its level of adequacy differed between service users who repeated suicide attempts during follow up. There were 23 who repeated self-harm between one and twelve months and 117 who did not. The results showed that after one month, a high rate of formal and informal help was received in the most common areas of need, mentioned above. But in areas of need such as intimate relationships, and needs in daytime activities, company and sexual expression, there was little (formal or informal) help received. After twelve months, the need for 'safety to self' fell but the highest rate of help received was still in this area and psychological distress. There was no difference between repeaters and non-repeaters in that they rated the same main need areas and the same severity of need. Furthermore, the help received did not differ at one month after the index episode of self-harm. After twelve months, however, repeaters had significantly more needs such as 'safety to self, psychological distress, intimate relationships', to name a few. In regards to the help received, repeaters received more help for psychological distress, intimate relationships and company. Both groups found help from services to be adequate but with the exception of needing more information.

KEENE2005 conducted a descriptive cross-sectional study to look at the assessed needs and service use of a self-harm population. This population comprised people who had self-harmed by self-poisoning, asphyxiation, cutting, burning and other self inflicted injuries. The first part of this study aimed to look at the assessment of need including mental health and substance misuse need. The second part assessed the inter-agency service use of this population, such as health and social care services, and compared it to utilisation patterns of a wider emergency department population. Results showed that 53% (n=427) had an assessed mental health problem, 18% with drug or alcohol problems and 15% with a dual diagnosis. Only 10% had no assessed need. Results also looked at the proportion of each assessed need group and their referral to the relevant external agencies. 70% of those who had self-harmed and had mental health problems were referred to mental health services, 64% with drug problems to a drug agency and 35% with alcohol problems were referred to an alcohol agency or for detoxification from alcohol. Overall, 37% of those with at least one assessed need were referred to mental health services, 3% to a drug agency, 6% to an alcohol agency, 15% to social services, 16% to a GP, 15% to follow-up or out-patient and 9% were discharged with no further service. When comparing those who self-harm and the rest of the emergency department population over 3 years it can be seen that the former are three times more likely to contact social services and ten times more likely to attend drug or alcohol agencies. This study described the service use of a small population of those who had self-harmed in the hope that inter-agency integrated care services can provide a better service for this population and help inform the development of integrated care initiatives.

6.5 INTEGRATED PSYCHOSOCIAL ASSESSMENT

Models and definitions of psychosocial assessment vary, but in the current guideline the GDG uses the term to denote a comprehensive assessment of personal circumstances, social context, mental state, risk and needs (Kapur *et al.*, 2008). Many of the main areas of inquiry are listed in section 6.4 (on needs assessment). A psychosocial assessment following an act of self-harm should be regarded as an opportunity to engage a service user in a collaborative investigation of the complex interplay of factors that led to their act of self-harm.

6.5.1 Narrative reviews

The following section summarises studies identified, which examine the psychosocial assessment of people who have self-harmed. Some studies that are relevant to answering our clinical question, investigated whether receiving an assessment had an effect on repetition of self-harm or adherence to treatment (OUGRIN2011, HICKEY2001, WITTOUCK2010, KAPUR2007 and

1 BERGEN2010b). These studies compared groups of participants who
2 received an assessment with those who did not or those who were given
3 TAU. A further two studies (HAW2003b and KAPUR2003) looked at these
4 outcomes but did not make a comparison between groups of participants in
5 their study design.

6
7 HICKEY2001 conducted a study where they looked at people who presented
8 to hospital over two years following self-harm, comparing those who received
9 a psychosocial assessment and those who were discharged from hospital
10 without an assessment, and whether these participants differed in
11 characteristics and subsequent self-harm. A psychiatric team conducted the
12 assessments in a general hospital in the UK. When comparing their
13 characteristics, the non assessed participants (n=145) were more likely to have
14 a history of self-harm ($p<0.02$), were recorded as showing difficult behaviour
15 ($p<0.02$), were uncooperative during physical examination ($p<0.05$), took
16 early discharge from the emergency department ($p<0.0001$) and were less
17 likely to have further healthcare arrangements made ($p<0.0001$), compared to
18 the assessed participants (n=101). The non assessed group also had more
19 cases of self-poisoning (74%) as opposed to cases of self injury, compared to
20 the assessed group (79%).

21
22 In a follow up study, after 12 months of the index presentation, non assessed
23 participants were matched on characteristics (age, sex, type of self-harm) with
24 assessed participants (control) and there were 88 matched pairs in this
25 comparison. The participants GPs were contacted for information on
26 psychosocial variables of the participants in the one year after the index
27 presentation. There was no significant difference between the groups in
28 terms of psychosocial problems, although these were more common in the
29 non assessed group. According to the Monitoring System data, more non
30 assessed participants repeated self-harm within 28 days of the index episode
31 compared to assessed participants, although this was not statistically
32 significant. After 12 months, 3 times as many non assessed participants
33 repeated self-harm compared to assessed participants. When this data was
34 combined with GP data, the results showed that 37.5% of the non assessed
35 participants repeated self-harm within 12 months compared to 18.2% of the
36 assessed participants. One limitation to this study is that it excluded
37 participants who in current inpatient psychiatric care at the time of the index
38 presentation, so few participants had a history of psychiatric care or self-
39 harm, and so may not be generalisable to all people who self-harm.

40
41 KAPUR2007 carried out a large multi centre research project in the UK for
42 people who presented to hospitals following self-harm. They aimed to
43 establish factors associated with receiving or not receiving a specialist
44 psychological assessment and whether this is associated with repetition of

1 self-harm. Taking into account various social and clinical characteristics of
2 the 7,344 participants, and also the type of substance or method they used to
3 self-harm, key characteristics were associated with an increase likelihood of
4 having an assessment in hospital. These were: being aged over 55; having
5 current psychiatric treatment; being admitted into a medical ward and taking
6 antidepressants. A person less likely to receive an assessment is someone
7 who is unemployed, used self-cutting, and chose to self-discharge from
8 hospital and attending a hospital outside working hours. Overall, a repeated
9 subsequent attempt cannot be predicted based on whether one has received
10 or not received an assessment. However, in some hospitals having an
11 assessment appeared to reduce the risk of repeated self-harm and these
12 hospitals tend to have a higher proportion of assessed episodes, whereas in
13 others having an assessment appeared to increase the risk and these hospitals
14 had a lower proportion of assessed episodes. Only 60% of self-harm episodes
15 resulted in an assessment, overall. Of course the findings of this and other
16 similar studies need to be interpreted in the context of their observational
17 design which means that the observed associations may not be causal and
18 could well have been influenced by unmeasured confounders.

19
20 BERGEN2010b carried out a survival analysis to examine, firstly, the
21 association between psychosocial assessment by a specialist mental health
22 practitioner following self-harm and a subsequent repeat episode, and
23 secondly, the association between having a psychosocial assessment after an
24 episode and the survival time until the repeat episodes. The setting included
25 three UK centres, where 13,966 participants had made hospital presentation
26 for a first episode of self-harm in the study period (2003-2005) and 55.6% had
27 received a specialist psychosocial assessment. There were 18,483 repeated
28 episodes of self-harm within the following two years, which included up to
29 the first 6 episodes only, for each person. Participants received a specialist
30 psychosocial assessment for 54.7% of these episodes. The following results
31 look at 'short term repetition' or the time to the first repeat episode. For
32 participants who did not have a history of psychiatric treatment, the risk of
33 repeating an episode of self-harm was 51% (95% CI 42%-58%) less if they
34 received an assessment, compared to not receiving an assessment. Likewise,
35 for participants who do have a history of psychiatric treatment, having an
36 assessment will reduce the likelihood of a repeat episode by 26% (95% CI 8%-
37 34%), compared to not having an assessment, with other variants controlled.
38 For recurrent repetition, for all 6 episodes, results show that participants who
39 did not have a history of psychiatric treatment, the risk of repetition was 57%
40 (95% CI 51%-63%) less if they received an assessment at the last episode,
41 compared to not receiving an assessment, controlling for covariates.
42 Likewise, for those who have a psychiatric treatment history, having an
43 assessment will reduce the likelihood of a repeat episode by 26% (95% CI
44 11%-41%), compared to not having an assessment.

1
2 OUGRIN2011 conducted a randomised controlled trial with young people
3 who self-harm to examine whether Therapeutic Assessment (TA) compared
4 to assessment as usual (AAU) improves attendance and engagement during a
5 3 month follow-up period. This study was set in CAMHS settings in London
6 (U.K). AAU involved standard psychosocial evaluation and standard
7 disposition planning. The TA was carried out by trained healthcare
8 professionals and involved the same components as AAU in addition to a
9 brief therapeutic intervention. When looking at the attendance rate of the first
10 follow up session, results showed that subjects in the TA group had better
11 attendance rates (OR 5.19, 95% CI, 2.22 to 12.10). Subjects were also given the
12 Strengths and Difficulties Questionnaire (SDQ) and the results showed that
13 although there was an improvement in scores for all subjects, there was no
14 significant differences in changes of scores between the groups (MD -0.37,
15 95% CI (-3.25 to 2.53) and this was also seen in the Children Global
16 Assessment Scale scores (MD 4.49, 95% CI (-0.98 to 9.96). There was
17 insufficient evidence to make any conclusions regarding the difference
18 between therapeutic assessment and assessment as usual. Limitations of this
19 study include a short follow up period, and that the effectiveness of standard
20 clinical practice interventions for young people who self-harm is
21 questionable.

22
23 WITTOUCK2010 conducted a longitudinal study to examine people who
24 attempted suicide and their compliance with aftercare following standardised
25 psychosocial assessment. The study group were assigned to assessment using
26 the Instrument for Psychosocial Evaluation and Care of Suicide Attempters
27 (IPEO) (n=93) compared to people who attempted suicide who received a non
28 IPEO based psychosocial assessment (n=38). Semi structured interviews were
29 conducted at 1 (FU1) and 6 (FU2) months follow up after an index episode
30 (within the study period). Outcomes measured include contact with
31 emergency department staff (during hospital admission), GP and mental
32 health services. The results showed that participants who have no inpatient
33 history (OR=2.73, 95% CI 1.18-6.29) or those who have only had one inpatient
34 admission for treatment (OR=7.15, 95% CI 1.43-35.7) were more likely to
35 receive a IPEO based assessment compared to participants with two or more
36 previous inpatient admissions for treatment. There was no difference
37 between the study groups in terms of the treatment advice received, and
38 compliance with fixed referrals, however, participants in the IPEO group
39 were more likely to have treatment options discussed with them than the non-
40 IPEO group (OR=3.2, 95% CI 1.23-8.45). During FU1, 62% of the participants
41 who visited their GPs did so within one week of their index attempt. There
42 was no difference between the study groups in the number of participants
43 who visited their GP. However, during the period of discharge from hospital
44 to visiting the GP, the non-IPEO group visited their GP 3.6 times less within

one week after the index attempt (95% CI 1.1-11.9). During F2 there was no difference in the groups regarding the regularity of visits to a GP. At FU1, there was no difference between the groups in receiving mental health care (MHC), outpatient MHC or pharmacological treatment. However, the non-IPEO group were more likely to receive inpatient MHC than the IPEO group (OR=3.1, 95% CI 1.4-6.8). At FU2, no differences in treatment received remained between the two groups. There was a high dropout rate from FU1 to FU2 of 37% reported in this study.

HAW2003b conducted a prospective study on 135 participants who presented to a general hospital in the UK following self-harm and were given an assessment by the hospital self-harm service. This is a specialist service which aims to provide a rapid psychosocial assessment and aftercare for people who have self-harmed. After the index hospital presentation, participants were followed up for between 12 months to 20 months to assess repetition of self-harm, treatment adherence and satisfaction. One hundred and six patients (79%) reported how satisfied they felt with their psychiatric assessment at follow up and a majority felt that the assessor showed understanding and that their problems were taken seriously.

Only 33 (24%) of the participants who were assessed were offered an outpatient appointment by the self-harm service as there was a criteria for this offer, such as being at high risk for further self-harm. Twenty (61%) of these participants attended their first follow up appointment but there was no statistical difference between the characteristics of these people and those who refused an appointment or did not turn up. Nineteen participants had a follow up interview and most of them were satisfied with the care that they had received by the self-harm service. Four (21%) out of 19 participants who reported satisfaction levels of the treatment received had also reported a further episode of self-harm, whereas, 30 (35%) out of 87 participants who were not offered treatment reported a repeat episode of self-harm. Although the repetition rate of participants who received aftercare was low, there was no statistical difference between these groups.

The self-harm service provided 53 (39%) participants, who were thought to be at high risk of further self-harm, an emergency telephone number if needed in a crisis. Forty one (77%) of these participants were seen at follow up, and six (15%) reported a repeat episode of self-harm during this period.

When interpreting the findings of the participants used in this study, it is important to note that this study defined self-harm as including self-poisoning and self-injury but excluded self-cutting that was considered part of a repetitive pattern of self-mutilation. Another limitation to interpreting the findings of this study is that the sample size of participants offered

1 outpatient appointments and interviewed regarding satisfaction of the
2 psychosocial assessment that they received are small. Furthermore,
3 experiences of the psychiatric assessment were measured after the 12-20
4 month follow up period, where 15 participants could not then remember or
5 report on the assessors attitude towards their problems. This study had an
6 original sample of 150 participants presenting to hospital for self-harm.
7 Ninety percent of these received an assessment, however, this study did not
8 compare outcomes between groups of participants who received and did not
9 receive a psychosocial assessment.

10
11 KAPUR2003 conducted a prospective study to look at the differences in six
12 UK hospitals in regards to their management (including rate of psychosocial
13 assessments received by participants) and direct costs associated with
14 participants presenting for self-poisoning. Three of these hospitals had a
15 multidisciplinary self-harm teams consisting of medical or nursing staff as
16 well as social workers who carried out the assessments. Over a 5 month
17 study period there were 1,778 episodes of self-poisoning involving 1,306
18 people aged over 16 years. When looking at differences between hospitals,
19 rates of admission following an episode of self-harm varied from 16.5% to
20 81.3%, rates of psychosocial assessment varied from 28.5% to 57.7%, rates of
21 admission to a psychiatric bed varied from 1.8% to 6.2% and the rate of
22 specific follow-up being arranged by the hospital varied from 16.3% to 58.6%.
23 Hospital costs (including capital charges and general services) ranged from
24 £228 to £422. The rate of repetition varied from 10.3% to 16.1%, but the
25 difference between hospitals was not statistically significant. Furthermore,
26 the rate was similar in the hospitals with a self-harm team (14%) and with no
27 such team (15.2%). 604 participants who had presented in the first 8 weeks of
28 the study were followed up to measure repetition of self-poisoning within 12
29 weeks of their index presentation of which 88 participants (14.6%) repeated
30 self-poisoning. This study found that the repetition rate of participants
31 receiving an assessment was 9.8% compared to 17.9% in those who did not
32 receive an assessment and this association reached statistical significance
33 ($p<0.005$) even when adjusted for differences in participants' characteristics
34 such as age, sex, substance dependence, previous self-harm and current
35 contact with psychiatric services (adjusted OR 0.42 CI 95% (0.25-0.71),
36 $p<0.005$). One limitation of this study is that it did not measure rates of
37 repetition in a larger sample. If this had been done, there may have been
38 more significant differences noticed between teaching and district hospitals,
39 hospitals with or without specialist teams and in aspects of management.

40 **6.5.2 Summary**

41 From the evidence review in Section 6.5, due to the studies being very
42 different from each other and therefore not meta-analysable, there was

insufficient evidence to draw any conclusions regarding the association between psychosocial assessment and improvement in outcomes. Nevertheless, psychosocial assessment is an important part of developing care and management plans for self-harm. Reviews conducted in Section 6.2 and 6.3 may inform areas to explore during psychosocial assessment.

6.6 FROM EVIDENCE TO RECOMMENDATIONS

Based on current literature, it is difficult to draw conclusions regarding the association between psychosocial assessment and improvement in outcomes. Nevertheless, an integrated psychosocial assessment should be regarded as part of the therapeutic process to engage the service user.

A comprehensive psychosocial assessment including an assessment of needs and risk should be carried out on all those who have self-harmed. This includes people from black and minority ethnic groups, children and young people, as well as people older than 65 years of age. Assessment should follow the same principles as for adults who self-harm in each sub-group. From the experience of care chapter, the literature highlights the importance of exploring the meaning and functions of self-harm for each individual. Health and social care professionals should treat each episode in its own right and acknowledge each person who self-harm does so for individual reasons.

Risk assessment

The domains of enquiry in the assessment of risk are linked with the evidence from the review of risk and protective factors.

The following risk factors in particular should be considered when assessing risk of repeated self-harm or suicide: previous self-harm and depressive symptoms. These two factors were supported by pooled quantitative analysis. Based on the evidence review, previous self-harm before an index episode is the most robust risk factor predicting both repetition and suicide following self-harm. The size of the evidence base and the adjustment of confounding variables provide stronger support for this risk factor. Another factor, depressive symptoms is also important but less robust.

Other risk factors such as current and past suicidal intent, and psychiatric illness should also be taken into account. Personal and social context associated with the behaviour and any other specific antecedent factors should be noted. Individual risk and protective factors that may increase or decrease risks associated with repetition of self-harm are important as well. Interpersonal relationships with family or significant others may also lead to possible changes (positive or negative) in the level of risk. It is important to note risk factors often overlap with each other, and measuring one maybe a

1 proxy measure for another. The association between factors does not imply
2 any causal relations. Therefore, the evidence review in Section 6.2 is only
3 intended to give guidance on factors to consider in psychosocial assessment,
4 and should not be used for predicting risk.

5 *Risk assessment tools and scales*

6 No risk scale can be recommended for use in isolation to distinguish those at
7 risk of repeated self-harm from those who are not. Based on the evidence
8 reviewed, there are major limitations to making a recommendation for the use
9 of a scale alone to predict whether a person who has a history of self-harm
10 will go on to die by suicide. The main limitation is that suicide in nature is a
11 rare outcome, therefore, the prevalence will always be low which makes it
12 difficult for scales, when tested, to correctly identify the probability that a
13 person with a positive test result really has self-harmed.

14 The results of the risk assessment scales show that it also almost always
15 likely to miss cases that will go on to die by suicide. Furthermore, scales tend
16 to pick up a high number of cases who have been identified as high risk for
17 suicide but who do not then go on to die by suicide, which make them of
18 limited use in its clinical utility.

19
20 There are also limitations for making a recommendation for the use of a scale
21 alone to predict a repeated non-fatal episode of self-harm. Although some
22 scales perform well in correctly identifying the number of people who self-
23 harm who were classified as high risk, they perform poorly in correctly
24 identifying those who were categorised at low risk. Also, the scales will
25 identify many individuals as high risk, but who do not go on to self-harm,
26 reducing its clinical utility. As a result, do not use risk tools or scales to
27 predict future repetition or suicide following self-harm. Risk tools and scales
28 should not be used to determine treatment offers or discharge decisions. Risk
29 tools may be considered to prompt, add detail and help structure
30 psychosocial assessments.

In addition, it is also good practice to identify and agree with service users the specific risks for them. Healthcare professionals should differentiate long term and more immediate risks, and monitor any changes in risks and associated factors, and differentiate long term and more immediate risks.

6.7 RECOMMENDATIONS

General principles of care

Primary care

6.7.1.1 If a person presents in primary care with a history of self-harm and a risk of repetition, consider referring them to community mental health services for assessment. If they are under 18 years, consider referring them to CAMHS for assessment. Make referral a priority when:

- levels of distress are rising, high or sustained
- the risk of self-harm is increasing or unresponsive to attempts to help
- the person requests further help from specialist services
- levels of distress in parents or carers of children and young people are rising, high or sustained despite attempts to help.

6.7.1.2 If a person who self-harms is receiving treatment or care in primary care as well as secondary care, primary and secondary health and social care professionals should ensure they work cooperatively, routinely sharing up-to-date care and risk management plans. In these circumstances, primary health and social care professionals should attend CPA meetings.

6.7.1.3 Primary care professionals should monitor the physical health of people who self-harm. Pay attention to the physical consequences of self-harm as well as other physical healthcare needs.

Psychosocial assessment in community mental health services and other specialist mental health settings: integrated and comprehensive assessment of needs and risks

6.7.1.4 Offer an integrated and comprehensive psychosocial assessment of needs and risks (see recommendations 6.7.1.5-6.7.1.8) to understand and engage people who self-harm and to initiate a therapeutic relationship.

Assessment of needs

6.7.1.5 Assessment of needs should include:

- skills, strengths and assets
- coping strategies

- mental health problems or disorders
- physical health problems or disorders
- social circumstances and problems
- psychosocial and occupational functioning, and vulnerabilities
- recent and current life difficulties, including personal and financial problems
- the need for psychological intervention, social care and support, occupational rehabilitation, and also drug treatment for any associated conditions
- the needs of any dependent children.

6.7.1.6 All people over 65 years who self-harm should be assessed by mental health professionals experienced in the assessment of older people who self-harm. Assessment should follow the same principles as for working-age adults who self-harm (see recommendations 6.7.1.4 and 6.7.1.5). In addition:

- pay particular attention to the potential presence of depression, cognitive impairment and physical ill health
- include a full assessment of the person's social and home situation, including any role they have as a carer, and
- take into account the higher risks of suicide following self-harm in older people.

6.7.1.7 Follow the same principles as for adults when assessing children and young people who self-harm (see recommendations 6.7.1.4 and 6.7.1.5), but also include a full assessment of the person's family, social situation, and child protection issues.

6.7.1.8 During assessment, explore the meaning of self-harm for the person and take into account that:

- each person who self-harms does so for individual reasons, and
- each episode of self-harm should be treated in its own right and a person's reasons for self-harm may vary from episode to episode.

Risk assessment

A risk assessment is a detailed clinical assessment that includes the evaluation of a wide range of biological, social and psychological factors that are relevant to the individual and, in the judgement of the healthcare professional conducting the assessment, relevant to future risks, including suicide and self-harm.

6.7.1.9 When assessing the risk of repetition of self-harm or risk of suicide, identify and agree with the person who self-harms the specific risks for them, taking into account:

- methods and frequency of current and past self-harm
- current and past suicidal intent
- depressive symptoms and their relationship to self-harm
- any psychiatric illness and its relationship to self-harm
- the personal and social context and any other specific factors preceding self-harm, such as specific unpleasant affective states or emotions and changes in relationships
- specific risk factors and protective factors (social, psychological, pharmacological and motivational) that may increase or decrease the risks associated with self-harm
- coping strategies that the person has used to either successfully limit or avert self-harm or to contain the impact of personal, social or other factors preceding episodes of self-harm
- significant relationships that may either be supportive or represent a threat (such abuse or neglect) and may lead to changes in the level of risk
- immediate and longer-term risks.

6.7.1.10 Consider the possible presence of other coexisting risk-taking or destructive behaviours, such as engaging in unprotected sexual activity, exposure to unnecessary physical risks, drug misuse or engaging in harmful or hazardous drinking.

6.7.1.11 When assessing risk, consider asking the person who self-harms about whether they have access to family members', carers' or significant others'¹⁸ medications.

6.7.1.12 In the initial management of self-harm in children and young people, advise parents and carers of the need to remove all medications or, where possible, other means of self-harm available to the child or young person

6.7.1.13 Be aware that all acts of self-harm in older people should be taken as evidence of suicidal intent until proven otherwise.

Risk assessment tools and scales

Risk assessment tools and scales are usually checklists that can be completed and scored by a clinician or sometimes the service user depending on the nature of the tool or scale. They are designed to give a crude indication of the level of risk (for example, high or low) of a particular outcome, most often suicide.

6.7.1.14 Do not use risk assessment tools and scales to predict future suicide or repetition of self-harm.

¹⁸ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

1 **6.7.1.15** Do not use risk assessment tools and scales to determine who should
2 and should not be offered treatment or who should be discharged.

3 **6.7.1.16** Risk assessment tools may be considered to help structure risk
4 assessments as long as they include the areas identified in
5 recommendation 6.7.1.9.

6 **Developing an integrated care and risk management plan**

7 **6.7.1.17** Summarise the key areas of needs and risks identified in the
8 assessment (see recommendations 6.7.1.5-6.7.1.11) and use these to
9 develop a care plan (see recommendations 6.7.1.20-6.7.1.21) and a risk
10 management plan (see recommendations 6.7.1.22 and 6.7.1.23) in
11 conjunction with the person who self-harms and their family, carers
12 or significant others¹⁹ if this is agreed with the person. Provide
13 printed copies for the service user and share them with the GP.

14 **6.7.1.18** If there is disagreement between health and social care professionals
15 and the person who self-harms about their needs or risks, consider
16 offering the person the opportunity to write this in their notes.

18 *Longer-term treatment and management of self-harm*

19 **Provision of care**

20 **6.7.1.19** Mental health services (including community mental health teams
21 and liaison psychiatry teams) should generally be responsible for the
22 routine assessment (see recommendations 6.7.1.4-6.7.1.18), and the
23 longer-term treatment and management of self-harm. In children and
24 young people this should be the responsibility of tier 2 and 3
25 CAMHS.²⁰

26 **Care plans**

27 **6.7.1.20** Discuss, agree and document the aims of longer-term treatment in the
28 care plan with the person who self-harms. These aims may be to:

- 29 • prevent escalation of self-harm
- 30 • reduce harm arising from self-harm or reduce or stop self-harm
- 31 • reduce or stop other risk-related behaviour
- 32 • improve social or occupational functioning
- 33 • improve quality of life
- 34 • improve any associated mental health conditions.

¹⁹ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

²⁰ Tier 2 CAMHS: primary care; Tier 3 CAMHS: community mental health teams.

Review the person's care plan with them, including the aims of treatment, and revise it at agreed intervals of not more than 1 year.

6.7.1.21 Care plans should be multidisciplinary and developed collaboratively with the person who self-harms and their family, carers or significant others²¹. Care plans should:

- identify realistic and optimistic long-term goals, including education, employment and occupation
- identify short-term treatment goals (linked to the long-term goals) and steps to achieve them
- identify the roles and responsibilities of any team members and the person who self-harms
- include a jointly prepared risk management plan (see recommendations 6.7.1.22-6.7.1.25)
- be shared with the person's GP.

Risk management plans

6.7.1.22 A risk management plan should be a clearly identifiable part of the care plan and should:

- address each of the long-term and more immediate risks identified in the risk assessment
- address the specific factors (psychological, pharmacological, social and relational) identified in the assessment as associated with increased risk, with the agreed aim of reducing the risk of repetition of self-harm and/or the risk of suicide
- include a crisis plan outlining self-management strategies and how to access services during a crisis when self-management strategies fail
- ensure that the risk management plan is consistent with the long-term treatment strategy.

Inform the person who self-harms of the limits of confidentiality and that information in the plan may be shared with other professionals.

6.7.1.23 Update risk management plans regularly for people who continue to be at risk of further self-harm. Monitor changes in risk and specific associated factors for the service user, and evaluate the impact of treatment strategies over time.

²¹ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

Provision of information about the treatment and management of self-harm

6.7.1.24 Offer the person who self-harms relevant written and verbal information about, and give time to discuss with them, the following:

- the dangers and long-term outcomes associated with self-harm
- the available interventions and possible strategies available to help reduce self-harm and/or its consequences (see 4.5.1.1 and 7.5.1.1)
- treatment of any associated mental health conditions (see Sections 7.2 and 8.5).

6.7.1.25 Ensure that people who self-harm, and their families, carers and significant others²² where this is agreed with the person, have access to the 'Understanding NICE guidance' booklet for the short-term management of self-harm (NICE clinical guideline 16), and for the longer-term management of self-harm (NICE clinical guideline XXX).

6.8 RESEARCH RECOMMENDATION

6.8.1.1 The effectiveness of psychosocial assessment with a valid risk scale, compared with psychosocial assessment, for the management of people who self-harm (including young people)

For people who self-harm (including young people), does the provision of psychosocial assessment with a validated risk scale, compared with psychosocial assessment alone, improve outcomes?

This question should be answered using a well-conducted randomised controlled trial. The assessment should be conducted by mental health professionals in community mental health teams. The main outcomes should include both hospital-reported and self-reported repetitions of self-harm. Outcomes such as service users' experience of assessment and the impact on therapeutic engagement should also be included. The duration of the study should be at least 6 months.

Why this is important

There are many different scales aimed at predicting the risk of self-harm and these are widely used in clinical practice. The sensitivity and specificity of these scales are, at best, modest. While individual scales may provide useful prompts for making a psychosocial assessment, it is possible that they may disrupt engagement and encourage clinicians to treat risk as dichotomous rather than continuous. It is therefore important to establish how they are used, how their use is experienced and whether scales do or do not improve tangible service-user outcomes.

²²'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

7 PSYCHOSOCIAL INTERVENTIONS

This chapter provides an evaluation of the evidence for psychosocial interventions for the management and treatment of people who self-harm.

As discussed in the short term guideline (NICE, 2004) self-harm is not a medical diagnosis but a heterogeneous set of behaviours, which can have different meanings in different contexts. Therefore psychosocial interventions need to take account of this complexity (Hjelmeland *et al.*, 2002; O'Connor, *et al.*, 2011b) and recognise that there is no 'one size fits all' intervention for self-harm. A key aim of any intervention is to reduce self-harm through understanding the specific contributing factors in each individual.

7.1 INTRODUCTION

Management of self-harm takes place in a wide range of health and social care settings across children, young people and adult services. Provision of self-harm services in the UK appears to be variable, (Kapur *et al.*, 1998; Bennewith *et al.*, 2004) and many individuals do not receive specialist follow up or interventions (Kapur *et al.*, 1999). Self-harm is also a key factor in the treatment of a wide range of psychiatric disorders and difficulties, including borderline personality disorder (Bateman & Fonagy 2009; Clarkin *et al.*, 2007) and substance misuse (Gunnell *et al.*, 2008; Sinclair, Hawton & Gray, 2010a).

The treatment of self-harm can be through distinct stand alone psychological therapies (O'Connor *et al.*, 2011b) or adjunctive treatments which operate alongside standard care such as contact by letter, postcard, telephone or provision of crises cards (Kapur *et al.*, 2010a). The setting in which treatment is provided is also important, for example at home or in community mental health settings. Who provides the treatment also needs to be considered. Generic mental health services and the voluntary sector have important roles in contemporary service provision, and specialist multi-disciplinary self-harm teams in secondary care are becoming increasingly common. Interventions for self-harm may focus on the behaviour itself; or take a more holistic approach by dealing with relationships, cognitions and social factors. Interventions may be delivered individually or in groups. Therapeutic engagement is very important in this group of service users who some professionals might find it hard to treat (Ougrin *et al.*, 2010). There may be some benefit in differentiating between those who have a transient relationship with self-harm, and those people whose self-harm is more enduring over longer periods of time. Despite the range of treatments and

1 service provision, the evidence to date in terms of the effectiveness of
2 psychological or psychosocial interventions remains unclear.

3 *Aim of review*

4 This review aimed to explore the effect of psychological interventions on the
5 repetition of self-harm. This was selected as the main outcome because of its
6 clinical importance, the relationship of repeat self-harm to suicide, and its
7 inclusion as an outcome in most studies to date. However, it is accepted that
8 this is not always the only outcome of interest in clinical settings. The effect
9 of intervention on a range of psychological factors and engagement with
10 services was therefore also reviewed.
11

12 **7.1.1 Studies considered²³**

13 An existing systematic review was identified (Hawton *et al.*, 2011) for which
14 the authors made their data available to the NCCMH team. The review
15 included 49 studies, of which, 5 studies reviewed pharmacological
16 interventions (see Chapter 8). This chapter included 34 studies relating to
17 psychosocial interventions (ALLARD1992; BENNEWITH2002; BROWN2005;
18 CARTER2005; CEDEREKE2002; CLARKE2002; COTGROVE1995;
19 DONALDSON2005; DUBOIS1999; EVANS1999A; FLEISCHMANN2008;
20 GIBBONS1978; GUTHRIE2001; HARRINGTON1998; HAWTON1981;
21 HAWTON1987; HAZELL2009; LIBERMAN1981; MCLEAVEY1994;
22 MORGAN1993; PATSIOKAS1985; SALKOVSKIS1990; SLEE2008;
23 SPIRITO2002; STEWART2009; TYRER2003A; TORHORST1987;
24 TORHORST1988; VAIVA2006; VAN DER SANDE 1997; VAN HEERINGEN
25 1995; WATERHOUSE1990; WELU1977; WOOD2001). Seven studies looked
26 specifically at interventions treating population with borderline personality
27 disorder (BPD) (BATEMAN2009; GRATZ2006; LINEHAN1991;
28 LINEHAN2006; MCMAIN2009; TURNER2000; WEINBERG2006), and one
29 (EVANS1999B) looked at treatment for personality disorder. These studies
30 would be excluded from the current analysis as they had been reviewed in the
31 NICE guideline for BPD, but a brief summary of the overall findings of these
32 studies was included in Section 7.1.6. Treatment for underlying BPD should
33 be referred to the relevant NICE guideline CG 78 (NICE, 2009e).
34

35 Additional systematic searches were undertaken to update the review in
36 January 2011. An additional two studies were identified (CARTER2007,
37 BEAUTRAIS2010). Further to this, an additional unpublished study was
38 identified by contacting researchers known to be working in this area
39 (GREEN2011).

²³ Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is in press or only submitted for publication, then a date is not used).

1
2 The categories into which studies in the review (Hawton *et al.*, 2011) had been
3 grouped was maintained (with one exception: intensive interventions in
4 Section 7.1.2).

5
6 Psychological interventions included in the meta-analysis (Section 7.1.2) were:
7 Problem-solving therapy; cognitive behavioural therapy;
8 psychodynamic therapy; interpersonal problem-solving skills training
9

10 Psychosocial, service level interventions included in the meta-analysis
11 (Section 7.1.2) were:

12 Intensive interventions; emergency card interventions; telephone
13 supportive contact; postcard interventions
14

15 Psychosocial, service level interventions included in the narrative reviews
16 (Section 7.1.4) were:

17 long or short term therapy; continuity of therapist; home or outpatient
18 interventions; general hospital admission or discharge to GP;
19 compliance enhancement; case management; and GP letters.
20

21 The primary outcome is repetition of self-harm. Other dichotomous outcomes
22 included death by suicide and treatment attendance. Continuous outcomes
23 such as depression, hopelessness, and suicidal ideation scores were also
24 extracted where reported.
25

26 The clinical evidence for psychological interventions that had been meta-
27 analysed are presented in Section 7.1.2, followed by narrative reviews of
28 single trial psychosocial interventions in Section 7.1.4. The review of trials for
29 children and young people followed the same sequence in Section 7.1.7.
30
31

Table 25 - Summary study characteristics of trials comparing psychological interventions versus treatment as usual

	a. Psychological therapy versus TAU
Total no. of trials (N)	10 RCTs (1458)
Study ID	1) GIBBONS1978 2) PATSIOKAS1985 3) HAWTON1987 4) SALKOVSKIS1990 5) DUBOIS1999 6) GUTHRIE2001 7) TYRER2003a 8) BROWN2005 9) SLEE2008* 10) STEWART2009*
Diagnosis	1) 44% had diagnosis of depressive neurosis, 2% phobic neurosis, 2% affective psychosis, and 1% schizophrenia. No baseline difference between groups. 2) Not reported. No baseline difference in demographics, psychiatric diagnosis, previous attempts, or suicidal intent. 3) Not reported. No baseline difference in demographics, previous psychiatric problems, prior history of self-harm, psychiatric symptoms. 4) Not reported. 5) unclear 6) 55% had psychiatric history. 7) 42% diagnosed with personality disorder.(ICD-10). No difference in baseline characteristics. 8) 68% had diagnosis of substance abuse and 77% major depressive disorder (SCID-DSM-IV); No baseline difference in demographics and psychiatric diagnosis. 9) Not reported. No baseline difference in demographics. 10) Not reported.
Recruitment setting	1) Patients who presented to an A&E department after deliberate self-poisoning. 2) Patients admitted to psychiatric ward for suicide attempt. 3) Patients admitted to general hospital for self poisoning. 4) Patients who were referred by a psychiatrist following antidepressant self-poisoning and assessed in an A&E department. 5) Patients attending emergency department after a suicide attempt. Not hospitalised for more than 24 hours. 6) Patients presenting to hospital after self-poisoning. 7) Patients presenting to hospital after self-harm 8) Patients presenting to hospital after suicide attempt. Received medical/psychiatric evaluation within 48 hours. 9) Patients presenting to hospital/mental health centre following self-harm 10) Patients presenting to a hospital after a suicide attempt, either discharged with referral for community follow up
Number of sessions and	1) Unclear: number of sessions up to 3 months 2) 10 sessions (60 minutes each) for 3 weeks

treatment length	<p>3) Average of 3 sessions (Range 1 to 8 sessions lasting 54 minutes). Treatment length not stated.</p> <p>4) 5 sessions lasting 60 minutes each for 1 month</p> <p>5) 5 sessions for 1 month</p> <p>6) 4 weekly 50 minutes sessions</p> <p>7) Up to 5 sessions (plus 2 booster sessions)</p> <p>8) 10 weekly or biweekly sessions for 10 to 20 weeks</p> <p>9) 12 sessions (plus 3 follow up sessions) for 5.5 months</p> <p>10) 4 & 7 sessions of 60 minutes each</p>
Country	<p>1)UK</p> <p>2)USA</p> <p>3)UK</p> <p>4)UK</p> <p>5)France</p> <p>6)UK</p> <p>7)UK</p> <p>8)USA</p> <p>9)Netherlands</p> <p>10)Australia</p>
Intervention	<p>1) Home-based problem-solving intervention</p> <p>2) Non home-based cognitive structuring and problem-solving intervention</p> <p>3) Non home-based problem-solving intervention</p> <p>4) Home-based problem-solving intervention</p> <p>5) Brief psychotherapy</p> <p>6) Home-based psychodynamic intervention focused on interpersonal problem-solving</p> <p>7) Non home-based, manual-assisted cognitive behaviour therapy</p> <p>8) Non home-based cognitive therapy</p> <p>9) Non home-based cognitive behavioural intervention</p> <p>10) Non home-based cognitive behavioural and problem-solving interventions</p>
Control	<p>1) Usual care: 54% were referred to their GP, 33% received a psychiatric referral, and 13% received unspecified referral.</p> <p>2) Non-directive therapy: open discussion about suicidal behaviour, problems, and daily life.</p> <p>3) GP care (individual support, marital therapy).</p> <p>4) Usual care.</p> <p>5) Treatment as usual: attended an assessment by a clinical psychiatrist and upon leaving were followed-up by a psychiatrist or psychologist.</p> <p>6) Usual care, in most cases assessment by doctor in ED and referral to psychiatry outpatient, addiction services or GP.</p> <p>7) Normally psychiatric assessment, outpatient care, occasional day-patient care or referral back to GP.</p> <p>8) Usual care from clinicians in the community. Case managers track patients on regular basis and refer services to community mental health team or social services when necessary.</p> <p>9) Treatment as usual (e.g. psychotropic medication, psychotherapy, hospitalization).</p> <p>10) Treatment as usual: community follow up by telephone visits, appointments with the psychiatrist, liaison with the client's GP, or networking with social supports. (no specialized therapy)</p>

Source for primary outcome (repetition) and follow up period	1) Hospital records (plus GP notes) (at 6-12 months) 2) Did not report this outcome 3) Mixture (interviews, GP interviews, hospital). Did not report outcomes for each separately. (at 6-12 months) 4) Hospital records (at 0-6 months and over 12 months) 5) Unclear (at 6-12 months) 6) Mixture (majority self report repetitions with no hospital treatment; some self-reported re-admission to hospitals and a few identified from computer records) (at 0-6 months) 7) Interviews checked with hospital record (at 6-12 months) 8) Unclear (over 12 months) 9) Interviews checked with hospital record (at 6-12 months) 10) Hospital records (at 0-6 months)
* new studies since short term guideline (NICE 2004)	

1

2 7.1.2 Clinical evidence for psychosocial interventions

3 *a) Psychological therapy versus treatment as usual (TAU)*

4 10 studies were combined to investigate the effects of psychological therapy
5 compared with treatment as usual on the treatment of self-harm. Given the
6 variation in modality and duration of psychological therapies, components of
7 standard care, and prevalence of psychiatric disorders in these studies, the
8 results should be interpreted with caution.

9

10 Psychological therapies included problem-solving therapy, cognitive
11 behavioural therapy, and psychodynamic interpersonal therapy. They were
12 conducted either at home (home-based therapies) or in outpatient settings.
13 Evidence from each important outcome and overall quality of evidence were
14 presented after each review. The full evidence profiles and associated forest
15 plots could be found in Appendix 16.

16 **Effects on repetition (up to 6 months)**

17 Three studies (SALKOVSKIS1990, GUTHRIE2001, STEWART2009) measured
18 repetition up to 6 months since trial entry. Less people from the treatment
19 group had a repetition of self-harm compared with the TAU group. A
20 statistically significant relative risk of 0.33 (95% CI 0.15 to 0.72) (K=3, N=171)
21 was observed. There was no heterogeneity, however, the outcome was of low
22 quality.

23 **Effects on repetition (6 to 12 months)**

24 Five studies (GIBBONS1978, HAWTON1987, DUBOIS1999, TYRER2003A,
25 SLEE2008) measured repetition from 6 to 12 months since trial entry. Less
26 people from the treatment group had a repetition of self-harm compared with

the TAU group. A relative risk of 0.89 (95% CI 0.76 to 1.02) (K=5, N=1067) was observed but it was not statistically significant. The outcome was of moderate quality and there was no heterogeneity.

Effects on repetition (more than 12 months)

Two studies (SALKOVSKIS1990, BROWN2005) measured repetition over 12 months since trial entry. Less people from the treatment group had a repetition of self-harm compared with the TAU group. A statistically significant relative risk of 0.5 (95% CI 0.31 to 0.82) (K=2, N=105) was observed with no heterogeneity. The outcome was of low quality.

Effects on repetition (at last follow up)

As in the review conducted by Hawton and Colleagues (2011) the GDG also considered repetition at its last follow up as an outcome. This approach allowed consideration of the combined findings of all 9 studies. There was a statistically significant 24% reduction in chance of repetition in the treatment group compared with TAU (RR 0.76, 95% CI 0.61 to 0.96) (K=9, N=1323) with acceptable heterogeneity of 30%. The outcome was of low quality.

The results of the above analysis should be interpreted with caution. The source of repetition data varied across the studies. It included a mixture of hospital records, GP interviews, and self-reports. Repetition data from hospital records included only hospital treated episodes, which might underestimate the true number of repetitions that did not require medical attention. Similarly, self-report repetitions might be overestimating the effect detected.

Effects on depression scores (at 6 months)

Four studies measured depression using the Hospital Anxiety and Depression Scale (TYRER2003a) and the Beck Depression Inventory (SLEE2008, GUTHRIE2001 and BROWN2005). There was no evidence of effect in depression scores (SMD -0.33, 95% CI -0.71 to 0.05) (K= 4, N=660) compared with TAU. However, large heterogeneity was observed ($I^2 = 78\%$) and the outcome was of low quality.

Effects on depression scores (at 12 months)

Five studies measured depression using the Hospital Anxiety and Depression Scale (TYRER2003a) and the Beck Depression Inventory (HAWTON1987, SALKOVSKIS1990, SLEE2008 and BROWN2005). There was a statistically significant moderate improvement in depression scores, favouring treatment (SMD -0.54, 95% CI -1.01 to -0.07) (K= 5, N=656) compared with TAU. However, a large heterogeneity was observed ($I^2 = 83\%$) and the outcome was of low quality.

Effects on depression scores (over 12 months)

Two studies measured depression using the Beck Depression Inventory (GIBBONS1978 and BROWN2005). There was no statistical significant effect between groups on this outcome (SMD -0.22, 95% CI -0.48 to 0.05) (K= 2, N=225) compared with TAU. No heterogeneity was observed, however, the outcome was of low quality.

Effects on depression scores (at last follow up)

All seven studies reported in the previous paragraphs were combined for reporting depression scores at its last follow up. There was a statistically significant small improvement in depression scores (SMD -0.43, 95% CI -0.76 to -0.12) (K=7, N=878) favouring treatment over TAU. However, a large heterogeneity was observed ($I^2=75\%$) and the outcome was of low quality, limiting confidence in drawing any firm conclusions for this particular outcome.

Effects on hopelessness scores (up to 6 months)

Three studies measured hopelessness using the Beck Hopelessness scale (PATSIOKAS1985, STEWART2009 and BROWN2005). There was a statistically significant moderate improvement (SMD -0.52, 95% CI -0.86 to -0.18) (K= 3, N=149) favouring treatment over TAU. No heterogeneity was observed and the outcome was of moderate quality.

Effects on hopelessness scores (at 12 months)

Two studies measured hopelessness using the Beck Hopelessness scale (SALKOVSKIS1990 and BROWN2005). There was no statistically significant difference between groups (SMD -0.7, 95% CI -1.76 to 0.35) (K= 2, N=121). Moreover, a high heterogeneity was observed ($I^2=74\%$) and the outcome was of very low quality.

Number of participants with improved problems (at 4 months)

Two problem-solving trials measured participants' perceived social problems experienced in various life areas (GIBBONS1978, HAWTON1987). There was a statistically significant improvement favouring treatment over TAU (RR 1.28, 95% CI 1.09 to 1.49) (K= 2, N=231). No heterogeneity was observed, however, the outcome was of low quality.

Number of participants with improved problems (at last follow up)

The same two studies measured participants' perceived social problems experienced in various life areas. The last assessment point for GIBBONS1978 is 12 months and 9 months for HAWTON1987. The effect was no longer statistically significant at last follow up (RR 1.32, 95% CI 0.89 to 1.96) (K= 2,

N=211). Large heterogeneity was observed ($I^2=81\%$) and the outcome was of very low quality. Compared with the effect observed at four months, this might imply the beneficial effect was not sustained in the longer term.

Effects on suicidal ideation scores (up to 6 months)

Three studies measured suicidal ideation using the Beck Scale for Suicide Ideation (GUTHRIE2001, STEWART2009) and the Scale for Suicide Ideation (PATSIOKAS1985). There was a statistically significant moderate improvement (SMD -0.54, 95% CI -0.92 to - 0.16) (K= 3, N=142). No heterogeneity was observed, however, the outcome was of low quality.

Completed suicides at last follow up

Four out of the eight psychological interventions reported number of completed suicides (K=8, N=770). No suicides occurred in the remaining four studies. Since suicide was a rare event, a meta-analysis was not possible. Overall, there were more suicides amongst participants in TAU group (7/382) than the treatment group (2/388). For both HAWTON1987 and TYRER2003a there was only one suicide in each of the treatment arms. In BROWN2005 and SLEE2008 one suicide occurred in each of the control groups, and five suicides occurred in the control group in TYRER2003a. No conclusions could be drawn from these data.

Attendance at treatment

Low attendance rates or missing data might lead to an overestimation of study effects. This issue had been addressed somewhat by employing intent-to-treat analysis for all dichotomous outcomes. Nevertheless, no firm conclusions could be drawn from the below evidence.

All participants in the treatment group completed all sessions of therapy, in contrast to a dropout rate of 21% (9/42) in the comparison group in SLEE2008. Overall 34% in the CBT group and 38% in the problem-solving group completed the sessions as opposed to 26% in the control group in STEWART2009.

Most studies reported adherence data for the intervention group only. In BROWN2005, 50% received 10 or more treatment sessions. 86% (50/58) completed more than half the treatment sessions and 60% (35/58) completed all treatment sessions in GUTHRIE2001. 40% of participants did not attend treatment sessions in TYRER2003a. Finally, 49% completed 1 to 8 sessions and 22% attended no sessions (HAWTON1987).

Summary of treatment components

1 The treatments in the pooled studies varied in terms of settings, length of
 2 treatment, modality of treatment, and were delivered by a range of
 3 professionals. Three studies were home-based interventions
 4 (SALKOVSKIS1990, GIBBONS1978 and GUTHRIE2001). Social workers or
 5 nurses conducted home-visits ranging from 4-5 sessions within 1 to 3 months.
 6 Both home-based treatments started within 1 week of the index episode
 7 (SALKOVSKIS1990 and GUTHRIE2001). The non-home based interventions
 8 were conducted in outpatient or clinic settings. They ranged from 3 to 12
 9 sessions delivered by a range of therapists including psychiatrists,
 10 psychologists, counsellors, community psychiatric nurses and social workers.
 11 The treatment sessions (where reported) ranged from 50 to 60 minutes each.
 12 Common treatment modalities included cognitive therapy, cognitive
 13 behavioural therapy, problem-solving therapy, and psychodynamic
 14 interpersonal therapy. Most studies did not report details of staff training,
 15 however, the majority of the studies employed therapists who had significant
 16 experience with people who self-harm. Adherence to protocols was ensured
 17 by video or audio taping treatment sessions in 4 studies (PATSIOKAS1985,
 18 GUTHRIE2001, BROWN2005, SLEE2008). HAWTON1987 provided details of
 19 training including standard assessment and treatment procedures. Training
 20 consisted of specific reading, closely supervised assessment and treatment
 21 experience, and attending daily supervision meetings with a senior
 22 psychiatrist. SLEE2008 also provided two days of training in standardised
 23 protocol. Therapists met biweekly (BROWN2005) or monthly for feedback
 24 (SLEE2008).

25 ***b) Other psychosocial therapy versus treatment as usual (TAU)***

	i. Intensive multi-modal intervention versus TAU	ii. Emergency card versus TAU	iii. Telephone contact versus TAU
Total no. of trials (N)	2 RCTs (270)	2 RCTs (1039)	2 RCTs (821)
Study ID	1) ALLARD1992 2) WELU1977	1)MORGAN1993 2)EVANS1999a	1)CEDEREKE2002 2)VAIVA2006
Diagnosis	1) 87 % (n = 131) had diagnosis of depression, 53% (n= 80) substance abuse diagnosis, 45% (n=68) personality disorder. All according to DSM-III. 2) Not reported	1) Most common diagnosis was depressive disorder (22%) (diagnostic tool was not reported) 2) 85% (n = 707) had a diagnosis of any psychiatric disorder (diagnostic tool was not reported)	1) 91% (n = 197) had diagnosis of mood disorder by DSM-III-R 2) Not reported
Recruitment	1) Patients presenting to	1) Patients	1) Patients treated

setting	hospital for a suicide attempt 2) Patients admitted to an A&E department for self-harm	admitted to hospital following first episode of self-harm 2) Patients admitted to general hospital following self-harm episode	in hospital after suicide attempt 2) Patients presenting to hospital after drug overdose
Number of sessions and treatment length	1) Unclear sessions; 12 months 2) Weekly or bi-weekly contacts for 4 months	1) 12 months 2) 6 months	1) 8 months (telephone calls ranged from 20-45 mins) 2) 1 telephone call (duration not specified)
Country	1) Canada 2) US	1) UK 2) UK	1) Sweden 2) France
Intervention	1) Various interventions (e.g. psychoanalytic psychotherapy, psychosocial, drug or behavioural therapy) or therapy provided where needed. 2) Special outreach programme: a community mental health team contacted participants immediately after discharge and at home visit arranged as soon as possible. Various modalities involved	1) Standard care plus emergency green card (emergency card indicating that a doctor was available by telephone and how to contact them) 2) Emergency card plus treatment as usual: participants were provided with an emergency card offering 24-hour service for crisis telephone consultation with an on-call psychiatrist	1) Telephone contact 2) Telephone contact
Control	1) TAU (No details on usual care other than this group was 'treated by regular personnel of hospital) 2) TAU (routine treatment program: psychiatric consultation at request of treating physician. Participants were given a next day appointment for evaluation at the community mental	1) TAU (e.g. referral back to the primary healthcare team, psychiatric inpatient admission) 2) TAU	1) TAU 2) TAU (mostly referred back to GP)

	health team centre. Any further contact after discharge was up to the patient to decide.)		
Source for primary outcome (repetition) and follow up period	1) Hospital records, coroner's office plus interview with participants and other informants 2) Self report, hospital records and interview with family/friends	1) Hospital, psychiatric and GP records 2) Hospital records	1) Interviews checked against patient and admission charts 2) Self-report and hospital records

1 i) Intensive multi-modal intervention versus TAU

2 In the NICE guideline *Self-Harm: Short Term Management* (NCCMH, 2004),
3 there were six studies grouped under comparison of "intensive intervention
4 plus outreach versus standard aftercare" (ALLARD1992; CEDEREKE2002;
5 HAWTON1981; VAN DER SANDE1997; VANHEERINGEN1995;
6 WELU1977). For this guideline, however, four of these studies were included
7 in other comparisons; either single modality or less intensive treatments
8 (CEDEREKE2002; HAWTON1981; VANHEERINGEN1995; VAN DER
9 SANDE1997). The remaining two studies (ALLARD1992, WELU1977) were
10 combined to investigate the effects of intensive multi-modal interventions
11 compared with treatment as usual. The two studies included service users
12 presenting to hospital after a suicide attempt. ALLARD1992 and WELU1977
13 involved the implementation of a range of psychological and pharmacological
14 interventions, which could be combined according to the needs of the service
15 user, including psychoanalytic psychotherapy, behavioural therapy, family
16 counselling and a range of drug treatments amongst others. Wherever
17 possible, the staff involved established contact immediately after the suicide
18 attempt and scheduled visits with the individual.

19 *Effects on repetition (at last follow up)*

20 There was insufficient evidence to determine the clinical effectiveness
21 between intensive intervention and TAU. These studies measured repetition
22 of self-harm, one at 24 months (ALLARD1992), and the other at 4 months
23 follow up (WELU1977). Overall, less people from the treatment group
24 compared with TAU repeated. A relative risk of 0.67 (95% CI 0.18 to 2.49)
25 (K=2, N=245) was observed but it was not statistically significant, with
26 significant heterogeneity ($I^2=74\%$). Also, the results must be interpreted with
27 caution as the study was of low quality. Some possible reasons for this
28 heterogeneity were the difference in the length of follow-up, the difference in
29 the length of treatment (8 months longer in WELU1977) or the time difference
30 in which the studies were conducted (there is almost 20 years difference

1 between studies). The variabilities in the above studies limited drawing
2 conclusions concerning the clinical effectiveness of intensive interventions on
3 repetition of self-harm in the longer term.

4 *Attendance*

5 Data were reported separately for each study. In ALLARD1992, the
6 experimental group attended more sessions by 12 month follow up (Mean
7 12.35 versus 1.54 sessions; $p<.001$). After the first year participants in the
8 intervention group were referred to standard psychiatric services. At 24
9 months follow up, the intervention group continued to attend more sessions
10 (Mean 2.11 versus 0.64 sessions; $p=.071$).

11 *Suicides*

12 ALLARD1992 reported suicides during the follow up period of two years.
13 Three suicides were reported in the intensive intervention group versus one
14 in the TAU group. The number of suicides in WELU1977 was unclear. No
15 conclusions could be drawn from this data given the rarity of this outcome.
16

17 **ii) Emergency card plus TAU versus TAU**

18 Two studies (MORGAN1993, EVANS1999a) were combined to investigate the
19 effects of emergency card use compared with treatment as usual on the
20 treatment of self-harm. These interventions emphasised the importance of
21 having easy access to on-call professionals in the event of difficulties. In both
22 studies the majority of participants consisted of those who had self-harmed
23 by drug overdose (98% in both studies). However, in MORGAN1993 the
24 participants had no prior history of self-harm, whereas in EVANS1999a, 48%
25 of the participants had a prior history of self-harm. The emergency card
26 treatment consisted of access to either telephone consultation with a trainee
27 psychiatrist (EVANS1999a) or the choice between telephone or face-to-face
28 consultation with a doctor or trainee psychiatrist with the offer of admission
29 to a psychiatric ward if necessary (Morgan1993).

30 *Effects on repetition (at 12 months)*

31 There was insufficient evidence to determine the clinical effectiveness
32 between emergency card intervention and TAU. A longer term follow-up
33 paper (EVANS2005) and MORGAN1993 measured repetition of self-harm at
34 12 months. Overall, less people from the treatment group compared with
35 TAU repeated. A relative risk of 0.83 (95% CI 0.35 to 1.97) ($K=2$, $N=1039$) is
36 observed but it is not statistically significant, with high heterogeneity ($I^2=67\%$)
37 and low quality. Some possible reasons for this high heterogeneity are the
38 differences noted above in prior history of self-harm and the longer treatment

period in MORGAN1993 (6 months versus 12 months). This limited our ability to draw any conclusions from this finding.

Suicides

Only one study (EVANS1999a) reported suicides during the follow up period of one year. Two suicides were reported in the emergency card group versus one in the TAU group. No suicides occurred in MORGAN1993. No conclusions can be drawn from this data due to the small evidence base.

iii) Telephone contact plus TAU versus TAU

Two studies (CEDEREKE2002, VAIVA2006) were combined to investigate the effects of telephone contact compared with treatment as usual on the treatment of self-harm. The active approach of establishing contact with participants aimed to increase motivation and engagement with treatment. Both studies consisted of participants who were treated after a suicide attempt and the majority were repeat attempters. Telephone contact consisted mainly of contact with an experienced therapist over the phone at two different time periods (4 and 8 months in CEDEREKE2002 and 1 and 3 months in VAIVA2006).

Effects on repetition (at last follow up)

There was insufficient evidence to determine the clinical effectiveness between telephone contact plus routine care and TAU. VAIVA2006 reported repetition of self-harm both at one and three months follow up, and CEDEREKE2002 reported one outcome (repetitions between 1 and 12 months). There was no statistical difference between telephone contact and treatment as usual after a period of one month (RR 0.89, 95% CI 0.62 to 1.28) (K=2, N=674) nor three months (RR 0.79, 95% CI 0.54 to 1.16). No heterogeneity was observed and both of these studies are of moderate quality. No conclusions could be drawn due to the small evidence base.

Treatment attendance (at 12 months follow up)

CEDEREKE2002 found no difference in the number of participants attending treatment (60/83) at least once during the 12 months follow up compared with control group (58/89).

Suicides

Studies reported suicides at follow up of 12 months (CEDEREKE2002) and 13 months (VAIVA2006). Since suicide was a rare event, the results were not meta-analysed. One suicide was reported in both the treatment group and TAU group in CEDEREKE2002 and two suicides were reported in TAU group in VAIVA2006. No conclusions could be drawn from these data.

iv) Postcard interventions plus TAU versus TAU

Two studies (CARTER2005, BEAUTRAIS2010) looked at effectiveness of postcard interventions in addition to TAU compared with TAU alone. The intervention consisted of sending a series of postcards following participants' index presentation of self-harm.

Table 26 - Summary study characteristics of trials comparing postcard interventions versus treatment as usual

	Postcard interventions versus TAU	Postcard interventions versus TAU
Total no. of trials (N)	1 RCT (772)	1 RCT (327)
Study ID	1a) CARTER2005 1b) CARTER2007 (24 months follow up study of CARTER2005)	BEAUTRAIS2010
Diagnosis	43% had diagnosis of any affective disorder, 13% alcohol misuse and/or dependence, 40% other substance related disorders, 22% personality disorder.	Unclear
Recruitment setting	1a & 1b) Patients presenting to hospital toxicology service after DSP	Patients presented to psychiatric emergency services after self-harm/attempted suicide
Treatment length	12 months	12 months
Country	Australia	New Zealand
Intervention	8 postcards sent at 1, 2, 3, 4, 6, 8, 10, and 12 months after discharge plus usual care	6 postcards sent at 2, 6 weeks, 3, 6, 9, 12 months after discharge plus usual care
Control	Treatment as usual	Treatment as usual – crisis assessment and referral to in-patient community based mental health services
Source for primary outcome (repetition) and follow up period	Hospital database	Psychiatric emergency services, and hospital medical record

Effects on repetition (at 12 months)

There was insufficient evidence to determine whether there is a clinically significant difference between intervention and TAU during 12 months since trial entry (RR 0.92, 95% CI 0.73 to 1.18) (K=2, N=1099). No heterogeneity was observed and the study was of moderate quality. A follow up study measured

1 repetition at 24 months and found no statistical significant differences
2 between groups (RR 0.93, 95% CI 0.71 to 1.21) (K=2, N=772).

3 *Effects on number of episodes per patient*

4 Although the proportions of participants who repeated was not statistically
5 significant between groups, participants in the experimental group had a
6 much lower mean number of self-harm episodes during the first 12 months
7 (CARTER2005, CARTER2007). However, this result had to be interpreted
8 with caution as this was derived from 18 participants with multiple repeated
9 episodes. An unadjusted incidence risk ratio (IRR) showed a significant
10 reduction in the number of repetitions in the treatment group (IRR 0.55, 95%
11 CI 0.35 to 0.87) compared with control group. This difference persisted at two
12 years follow up (IRR 0.49, 95% CI 0.33 to 0.73). BEAUTRAIS2010 reported
13 similar findings with an unadjusted IRR 0.73 (95% 0.56 to 0.95). However,
14 when adjusted for prior self-harm, the effect is no longer significant (adjusted
15 IRR 1.07, 95% CI 0.8 to 1.43). This attenuation in effect after adjustment for
16 prior self-harm might indicate the observed results were derived from small
17 sub-group who repeatedly self-harm.
18

19 *Suicide*

20 In the first year following trial entry, there were two suicides in the
21 intervention group and four in the control group (CARTER2005). At 24
22 months after trial entry there were still two suicides in the intervention group,
23 but five in the control group (CARTER2007). Both suicides in the intervention
24 group occurred in males, and all but one in the control group were males. The
25 number of suicides was not reported in BEAUTRAIS2010.
26

27 Results should be interpreted with caution as these two postcard studies
28 varied in a number of ways. In CARTER2005 and CARTER2007 more
29 postcards were sent compared with BEAUTRAIS2010. In addition,
30 CARTER2005 and CARTER2007 recruited only people who had self-
31 poisoned, whereas BEAUTRAIS2010 recruited a mixture of self-poisoning and
32 self-cutting individuals. The postcard intervention might have reduced the
33 number of repeated episodes per participant. This was, however, confounded
34 by the history and chronicity of prior self-harm. An important limitation to
35 note in CARTER2005 and CARTER2007 was the small proportion (less than
36 20%) of participants who repeated more than once. This highly skewed
37 subgroup might result in an overestimation of the effect of the intervention
38 for most service users. In BEAUTRAIS2010, there were baseline differences
39 between treatment and comparison groups on the history of prior self-harm.
40 After adjustment, the clinical benefit of treatment was no longer valid.

41 **7.1.3 Clinical evidence summary**

Psychological therapy (regardless of treatment modality) might be effective in improving outcomes compared with treatment as usual. The uncertainty lies in the variability found in the population, treatment modalities, as well as comparison arms. The variability was reflected by considerable heterogeneity in a number of outcomes.

There was some evidence drawn from summarising the effect of psychological therapies on reducing per protocol repetition (the primary outcome), suicide ideation scores, and mixed evidence on depression and hopelessness scores. However, the quality of these outcomes was poor for several reasons. First, there were variability and uncertainties in terms of the comparability of the population.

Six of nine studies (in meta-analyses) did not report psychiatric diagnosis of their included population. Also, six studies did not report the percentage of the population who had a previous history of self-harm. For those that reported this data, it ranged from 30% to 100% of participants who had at least one previous attempt prior to study entry. Previous history of self-harm might modify the effect of treatment (for example, treatments might be effective for those presenting with their first self-harm episode but not for those with a past history). Second, the treatment sessions and length varied from 3 to 12 sessions (average 6 sessions) delivered from 3 weeks to 5.5 months. Third, the treatment modalities and settings differed across trials. Fourth, it was uncertain whether psychological treatments had any adverse events as these studies did not report data on this.

A number of other psychosocial interventions were reviewed, namely intensive intervention, provision of emergency cards, establishing contact by telephone support and sending postcards to individuals. However, compared with usual care, there was insufficient evidence to determine clinical effects between interventions and routine care in the reduction of the proportion of participants who repeated self-harm. Thus, no conclusions could be made regarding psychosocial interventions on reduction of repetitions of self-harm.

7.1.4 Narrative review for single trials

Table 27 - Summary study characteristics of single trials comparing psychosocial interventions versus other comparator

	a. Interpersonal problem-solving skills training (IPSST) versus brief problem-oriented therapy	b. Behaviour therapy versus insight-orientated therapy	c. Long-term versus short-term therapy
Total no.	1 RCT (39)	1 RCT (24)	1 RCT (80)

of trials (N)			
Study ID	MCLEAVEY1994	LIBERMAN1981	TORHORST1988
Diagnosis	23% had diagnosis of dysthymia, 15% dependent personality disorder, and 13%, alcohol abuse.	All had diagnosis of depressive neurosis. Most met criteria for personality disorder	Unclear
Recruitment setting	Patients admitted to A&E department following self-poisoning.	Patients were referred by the psychiatric emergency service or the hospital A&E department following self-harm.	Patients who had deliberately self-poisoned referred to liaison service of toxicological ward.
Treatment length	5 weeks, follow up over 12 months	10 days, follow up over 24 months	Long term therapy: once a month for 12 months; Short term therapy: once a week for 3 months
Country	Ireland	USA	Germany
Intervention	5 sessions lasting 60 min. Manualised training consisting of instruction, active discussion, reflective listening, modelling, coping strategy, role playing, sentence completion, and prompting.	Inpatient treatment with behaviour therapy plus aftercare at community mental health centre/private therapy	Following hospitalization for self-poisoning (duration: approximately three days) long-term therapy: 1 therapy session per month over 12 months
Control	Brief problem-solving therapy: therapy focused on patient's current problems and prevention by helping patient gain insight into problems; no specific skills training.	Inpatient treatment with insight orientated therapy plus aftercare at community mental health centre/private therapy.	Following hospitalization for self-poisoning (duration: approximately three days) short-term therapy: 12 weekly therapy sessions over a period of three months.
<i>Note.</i> N = Total number of participants. * new studies since short term guideline (NICE 2004)			

- 1 **a) Interpersonal problem-solving skills training (IPSST) versus brief**
- 2 **problem-oriented therapy**
- 3 MCLEAVEY1994 conducted a small study to compare interpersonal problem-
- 4 solving skills training (IPSST) with brief problem-oriented therapy (BPT).

Thirty four subjects completed treatment and 31 subjects were available after a one year follow up.

Effects on repetition (at 12 months)

There was insufficient evidence to determine clinical difference between IPSST and brief problem-oriented therapy (RR 0.84, 95% CI 0.27 to 2.67). Repetition was assessed as being a "self-poisoning act" within one year of treatment.

Effects on other outcomes

There were no suicides in either treatment group. Results showed that the mean scores of hopelessness measured during the first six months in the experimental group did not differ from control group (SMD 0.07, 95% CI -0.62 to 0.75).

Results reported by the investigators suggest an equal benefit of both treatments in reducing the number of presenting problems and in reducing hopelessness. However, it was reported that IPSST was significantly more effective in interpersonal cognitive problem-solving, self-rated personal problem-solving ability, perceived ability to cope with ongoing problems, and self-perception.

Attendance

Three (15%) subjects in the control group and two (11%) in the treatment group did not complete treatment.

b) Inpatient behaviour therapy versus insight-oriented therapy

One study made the comparison between Inpatient behaviour therapy versus insight-oriented therapy (LIBERMAN1981). Here behaviour therapy covered social skills training, anxiety management, family work, and insight-oriented therapy involving individual therapy, group therapy, psychodrama and family therapy. Both groups received approximately 32 hours of therapy over 10 days.

Effects on repetition

There was insufficient evidence to determine if there was a clinically significant difference between inpatient behaviour therapy and insight-oriented therapy on reducing the likelihood of repetition of self-harm (RR=0.67, 95% CI, 0.13 to 3.3).

Effects on depression scores

After 24 weeks, patients who received behaviour therapy had a large reduction in depression scores (SMD -0.98, 95% CI -1.84 to -0.12) but this effect was not seen at 36 weeks. Behaviour therapy was also of benefit to

1 participants in terms of reported suicide ideation at 6 months and 36 weeks
2 after trial entry.

3 **c) Long-term therapy versus short-term therapy**

4 Only one study made the comparison between long-term and short-term
5 therapy (TORHORST1988). It compared outcomes following 12 monthly
6 therapy sessions with 12 weekly sessions. The type of therapy offered was not
7 specified. Outcomes were measured at the end of treatment for each group.

8 *Effects on repetition*

9 There was insufficient evidence to determine if there was a clinically
10 significant difference between long-term therapy and short-term therapy on
11 reducing the likelihood of repetition of self-harm (RR=1, 95% CI 0.44 to 2.26).

12 *Attendance*

13 The attendance of the long term group 'dropped drastically' by the second
14 session to under 40%, but this was not seen in the 3 month group. The overall
15 attendance rate was very low in both groups (mean sessions for the long term
16 group was 2.6 out of a possible 12 sessions and 3.9 of a possible 12 sessions in
17 the short term group; thus, about 23% attendance compared to about 33%
18 attendance at sessions). Nevertheless, information was available on 97% of the
19 sample at the end of the study.

20 *Effect of treatment on depression*

'Self-evaluated depressivity improved considerably more' for participants in the 12-week programme as compared to the 12 month group. Data were not given numerically but on a graph; difference reported to be 'significant'.

Table 28 - Summary study characteristics of single trials comparing psychosocial interventions versus other comparator

	d. Same versus different therapist	e. Home versus outpatient problem-solving therapy	f. General hospital admission versus discharge
Total no. of trials (N)	1 RCT (141)	1 RCT (96)	1 RCT (77)
Study ID	TORHORST1987	HAWTON1981	WATERHOUSE1990
Diagnosis	Uncertain	Not reported	Not mentioned. None had a psychiatric diagnosis of a depressive illness.
Recruitment setting	Patients hospitalized after suicide attempt.	Patients admitted to a general hospital following deliberate self-poisoning.	Patients admitted to A&E department for self-harm. (No immediate medical or psychiatric treatment needs).
Treatment length	3 months	Not stated, up to 60 minutes per session	Not applicable
Country	Germany	UK	UK
Intervention	Short crisis intervention during hospital stay, fixed outpatient appointment with same therapist as was seen in hospital. Motivational interview, letter and assessment of motivation towards therapy.	Domiciliary (home-based) therapy. Open telephone access to the general hospital service / flexible sessions. Treatment was to be brief, and terminated when patients current crisis resolved. During first 2 months of treatment, sessions could be as frequent but during third month, maximum of 2 sessions was allowed.	General hospital admission. No additional treatment or counselling.
Control	Short crisis intervention during hospital stay, fixed outpatient	Outpatient therapy / 1 session per week.	Discharge from hospital.

	appointment with a different therapist than was seen in hospital. Motivational interview, letter, and assessment of motivation towards therapy.		
Note. N = Total number of participants. * new studies since short term guideline (NICE 2004)			

d) Same therapist versus different therapist in different settings

One study made this comparison (TORHORST1987). All participants received a motivational interview, letter and assessment of motivation towards therapy. This was designed to increase engagement with treatment. Participants in the experimental group then received therapeutic contact with the original hospital therapist in an outpatient setting, whereas participants in the control group received therapy in a specialised suicide prevention centre with a different therapist. This made it hard to assess the effect of treatment. In addition, and despite randomisation, at baseline participants in the same-therapist group had more risk factors for repetition of self-harm than those in the different-therapist group, including being more likely to be older, male and divorced, and having more episodes of self-harm in the year before the index episode. These differences could wholly account for the differences in repetition.

Effects on repetition

There was limited evidence suggesting that there was a clinically significant difference favouring different therapist over same therapist on reducing the likelihood of repetition of self-harm (RR 0.31, 95%CI 0.09 to 1.11).

Attendance

There were significantly more patients in “same therapist” group (49 /68) attended treatment at least once compared with different therapist group (36/73).

Suicide

There was insufficient evidence to determine if there was a clinically significant difference between receiving a different therapist and receiving the same therapist on reducing the likelihood of death by suicide 9 months after treatment (2 suicides in treatment and 3 suicides in control group).

Effects on depression scores

There was no significant difference in depression scores between the groups at 12 months after trial entry (SMD -0.17, 95% CI -0.52 to 0.18).

e) Home versus outpatient problem-solving therapy

Hawton (1981) compared the delivery of brief problem-orientated counselling in two different ways, namely flexibly-timed home-based therapy (including access via telephone services to the general hospital psychiatric service) versus treatment in weekly outpatient clinics.

Effects on repetition

During the year following treatment entry the repetition of self-harm was measured. There was no significant difference in repetition which occurred in 5/48 participants in the domiciliary treatment group as compared to 7/48 in the outpatient group (RR 0.71, 95% CI 0.24 to 2.09)

Attendance

A greater number of participants in the domiciliary group attended one treatment session or more (45/48) when compared to the outpatient group (35/48).

Effects on depression scores

There was no significant difference in mean depression scores post treatment (adjusted for pre-treatment differences), in the domiciliary group 2.91 (N=44) and the outpatient group 2.71 (N=44) (F=0.09), which was not statistically significant. After 6 months, domiciliary group mean score 2.49 (N=42) versus outpatient group mean score 2.61 (N=40) (F=0.03), which was not statistically significant. The study did not report standard deviations.

f) General hospital admission versus discharge

One study assessed the effect of general hospital admission versus non-admission in a group of self-harm 'parasuicide' patients attending an emergency room who had 'no immediate medical or psychiatric treatment needs' ([Waterhouse, 1990](#)). In this study no additional treatment was offered to either group, although all patients were advised to contact their GP on discharge. Average length of admission was 17 hours. Only those who did not require hospital admission because of medical or psychiatric needs were included in the study, and the majority of patients were not randomised as they were considered to pose too great a risk to be assigned to the non-admission group. Therefore, the patients included in the study constitute an extremely biased sample.

Effects on repetition

There was insufficient evidence to determine if there was a clinically significant difference between general hospital admission and discharge on reducing the likelihood of repetition (RR=0.77; 95% CI, 0.18 to 3.21).

1 *Effects on hopelessness scores*

2 There was also no significant difference in hopelessness scores as measured
3 after one week (mean 10.29, SD 5.68 versus mean 10.21, SD 4.97), however, the
4 number of patients in each group were not reported for this outcome.

5 *Effects on suicidal ideation scores*

6 At four months, there was also no evidence of a difference in suicidal ideation
7 scores between the two groups (SMD 0.28, 95% CI -0.26 to 0.83).

1 **Table 29 - Summary study characteristics of single trials comparing psychosocial interventions versus treatment as usual**

	g. Compliance enhancement versus TAU	h. Intensive inpatient and community treatment versus TAU	i. Case management versus TAU	j. Supportive contact versus TAU	k. GP's letter to patient/enhanced care versus TAU
Total no. of trials (N)	1 RCT (516)	1 RCT (240)	1 RCT (467)	1 RCT (1867)	1 RCT (1932)
Study ID	VAN HEERINGEN1995	VAN DER SANDE1997	CLARKE2002	FLEISCHMANN2008*	BENNEWITH2002
Diagnosis	15% had a diagnosis of mood disorder, 3% of anxiety disorder.	32% had diagnosis of mood disorder and adjustment disorder.	17% had psychiatric history, 13% alcohol problems, 3% schizoaffective disorder.	Not reported	Not reported
Recruitment setting	Patients treated in A&E department after a suicide attempt.	Patients admitted to hospital following a suicide attempt.	Patients presenting to hospital for deliberate self-harm	Patients attending an emergency care setting with a diagnosis of self-harm or self-poisoning by medical staff.	Participants found in hospital case register for self-harm.
Treatment length	Unclear	Flexible appointments usually on weekly basis.	Up to 6 months	18 months	Unclear
Country	Belgium	Netherlands	UK	Brazil	UK
Intervention	Compliance enhancement plus usual care - home visits were made to participants who did not keep outpatient appointments, the reasons for not	Brief psychiatric unit admission, encouraging participants to contact unit on discharge. CPN assigned to establish therapeutic relationship w patient. Treatment by CPN based on prob-	Case management consisting of psychosocial assessment, a negotiated care plan, and 'open access' to case manager who helped patient identify and access	Treatment as usual plus brief intervention ("information about suicidal behaviour as a sign of psychological and/or social distress, risk and protective factors, basic	Letter from GP for consultation in surgery.

	attending appointments were discussed and the patient was encouraged to attend.	solving approach. Out-patient therapy plus 24-hour emergency access to unit.	suitable services plus usual care.	epidemiology, repetition, alternatives to suicidal behaviours, and referral options") plus follow up contact (via phone or visits; referral support) at 1, 2, 4, 7 and 11 week(s), and 4, 6, 12 and 18 months).	
Control	Out-patients appointments only; non-compliant participants were not visited.	Usual care. Patients were assigned by the routine clinical service and could consist of all currently available alternative treatments. 75% were discharged from hospital; of these patients, almost 90% were referred to an out-patient clinic. 25% were referred for hospitalisation in a psychiatric clinic.	Usual care consisting of triage, medical and psychosocial assessment and treatment as required. For patients who were admitted from A&E for further treatment, usual treatment generally involved a request for a psychiatric assessment.	Treatment as usual "according to the norms prevailing in the respective emergency departments" (typically treatment for somatic problems).	Usual general practice care. (No structured feedback about patient management. GPs in control group had initiated contact with only (97/642) 15% of patients, compared to (352/612) 58% in intervention group).
<p>Note. N = Total number of participants.</p> <p>* new studies since short term guideline (NICE 2004)</p>					

g) Compliance enhancement versus TAU

Some service users do not attend outpatient appointments arranged after discharge from hospital following self-harm. In a study by van Heeringen (1995), compliance enhancement via a nurse visit at home resulted in significantly more service users attending the outpatient clinic at least once compared to a group of service users who did not receive this extra intervention (129/252 versus 102/256).

Effects on repetition

There was also a substantial but non-significant reduction in the repetition of self-harm during the 12 months after trial entry (RR 0.61, CI 0.37 to 1.02).

Suicides

There was, however, no evidence of a difference between treatment groups in the occurrence of suicides during this period (6/196 versus 7/195).

h) Case management versus TAU

One study made the comparison between case management and treatment as usual (CLARKE2002). The intervention involved case management combined with routine management, including medical and psychiatric assessment. Usual care consisted of triage, medical and psychosocial assessment and treatment as required.

Effects on readmission

There was insufficient evidence to determine if there was a clinically significant difference between nurse-led case management and standard aftercare on reducing the likelihood of people who self-harm being readmitted to hospital (RR=0.85, 95% CI 0.48 to 1.51). However, investigators reported that multiple re-admission was much more common in the experimental group than the control (9/220 versus 2/247). At 36 months follow up, one suicide had occurred in each treatment group.

i) Supportive contact versus TAU

One study conducted as a multicentre investigation in 'suicide attempters' in five low and middle income countries (Brazil, India, Sri Lanka, Iran and China) assessed the effect of brief contact over 18 months by home visits or telephone contacts by a clinician after an information session at the time of discharge from hospital with treatment as usual (FLEISCHMANN2008). Participants were recruited in the emergency departments after their suicide attempts. The intervention included an individual one hour session, in addition to regular follow-up contacts after discharge. The therapist provided information which aided the understanding of suicidal behaviour, and provided contacts or referral options. A person with clinical experience (range of doctors, nurse, psychologist or students in psychology or social work who

received 1 day special training) conducted contacts at 1, 2, 4, 7, and 11 weeks, and 4, 6, 12 and 18 months after discharge. As comparison, treatment as usual was limited to acute management of index suicide attempts. It did not include psychosocial assessment or any treatment. In some sites, participants were discharged to outpatient mental health services.

Effects on repetition

There was no difference in repeat suicide attempts at 18 months (RR 0.98 95% CI 0.7 to 1.37). There were significantly fewer suicides in the experimental group at 18 months (2/872 versus. 18/827) (FLEISCHMANN2008). However these data should be interpreted cautiously as they were based on informant report rather than official data sources and data were not available for those lost to follow up.

Effects on contact with services

It was reported the utilisation of psychological services following self-harm was low in both BIC (5.7%) and TAU (5%) groups. And it was not statistically significant.

j) GP letter versus standard aftercare

One study made the comparison between a GP letter versus standard aftercare (BENNEWITH2002). In this study, which was cluster randomised by GP practice, participants were sent a letter by GPs from practices allocated to the experimental group inviting them to make an appointment for a consultation.

Effects on repetition

There was insufficient evidence to determine whether there was a clinically significant difference between using a GP letter and standard aftercare on reducing the likelihood of repetition of self-harm (RR=1.12, 95% CI 0.94 to 1.34).

Effects on contact with services

During the first six weeks after trial entry, there was no difference between treatment conditions in the number of contacts made with services (351/599 versus 387/681).

k) Intensive inpatient and community treatment versus routine care

One study (VAN DER SANDE1997) compared the impact of brief psychiatric inpatient admission followed by out-patient appointments and 24-hour access to the unit with treatment as usual.

Effects on repetition

There was insufficient evidence to determine whether there was a clinically significant difference on reducing the likelihood of repetition of self-harm at

12 months (RR=1.15, 95% CI 0.67 to 1.98). VAN DER SANDE1997 reported one suicide in the treatment group and two suicides in the TAU group.

Attendance

In VAN DE SANDE1997, more participants attended one or more treatment sessions in the intensive intervention condition (119/140) compared to the comparison group (64/143) at 12 month follow up. However, there was no difference in the mean number of treatment sessions participants attended (SMD 0.11, 95% CI -0.13 to 0.35).

Effects on depression scores

VAN DER SANDE1997 had lower depression scores after 12 months, however, the difference was not significant (SMD -0.31, 95% CI -0.66 to 0.03).

Effects on hopelessness scores

VAN DER SANDE1997 had lower hopelessness scores after 12 months, however, the difference was not significant (SMD -0.26, 95% CI -0.61 to 0.08).

7.1.5 Clinical evidence summary for narrative reviews

This section presented narrative reviews of single trial psychological or psychosocial interventions that could not be meta-analysed.

In terms of reducing repetition, there was insufficient evidence of a treatment difference between the following interventions: interpersonal problem-solving skills training versus brief problem-oriented therapy; inpatient behaviour therapy versus insight-oriented therapy; long term (12 months) versus short term (3 months) therapy; general hospital admission versus discharge.

There was limited evidence suggesting that the same versus a different therapist is associated with a reduction in self-harm repetition. However, this conclusion was subject to many uncertainties and biases. Thus, based on only a single trial, no conclusions could be drawn.

For the same outcome (repetition), compared with routine care, there was insufficient evidence to establish clinical effectiveness for psychosocial interventions such as: case management, supportive contact in low to middle income countries, GP letters, and intensive inpatient and community care.

There was a trend showing that enhancing compliance by visiting participants who did not attend an outpatient appointment may reduce repetition 12 months after trial entry. This was based on a single trial of poorer quality and therefore no conclusions could be drawn.

7.1.6 Narrative review for interventions for specific subgroups

This section included brief summary for studies that looked at interventions for specific subgroups, which reported repetition of self-harm as an outcome. For the management of each specific condition, please refer to other NICE guidelines.

Borderline personality disorder

A total of nine studies examined the effectiveness of Dialectical Behaviour Therapy (DBT) for the reduction of self-harm, all in Borderline Personality Disorder populations (BPD) with a history of self-harm. Eight of these studies have previously been reviewed in the NICE guideline (NCCMH, 2009) on Borderline Personality Disorder (Carter *et al.*, 2010; Koons *et al.*, 2001; Linehan *et al.*, 1991; Linehan *et al.*, 1999; Linehan *et al.*, 2002; Linehan *et al.*, 2006; Turner, 2000; van den Bosch *et al.*, 2002) which can be consulted for further details on the study characteristics and findings. There was also an additional study (McMain *et al.*, 2009) which was published after this guidance was produced.

In summary, the evidence for DBT showed some benefit in reducing rates of self-harm. Two studies (Koons *et al.*, 2001; van den Bosch *et al.*, 2002) displayed significant differences between DBT and TAU in the reduction of self-harm. Two further studies reported significant differences between DBT and community treatment by experts (Linehan *et al.*, 2006) and client centred therapy (Turner, 2000) in reducing self-harm, suicide attempts and suicidal ideation. Most of the evidence is of moderate quality. The sample size in these nine studies ranged from 23 participants to 180 participants with a total of 578 participants. The average duration of DBT treatment was one year with the treatment length ranging from 6 months to one year. Trials all followed the manualised treatment designed by Linehan (1993), although several modified it. DBT, in outpatient settings, was comprised of four treatment components; weekly individual cognitive-behavioural psychotherapy sessions with the primary therapist, weekly skills training groups lasting 2 to 2.5 hours per session, weekly supervision and consultation meetings for the therapists and phone consultation. Participants were encouraged to obtain coaching in the appliance of new effective skills by phoning their primary therapists either during or outside office hours. These results should be interpreted with caution as the populations examined varied considerably with some populations having coexisting substance misuse (Linehan *et al.*, 1999; Linehan *et al.*, 2002; van den Bosch *et al.*, 2002) and some involved women veterans (Koons *et al.*, 2001). The treatment setting also varied greatly including outpatients, primary care and referrals to a community mental health outpatient clinic following emergency department treatment for a suicide attempt. Five out of nine studies compared DBT with TAU, however, there were four studies in which the comparator varied including comprehensive validation therapy (Linehan *et al.*, 2002), community treatment by experts (Linehan *et al.*, 2006), a combination of psycho dynamically informed therapy and symptom-targeted medication management (McMain *et al.*, 2009) and client centred control (Turner, 2000). Finally, participants were mostly women thus limiting the applicability of the findings.

1 There were two studies that examined Manual Assisted Cognitive Treatment
2 (MACT), a brief cognitive oriented and problem focused therapy against
3 treatment as usual (Evans *et al.*, 1999b; Weinberg *et al.*, 2006). One was in a
4 population of people with personality disturbance within the flamboyant
5 personality cluster (N = 34) who had a history of self-harm aged 16-50 (Evans
6 *et al.*, 1999b) and the other was in a population with BPD (N = 30) aged 18-40
7 (Weinberg *et al.*, 2006). The first trial has been reviewed in the short term
8 management guideline for self-harm (NCCMH, 2004) and the second has
9 been reviewed in the BPD guideline (NCCMH, 2009) which can be consulted
10 for further details of study characteristics and findings. In summary, both
11 treatments lasted for six months with a range of 2-6 sessions and incorporated
12 DBT, CBT and bibliotherapy. Evans and colleagues (1999b) found that the rate
13 of self-harm episodes was lower in the MACT group compared to the TAU
14 group but not significantly so. On the other hand, Weinberg and colleagues
15 (2006) found that MACT was associated with significantly less frequent self-
16 harm post-treatment and at 6 months follow up when compared to the TAU
17 group. These results should be interpreted with caution given the following
18 limitations. The participants were mostly women thus limiting the
19 applicability of the findings reported. Both had small sample sizes and the
20 populations differed in their diagnosis with one being diagnosed with BPD
21 and the other population being a mixture of personality disorders within the
22 flamboyant personality cluster.

24 There was an additional RCT (Doering *et al.*, 2010) that examined the efficacy
25 of transference focused psychotherapy (TFP) compared to treatment by
26 community psychotherapists (CP) in reducing self-harm in 104 female
27 outpatients with BPD. Transference focused psychotherapy is a modified
28 psychodynamic psychotherapy which consists of two 50 minute sessions per
29 week over a period of one year and focuses on the experiences of
30 dysfunctional early relationships. Significantly fewer participants dropped
31 out of the TFP group compared to the CP group (38.5% versus 67.3%),
32 significantly fewer attempted suicide and there was a reduction in need for
33 psychiatric inpatient treatment in the TFP group. However, there were no
34 significant differences in the reduction of self-harm in either group. These
35 findings should be interpreted with caution as this was in a group of women
36 thus limiting the generalisability of the findings. There was also a high
37 dropout rate and a low participation in the follow up assessment with only
38 47% completing the one year treatment, which might introduce bias favouring
39 results.

41 A comprehensive review of treatment options for clients with a diagnosis of
42 BPD can be found in the Borderline Personality Disorder NICE guidance
43 (NCCMH, 2009).

44 **Alcohol misuse**

1 An RCT conducted by Crawford and colleagues (2010) looked at the effect of
2 referral for brief intervention for people who had self-harmed and were
3 misusing alcohol. The study was carried out after an earlier trial showed a
4 statistically significant reduction in re-attendance at the emergency
5 department for an unselected group of individuals screened for alcohol
6 misuse and given brief treatment (Crawford, *et al.*, 2004). Alcohol misuse was
7 defined as consuming more than 8 units (for men) or 6 units (for women) per
8 drinking session on a weekly basis, or if participants reported their self-harm
9 was related to the use of alcohol. Participants were recruited from an
10 emergency department following a self-harm episode, and if they met the
11 criteria for alcohol misuse. The brief intervention consisted of an appointment
12 card for a 30 minute session with Alcohol Specialist Nurse (ANS), together
13 with a health information leaflet. The ANS conducted an assessment of
14 current and past drinking behaviour using a person-centred and non-
15 confrontational approach. The control group received a blank card together
16 with the same health information leaflet. There was no statistical significant
17 difference between treatment and control on re-admission for repetition (RR
18 0.62, 95% CI 0.26 to 1.48) at 6 months follow up. There were a number of
19 limitations for this study including the low attendance of appointments in the
20 treatment group (47%) and the high prevalence of probably personality
21 disorder amongst the participants.
22

7.1.7 Clinical evidence for interventions for children and young people

Table 30: Summary study characteristics of trials comparing group psychotherapy versus treatment as usual

	Group psychotherapy versus TAU
Total no. of trials (N)	K=3 (501)
Study ID	1) WOOD2001 2) HAZELL2009* 3) GREEN2011
Diagnosis	1) Major depressive disorder in 83-84% of groups. 75% (experimental) and 62% (control) had conduct or oppositional disorder diagnosis (assessed by K-SADS & DSM-IV). 2) 4% had alcohol problems; 0% had substance misuse problems; 57% had depression; 7% had a diagnosis of conduct/oppositional defiant disorder (all assessed by Schedule for Affective Disorders & Schizophrenia for School-age Children (K-SADS)) 3) ~60% depressive disorder; ~30% behavioural disorder
Recruitment setting	1) Referred to children and young people's mental health service following self-harm. 2) Patients referred to CAMHS with reported self-harm. 3) Young people with 2 or more episodes of SH during previous 12 mths, in CAMHS northwest of UK.
Treatment length	All 6 sessions
Country	1)UK 2)Australia 3)UK
Intervention	Developmental group psychotherapy involved a variety of techniques, including a variety of interventions involving problem-solving and CBT, DBT and group psychodynamic psychotherapy interventions
Control	Routine care

a) Developmental group psychotherapy plus TAU versus TAU

Three studies (WOOD2001, HAZELL2009, GREEN2011) explored the effectiveness of developmental group psychotherapy for young people with repeated self-harm. This therapy was designed to tackle difficulties experienced by young people by using positive corrective therapeutic

relationships. It involved a number of treatment principles including problem-solving, cognitive-behavioural interventions, dialectical behaviour therapy, and psychodynamic therapy. It comprised of six “acute” group sessions plus routine care, followed by weekly group therapy in the longer term which could be terminated when participants felt ready to leave. HAZELL2009 was a replica of the original study conducted in Australia. GREEN2011 was a larger scale multi-centre study conducted by original developer of the intervention.

Effects on repetition

There was no evidence to determine whether group psychotherapy plus routine care had an effect compared with routine care alone. At 7 (WOOD2001) and 12 months follow up (HAZELL2009, GREEN2011), a relative risk of 0.95 (95% CI 0.63 to 1.45) with a 79% heterogeneity is observed. The heterogeneity might be explained by the large difference in effect size for WOOD2001 being effective, but not for the other two studies.

Effects on suicide ideation and depression scores

There was no evidence of effect when group psychotherapy plus routine care was compared with routine care alone at the last follow up (SMD -0.03, 95% CI -0.21 to 0.15) (K=3, N=471) for suicide ideation scores. Similarly, there was no evidence of effect on depression scores (SMD -0.17, 95% CI -0.52 to 0.18) (K=2, N=129).

Suicides

There were no suicides in treatment nor TAU group (WOOD2001, GREEN2011).

1 **Table 31: Summary study characteristics of trials comparing psychosocial interventions versus comparator**

	Psychological therapy versus TAU	Emergency card versus TAU	Home based family intervention versus TAU	Standard disposition planning with and without added compliance enhancement
Total no. of trials (N)	1 RCT (39)	1 RCT (105)	1 RCT (162)	1 RCT (76)
Study ID	DONALDSON2005*	COTGROVE1995	HARRINGTON1998	SPIRITO2002
Diagnosis	29% (9/31) had diagnosis of major depressive disorder. 19% (6/31) had diagnosis of alcohol use disorder	6% had major psychiatric disturbance (not specified).	64.5% had diagnosis of major depression. 10.5% had diagnosis of conduct disorder.	37% had a diagnosis of either dysthymia, major depression, oppositional defiant disorder, conduct disorder, alcohol abuse or drug abuse/dependence.
Recruitment setting	Patients presenting to a general paediatric emergency department or inpatient unit of an affiliated child psychiatric hospital after a suicide attempt.	Patients admitted to hospital following self-harm	Participants have no self injury by cutting or hanging but had all self-poisoned. Patients referred to mental health teams in four hospitals.	Patients presenting to hospital after suicide attempt.
Treatment length	6 individual sessions plus 1 family session; maintenance 3 sessions	12 months	5 sessions	8 weeks
Country	USA	UK	UK	USA
Intervention	Skills-based treatment focused on problem-solving and affect management skills; taught problem-solving and cognitive and behavioural strategies and given homework assignments to strengthen skills. Treatment was comprised of two parts: (a) active treatment (first three months) included six individual sessions and one adjunct	Standard care plus emergency green card: green card acted as a passport to re-admission into a paediatric ward in the local hospital.	Home based family therapy plus routine care	Compliance enhancement intervention plus standard disposition planning: single, one-hour session that reviewed expectations for outpatient treatment and factors likely to impede attendance. Addressed treatment misconceptions and encouraged the young person and

	family session with two additional family sessions and two crisis sessions available at therapist's discretion; (b) maintenance treatment (last three months) included three sessions.			parent to make a verbal contract to attend treatment. Participants were also contacted by telephone at 1, 2, 4, and 8 weeks after discharge regarding their compliance to treatment.
Control	Supportive relationship therapy focused on young people's mood and behaviour; unstructured sessions which addressed reported symptoms and problems; specific skills not taught, designed to be close to usual care for this population in this community.	Standard follow-up and treatment from a clinic or child psychiatry department.	Routine psychiatric aftercare. Visits to the clinic by the young person and family. A diverse range of interventions, including sessions with psychiatrists and with psychiatric nurses.	Standard disposition planning: treatment based on judgment of psychiatric clinician who conducted the evaluation. Some attempters in both groups had a brief inpatient psychiatric stay prior to receiving outpatient care. Remainder received outpatient care at local mental health centre.
<p>Note. N = Total number of participants.</p> <p>* new studies since short term guideline (NICE, 2004)</p>				

b) CBT versus usual care for children and young people

One small study assessed CBT versus nondirective supportive therapy, which was designed to be as close to usual care for young people who self-harm (DONALDSON2005). Treatment condition focused on problem-solving and affect-management skills. Young people were taught problem-solving and cognitive behavioural strategies for affect management. The comparator was supportive in nature and sessions were unstructured. It involved exploratory questioning, encouraging affect, however, specific skills were not taught.

Effects on repetition

There was little difference between psychological therapy and TAU in the number of participants in each group who repeated self-harm at six months after trial entry (RR 1.71, 95% CI 0.35 to 8.29). No participants died by suicide.

Attendance

All participants attended at least one treatment session. There was no statistical evidence of a difference in the mean number of treatment sessions attended in each group (mean 9.70 versus mean 9.50). A greater proportion of control group participants completed treatment (13/21 versus 13/18), but the difference was again non-significant.

Effects on other outcomes

Depression scores at six months after trial entry were somewhat lower in the treatment group, but the small sample size might explain its statistical insignificance (SMD -0.38, 95% CI -1.09 to 0.33). A similar, but not statistically significant finding was reported for suicidal ideation scores at six months (SMD 0.14, 95% CI -0.86 to 0.58).

c) Home based family intervention versus TAU for children and young people

One study (HARRINGTON1998) compared home-based family therapy undertaken by two social work masters-level students with 'standard aftercare' involving no home visits. The experimental intervention involved a single home-based assessment and four treatment sessions at home. All participants were under 16 years old, none of them were seriously suicidal; nearly 90% were female; and over 60% were reported as having major depression. All were routine referrals to mental health services.

Effects on repetition

There was insufficient evidence to determine if there was a clinically significant difference between home-based family therapy and standard aftercare on reducing the likelihood of repetition of self-harm (RR=1.01, 95% CI 0.47 to 2.19). One participant in the experimental treatment group died by suicide and no suicides occurred in the control group.

Attendance

More participants in the home-based group completed treatment (39/84 versus 28/77).

Effects on other efficacy outcomes

There was insufficient evidence to suggest clinically significant difference between home-based family therapy and standard aftercare on reducing hopelessness scores in children and young people (SMD 0.06, 95% CI -0.26 to 0.38), problem-solving scores (SMD -0.04, 95% CI -0.36 to 0.28), nor reducing suicidal ideation scores (SMD -0.13, 95% CI -0.45 to 0.19).

d) Standard disposition planning with and without added compliance enhancement versus standard treatment for children and young people

One study assessed the effect of standard disposition planning with and without an added compliance enhancement intervention in young people after a self-harm episode (SPIRITO2002).

Effects on repetition

Fewer participants in the intervention group had repeat self-harm episodes at 3 months after trial entry, but the difference was not significant (RR 0.70, 95% CI 0.18 to 2.69). The compliance enhancement group had fewer repeat self-harm episodes compared to participants in the control (mean 0.10 versus mean 0.15). No participants died by suicide.

Attendance

No significant difference was found between the groups in relation to the number of participants attending at least one treatment session (27/29 versus 31/34). While participants in the experimental group (that with compliance enhancement) attended more treatment sessions (mean 7.70 versus mean 6.40) and more completed treatment (17/29 versus 16/34), neither of these differences were significant.

7.1.8 Clinical evidence summary for interventions for children and young people

In the NICE guideline Self-Harm: Short Term Management guideline (NICE, 2004), group psychotherapy was recommended for children and young people based on evidence from a study by WOOD2001. However, results from more recent studies did not replicate the clinical effect observed in WOOD2001. Group psychotherapy plus routine care did not appear to be effective in reducing the repetition of self harm when compared with routine care alone, amongst young people with a history of self-harm. The difference in effect might be explained by differences in the participants. For example, a replication study in Australia (HAZELL2009) and a

more recent multi-centre RCT (GREEN2011) used wider referral samples, which tended to consist of more severe, complex and chronic participants. This contrasted with the single district participant pool used by WOOD2001. Another explanation could be a higher level of service provision and use in routine care in more recent years, which might diminish the relative treatment effect.

For all other studies included in the narrative review, there were no statistically significant findings in reducing the repetition of self harm. There were no differences between treatments such as CBT and home-based family interventions when compared with routine care. Furthermore, there was no evidence showing enhanced compliance had an effect in standard disposition planning amongst children and young people who self-harm.

7.1.9 Health economic evidence

a) Evidence review

The systematic literature search identified three economic studies that assessed the cost effectiveness of specific psychosocial intervention compared with treatment as usual or routine care. All the three studies were conducted in the UK (GREEN2011, Byford *et al.*, 2003; Byford *et al.*, 1999).

The first study (GRREN2011) was identified during an update search. It is a cost-effectiveness analysis comparing the group psychotherapy plus routine care compared with routine care alone for young people aged between 12 years and 17 years who had at least two past episodes of self harm within the previous 12 months. The analysis was conducted alongside randomised controlled trial in the Northwest of England with sample population of 181 for group therapy and 183 for routine care. The group psychotherapy comprised of initial six weekly sessions followed by a booster of weekly sessions as long as needed while routine care is made up of local children and young people's mental health services provided by CAMH teams. The perspective of the analysis was societal with broad service use from NHS, social services, education services, voluntary services and criminal justice services. The indirect cost due to productivity lost was tested in the sensitivity analysis. Primary outcome was proportion of participants who had not harmed themselves over the preceding 6 months at 12-month follow-up.

The reported total mean cost per young person (in 2005/06 prices) over the 12-month period was £21,761 (SD £38,794) for group therapy and £15,354 (SD £24,981) for routine care. No statistical significant difference in the two mean costs was detected. For the primary outcome result, the proportion of those young people that received group therapy who did not have any episode of self harm over the follow-up period was 38.9% while that of the routine care arm was 41.9%. The reported ICER was £2020 per 1% of increase in the proportion of young people not self-harming with probability of group therapy being an optimal strategy ranging from 12% to 28% as willingness to for outcome improvement increases.

1
2 The application of the economic evidence of this study in the guideline is limited
3 given that the perspective considered is societal and final outcome was not
4 measured in term of quality of life values. Also, according to author and from the
5 estimated likelihood of cost effectiveness of group therapy at increasing willingness
6 to pay thresholds, the addition of group therapy to routine care is probably not more
7 cost-effective than routine care alone.
8

9 The second study by Byford and colleagues (2003) evaluated the cost-effectiveness of
10 manual-assisted cognitive behaviour therapy (MACT) compared with treatment as
11 usual (TAU) for adult patients (16-65 years) with a history of self-harm recruited
12 after presenting with an episode of self-harm . Their analysis was based on the
13 clinical trial by Tyrer and colleagues (2003a). Those requiring inpatient psychiatric
14 treatment, or with psychotic or bipolar disorder, and those with alcohol or drug
15 dependence problem were excluded. The MACT group was given a treatment
16 manual each and offered up to seven sessions of cognitive therapy while those in the
17 TAU group were offered standard treatment which varied between the three studies
18 areas from problem-solving, psychotherapy, GP or voluntary group referral, and
19 short-term counselling. A societal perspective was adopted for the analysis.
20 Resource use items included hospital and community health services, social services,
21 voluntary sector services, community accommodation, criminal justice system and
22 participants' living expenses and productivity losses. The primary outcome measure
23 used in the analysis was the proportion of participants who experienced a repeat
24 episode of self-harm during 12-month follow-up. QALYs were also measured, by
25 calculating EQ-5D utility scores, taken from participants at baseline, six and twelve
26 months.
27

28 Total mean cost over 12 months was £13,454 in the MACT group and £14,288 in the
29 TAU group (1999/2000 prices). The reported percentage of participants experiencing
30 a repeat episode of self-harm over the 12 month period of follow-up was 7% lower in
31 the MACT group whilst QALYs were 0.0118 lower in the MACT group. Taking TAU
32 as the base case, the reported incremental cost-effectiveness ratios (ICERs) when
33 compared with MACT were -£120 per 1% reduction in percentage of participants
34 with a repeat episode of self-harm (thus MACT was the dominant strategy) and
35 £66,000 per QALY gained. Cost-effectiveness acceptability curves (CEACs) showed
36 that MACT had more than a 90% probability of being cost-effective when using the
37 percentage of repeat episodes of self-harm as an outcome. With QALY as an
38 outcome, MACT has higher probability of being cost-effective at a threshold less or
39 equal to £66,000 per QALY. However, at different threshold values, the probability
40 of MACT being more cost-effective ranges between 44% and 88%. Extrapolating
41 approximately from the CEACs, the probability of MACT being cost-effective at
42 willingness-to-pay threshold of £20,000 and £30,000 were 65% and 60% respectively.
43
44
45

1 The results of this study are highly applicable to this guideline in terms of the
2 population, health care system, interventions and outcomes considered. However,
3 the broader perspective other than NHS and Personal Social Services perspective
4 taken by the study may be relevant to the population resource use but not
5 recommended by NICE (2009d) in guideline development. Other limitations with
6 the study findings were that uncertainty around the effectiveness measures were not
7 presented. Given the small differences between the two treatment groups in terms of
8 QALYs and percentage of repeat self-harm episodes, it is possible that these
9 differences were not statistically significant and may explain why differences in
10 percentage of repeat self-harms but not QALYs favoured the MACT group. In
11 addition, as noted by the authors, the chance that any coping mechanism could
12 possibly improve Quality of Life (QoL) may be plausible. In other words, with self-
13 harm as a coping mechanism, such interventions that results in least reduction in
14 repeat episodes of self-harm may likely be associated with more gain in QoL than
15 others interventions with significant reduction in repeat episodes of self-harm.
16 Consequently, this calls for more caution in the interpretation of the direction of
17 QALYs gain/loss with respect to self-harm interventions.

19 The third study by Byford and colleagues (1999) evaluated the cost-effectiveness of a
20 home-based social work intervention plus routine care compared with routine care
21 for children and young people (age range: 10-16 years) who had self-poisoned. The
22 home-based social work intervention delivered by two psychiatric social workers
23 consisted of an assessment session and four intensive sessions targeted towards
24 intra-familial communication, behavioural techniques and problem-solving. Routine
25 care involved visitation of psychiatrists and psychiatrist nurses in the clinic on an
26 outpatient basis. The analysis was based on a RCT of 6 months follow-up with
27 outcome measure and costs reported for 162 children (77 for routine care and 85 for
28 intervention group). The perspective of the analysis included the NHS, PSS as well as
29 the educational and voluntary sector. Resource use included patient assessment
30 sessions, hospital services (inpatient, day-patient, intensive care unit, outpatient
31 care, accident and emergency department services), GP visits, school nurse and
32 doctor, community psychiatric nurse, counselling, educational welfare officers,
33 educational psychologists, social worker, foster and residential care.
34 The primary outcome measures used in the study were the suicidal ideation
35 questionnaire and hopelessness scale both of which were completed by the
36 individual, and the Family Assessment Device (a measure of family functioning)
37 completed separately by both young person and their parents. No statistically
38 significant differences were detected in any of the primary outcomes at six months
39 between the two treatment groups. Similarly, no statistically significant differences
40 in costs between the intervention and routine care (£1,455 versus. £1,751; $p=0.6$) were
41 detected.

43 Regarding the applicability of this study to the guideline, it has a number of
44 methodological limitations although the participant population, interventions and

health care system considered in the study are all relevant. Firstly, there was no synthesis of incremental costs and outcomes or use of QALY as a final outcome measure. Secondly, the short time horizon may not have allowed for full evaluation of all important costs and effects associated with the intervention and thirdly, the uncertainties of the result estimates were not tested.

Details on the methods used for the systematic search of the economic literature are described in Section 3.6.1. Information on the methods used and the results reported in the economic studies included in the systematic literature review are presented in the form of evidence tables in Appendix 14.

b) Economic modelling

Introduction – objective of economic modelling

The systematic review of clinical evidence and meta-analysis demonstrated that psychosocial interventions in addition to treatment as usual (TAU) for people who self-harm are clinically effective in reducing the repetition of self-harm episodes when compared with TAU alone. The subsequent repetition of self-harm could affect the service user's health-related quality of life (HRQoL) (Sinclair *et al.*, 2010a) and further use of NHS or PSS resources (Sinclair *et al.*, 2010b). It is thus necessary to identify the cost effectiveness of delivering a psychosocial intervention in addition to TAU to people who self-harm. The existing economic evidence from the reviewed literature (GREEN2011, Byford *et al.*, 2003; Byford *et al.*, 1999) was found to have some limitations to reliably inform the guideline recommendations given the short time horizon in estimation of the health benefits and costs, uncertainties in the use of QALYs and broader perspective of analyses. Hence, the need for an economic model aiming at assessing the cost effectiveness of psychosocial interventions added to TAU relative to TAU alone for people who self-harm, from the perspective of the NHS and personal social services (PSS), is important.

Though the recommended outcome is the QALY (NICE, 2009d), the final outcome used in this analysis was the number of people prevented from repetition of self-harm as the two quality of life studies (Sinclair *et al.*, 2010a; Byford *et al.*, 2003) identified from the systematic literature search (see Appendix 12) were not sufficiently reliable. The HRQoL data reported in the study by Sinclair and colleagues (2010a) was collected using both the EuroQol (EQ-5D) and Short-Form Health Survey, Version 11 (SF36-11) questionnaires. However, the results were neither presented in the form of utility scores nor in any value sets that could be converted into utility scores by using existing health states value sets for the general UK population. Also, the study by Byford and colleagues (2003) was limited in its application as the utility scores were reported in a way to determine the incremental QALYs between the two treatment arms in the trial study and was not specific for utilities of different possible self-harm health states used in this model. In addition, the methodology used in the valuation of the health utilities was not given and there was an associated significant level of uncertainty with the reported health utilities in

the later study. Therefore, the GDG was not convinced regarding the reliability of these utility data in developing the economic model for this guideline.

Economic modelling methods

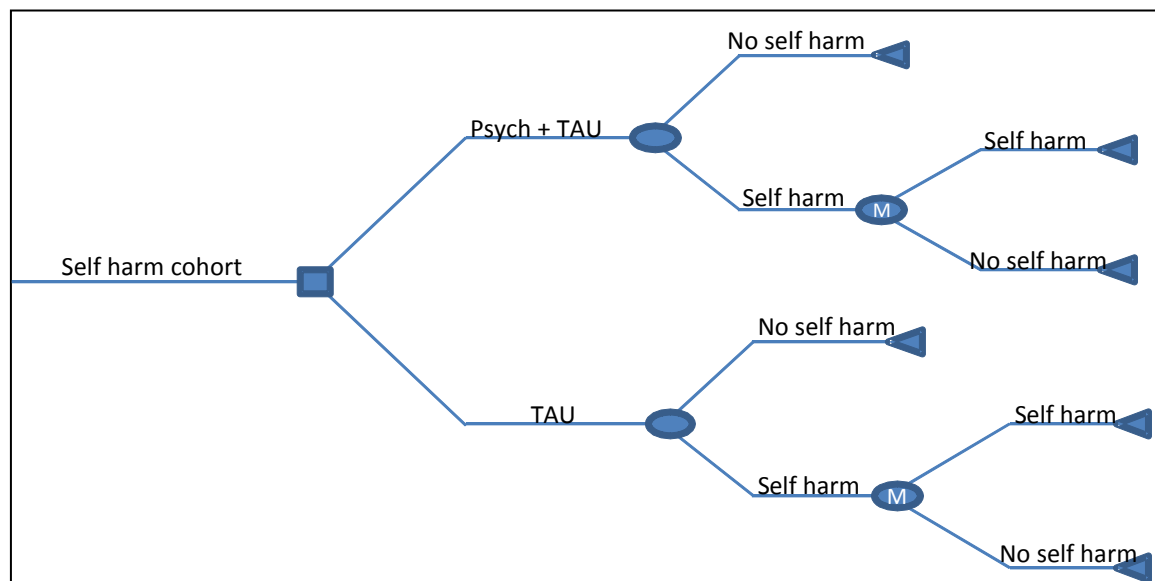
Intervention considered in the analysis

The economic analysis considered interventions that were shown to be effective in reducing the number of self-harm repeat episodes according to the systematic review and meta-analysis of the clinical evidence. The Guideline Development Group (GDG) identified a more realistic psychosocial intervention for reduction of repetition of self-harm episodes to consist of 6 sessions delivered by a skilled and competent mental health worker with each session lasting for 60 minutes while the treatment as usual (TAU) was described to consist of a basic treatment provided by the Community Mental Health Team to service users who self-harm after the initial hospital management of associated acute physical and/or mental health problem. For the group receiving psychosocial interventions, TAU is considered as a baseline intervention with psychosocial intervention serving as an additional intervention. The psychosocial intervention is delivered either at the service user's home or in a clinic.

Model structure

The model structure construct aims to elaborate the natural history of the self-harm population as much as possible. Identified literature on the risk of repetition of self-harm showed a varied self-harm repeat risk ranging from 15 to 33% (Owens *et al.*, 2002; Zahl & Hawton, 2004; Lilley *et al.*, 2008b). Given the insufficient data on self-harm mortality and quality of life outcome, a simple decision tree incorporating Markov nodes (represented by 'M' in Figure 3) and Markov health states (self-harm and no self-harm) with an annual cycle length was constructed using Excel workbook 2007 to partly capture the treatment effects and costs of psychosocial interventions over a period of time in the future. According to the model structure, 1000 hypothetical cohorts of people aged 8 years and above who self-harm were provided with a psychosocial intervention plus TAU or TAU alone. People in each cohort either self-harmed after treatment, or were prevented from self-harming with 'no self-harm' taken as the absorbing state (see Figure 3). In the base case analysis, the time horizon was taken to be 12 months based on the meta-analysis of the treatment effect of the psychosocial intervention lasting up to 12 months. A longer horizon of up to 24 months was tested in the sensitivity analysis assuming the treatment effect was sustained till the end of the second year. A schematic diagram of the decision tree is provided below.

1 **Figure 3: Model decision tree**



2
3
4 *Costs and outcomes considered in the analysis*

5 The economic analysis adopted the perspective of the NHS and personal social
6 services, as recommended by NICE (2009d) and reported in 2010 prices. Costs
7 consisted of intervention costs (psychosocial intervention) and annual costs of care
8 of a self-harm individual. The cost of TAU was not considered in the analysis, as this
9 was common to both arms of the model. The measure of outcome was the number of
10 people prevented from a repeat episode of self-harm.

11
12 *Clinical input parameters*

13 Clinical input parameters consisted of the relative risk (RR) of repetition of self-harm
14 associated with provision of a psychosocial intervention plus TAU compared with
15 TAU alone, and annual baseline risk of repetition of self-harm following TAU. Data
16 were derived from the guideline systematic literature review and meta-analysis of
17 clinical evidence. The baseline risk of repetition of self-harm estimated by Lilley and
18 colleagues (2008b) to be 33% was found to be comparable with the pooled self-harm
19 repetition risk from nine studies included in the meta-analysis. Given the possibility
20 that the baseline risk of self-harm repetition used in the base case analysis can be an
21 overestimation of risk of repetition of self-harm, as some people may not be
22 presenting to services, a lower risk of repetition of self-harm is tested in the
23 sensitivity analysis. In the base-case analysis, the economic model used the outcome
24 measure assessed at last follow-up period (12 months on average) as agreed by the
25 GDG.

Cost data

Cost of psychosocial intervention: The cost of intervention was estimated based on the descriptions of resource use identified from the psychosocial intervention studies included in the systematic review, confirmed by the GDG to be consistent with clinical practice in the UK. The psychosocial intervention is a brief psychological therapy consisting of 6 sessions which is provided by a nurse (mental health) specialist with each session lasting for 60 minutes. To estimate the intervention cost, the unit cost of a nurse specialist per hour of client contact reported in Curtis (2010) as £91 per hour was used. Calculation of this unit cost was based on the median full-time equivalent basic salary for Agenda for Change Band 6 of the January-March 2010 NHS Staff Earnings for qualified Nurses. The estimation also included the salary oncosts, qualification costs, overheads and capital overheads (Curtis, 2010). Adjustment was made for those intervention provided at service user's home by adding the cost of travel time to hourly cost of client contact. The total mean cost of the psychosocial intervention was then estimated as the average cost of both home-based and non-home-based psychosocial interventions by multiplying the quantity of resource use by the respective unit costs. Table 32 provides details on the estimation of the average intervention costs.

Table 32: Summary of the average costs of psychosocial intervention

Intervention	Resource use	Sessions (A)	Measure of resource use	Unit cost (B)	No. of hour(s) per session (C)	Valuation (A*B*C)	Reference
Home-based Psychosocial intervention	Nurse specialist's time	6	Per hour of client contact	£91	1	£546	Curtis, 2010 ; GDG expert opinion
	Nurse specialist travel time	6	Per visit	£1.5	-	£9	Curtis, 2010
					Total for Home-based	£555	
Non-home-based psychosocial intervention	Nurse specialist's time	6	Per hour of client contact	£91	1	£546	Curtis, 2010

					Average cost (Home-based and non-home based)	£550.5	
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Cost of self-harm: The estimation of cost incurred by a service user following an episode of self-harm was based on a retrospective cost analysis by Sinclair and colleagues (2010b), conducted in the UK. This cost study estimated costs following an episode of self-harm from the perspective of NHS and PSS with a mean follow-up period of 10.9 years which was divided into 6-month cost intervals. Among the 150 participants recruited into the cost study, 78 service users with available resource use in each time period were analysed. Resources measured in the study included primary care services, emergency department services, hospital services like medical and surgical inpatient bed days, outpatient consultations, laboratory investigations, and inpatient psychiatric care. Other resources included were the outpatient psychiatric care, psychotropic prescriptions, social service visits and social service residential placements. The cost estimate was reported as cost per episode of self-harm per 6-month interval and was in 2004/05 price year as £2,994. This estimate was inflated to 2010 price year using Hospital and Community Health Services pay and price inflator (Curtis, 2010) and also doubled to approximately estimate an annual cost of care of self-harm individual as £6,998. According to the GDG opinion, the cost incurred by people prevented from future episodes of self-harm after receiving a psychosocial intervention or TAU was assumed to be negligible. Table 33 provides the details of the clinical and cost input parameters described above with their probability distributions. For costs beyond 12 months, cost adjustment using discount rate of 3.5% was applied as recommended in the guidelines manual (NICE, 2009d).

Table 33: Summary of the base case input parameters of the economic model

Parameter	Distribution	Point estimate	Probability distribution	Reference and comment
Baseline risk of repetition of self-harm	Beta	0.33	Alpha=211 Beta= 437	Self-harm Repetition Risk pooling following TAU alone (from 9 meta-analysed studies)
Relative risk (RR)	Log normal	0.76	95% CIs: 0.61 to 0.96	Meta-analysis
Self-harm intervention cost	Gamma	£550.50	Alpha= 6.25 Beta= 88.08	CURTIS, 2010.; price year 2010

Annual cost of care of self-harm individual	Gamma	£6,998	Alpha= 2.78 Beta= 2519.45	Sinclair <i>et al.</i> , 2010b; price year 2010
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Data analysis and presentation of the results

In the base case analysis, the cost effectiveness of a psychosocial intervention plus TAU versus TAU alone at the 12-month time horizon was evaluated. Subsequently, evaluation at a longer time horizon of up to 24 months was made in the sensitivity analysis assuming the treatment effect was sustained till the end of the second year. Sensitivity analysis was also conducted for other key parameters of the model. Two methods were employed to analyse the input parameter data and present the results of the economic analysis

First, a *deterministic* analysis was undertaken, where data were analysed as point estimates; results are presented as mean total costs and outcomes associated with each intervention. Subsequently, an incremental cost effectiveness ratio (ICER) was calculated, expressing the additional cost per additional unit of benefit associated with one intervention relative to its comparator. Estimation of such a ratio allows consideration of whether the additional benefit is worth the additional cost when choosing one treatment option over another. Alternatively, if one intervention is less costly and more effective than its comparator, then this is obviously the most cost-effective option (*dominant*) and no ICER needs to be calculated.

To test the robustness of the results under different scenarios, one-way and two-way sensitivity analyses were conducted. The following scenarios were explored:

- A resource-intensive scenario comprising 12 psychosocial sessions delivered by a Band 7 clinical psychologist was considered to reflect the possible variations in resource inputs and the associated incremental cost-effectiveness ratio (ICER).
- A scenario of 50% variability in the cost of self-harm from Sinclair and colleagues (2010b) was tested to examine the effect on the ICER level since the reported cost of the self-harm estimate has wide standard deviation around the mean cost.
- It was assumed that people prevented from self-harming following a psychosocial intervention incurred a negligible future cost. The possibility that these people may incur some cost such as four subsequent GP visits (per clinic consultation lasting 17.2 minutes is £53 inclusive direct care cost (Curtis, 2010) was tested to examine the implication of such extra cost on the ICER level.
- A lower baseline risk of repetition of self-harm of 24% following an index episode was tested given that the baseline risk used in the base case was based on those presenting to services with the possibility of overestimating the risk as some individuals will not present to service. From the literature, the annual risk of repetition of self-harm varies from 15 to 33% (Owens et al.,

2002; Zahl & Hawton, 2004; Lilley et al., 2008b) with 24% as an approximate estimate of the average annual risk of repetition of self-harm.

- Variations in the effectiveness of the psychosocial intervention using the upper and lower values of 95% confidence interval of the relative risk and baseline risk of repetition of self-harm episodes was also tested.

In addition to deterministic analysis, a probabilistic analysis was also conducted. In this case, all model input parameters were assigned probability distributions (rather than being expressed as point estimates), to reflect the uncertainty characterising the available clinical and cost data. Subsequently, 10,000 iterations were performed, each drawing random values out of the distributions fitted onto the model input parameters. This exercise provided more accurate estimates of mean costs and benefits for each intervention assessed (average results from the 10,000 iterations), by capturing the non-linearity characterising the economic model structure (Briggs *et al.*, 2006). The distributions assigned to each of the input parameters are shown in Table 33.

Results of probabilistic analysis are presented as mean costs and effects derived on 10,000 iterations, as well as in the form of cost-effectiveness acceptability curves (CEAC), which demonstrate the probability of each intervention being cost-effective at different levels of willingness-to-pay per unit of effectiveness (that is, at different cost-effectiveness thresholds the decision-maker may set).

Results of economic modelling

For clarity, the results the analyses were presented as follows:

- For the base case analysis, the probabilistic and deterministic estimates showing the mean cost and mean effect of both psychosocial and TAU strategies with the resultant ICER evaluated at the end of last follow-up period (that is, 12 months) (see Table 34)
- The sensitivity analysis showing the value of ICER for a given value of parameter(s) of interest evaluated both at the end of the last follow-up period and 24-month Time horizon.

Table 34 shows the mean costs and number of people prevented from self-harm repetition for each of the each intervention assessed in the analysis. The incremental cost-effectiveness ratio (ICER) evaluated as £ per additional person prevented from repetition of self-harm episode was £164 (probabilistic analysis). The ICER estimate by deterministic analysis was £46. The ICER estimate from the probabilistic analysis is relatively higher than the deterministic estimate and is regarded as more reliable given the variations around the parameter inputs.

Table 34: Base case analysis at 12-month time horizon

Analytical method	Strategy	Cost (£)	Effect (Persons self-harm prevented)	Incremental Value		ICER (£/person prevented from self-harm repeat)
				Cost	Effect	
Probabilistic	TAU alone	2,281,636	674.43	-	-	
	Psych+TAU	2,294,166	750.85	12,530	76.42	164
Deterministic	TAU alone	2,278,819	674	-	-	
	Psych+TAU	2,282,403	753	3,583	78.15	46

Sensitivity Analysis

Deterministic sensitive analysis: The result of the deterministic sensitivity analysis as shown in

Table 35 demonstrated that ICER value is sensitive to most of the range values of the parameters tested. However, the ICER estimate is highly robust when the subsequent costs incurred by people prevented from future episodes of self-harm was tested.

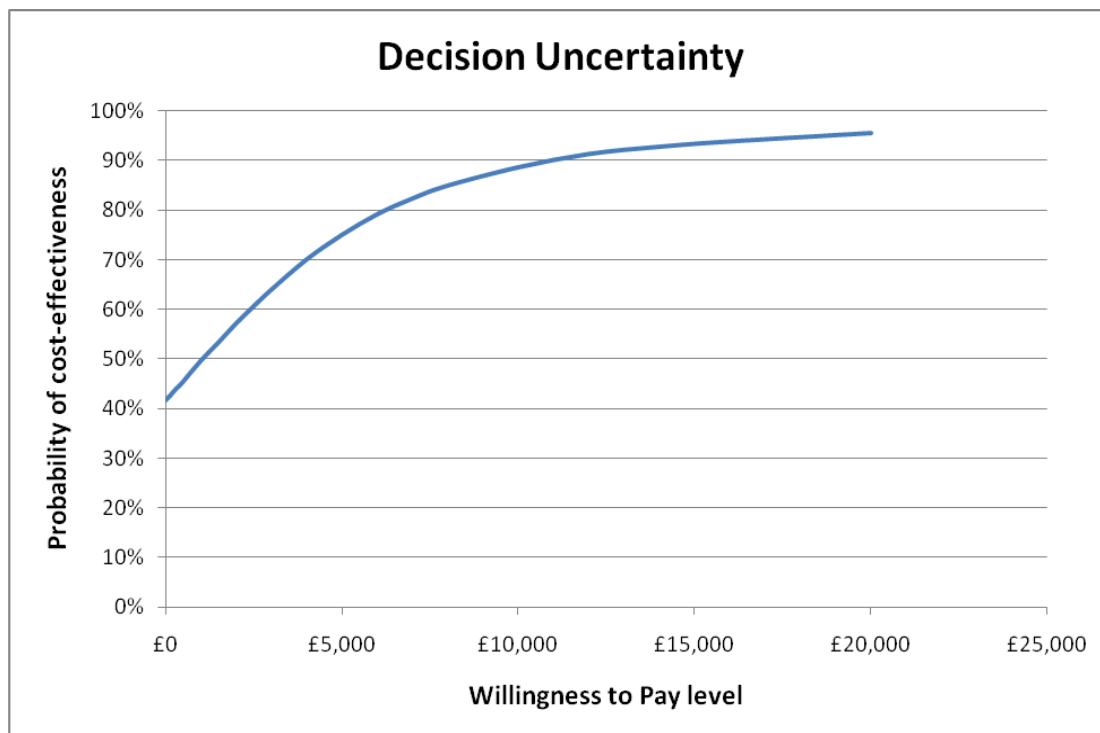
In the longer term of up to 24 months, psychosocial intervention becomes a dominant strategy and also tends towards a more cost-effective option for all other parameters tested separately. In two-way sensitivity analysis, different combinations of the intervention cost and relative risk of self-harm repetition give a rather varied ICER estimates when compared to the base case ICER value. The combination of low risk of self-harm repetition and resource intense intervention option results in psychosocial intervention being a dominant strategy in both short and long term period. Conversely, lower treatment effect and higher cost of self-harm care when combined results in an extra high cost for each additional person prevented from self-harming showing the extent of uncertainty around the treatment effect estimate.

Table 35: Deterministic Sensitivity Analysis

One way sensitivity analysis			
Variables	Value	ICER	
		At Last follow-up (12 months)	At 24 months
All model parameters (base case)	-	£164	Psych dominates
Resource intense intervention option (12 sessions by a clinical psychologist) (base case=£550)	£1,149	£7,704	£6,682
Further cost of care of treated people (assuming they have 4 extra GP visits) (base case=£0)	£212	£258	Psych dominates
50% increase in cost of self harm care (base case=£6,998)	£10,498	Psych dominates	Psych dominates
50% decrease in cost of self harm care (base case=£6,998)	£3,499	£3,545	£2,805
Low baseline risk of self-harm repetition (base case=0.33)	0.24	£2,559	Psych dominates
Two way sensitivity analysis			
Higher effect size (lower CI of RR) & Resource intense intervention option	0.61 & £1,149	£2,049	Psych dominates
Low baseline risk of self-ham repetition & 50% increase in the cost of self harm	0.24 & £10,498	Psych dominates	Psych dominates
Low effect size (Upper CI of RR) & 50% increase in the cost of self-harm	0.96 & 10,498	£31,768	£39,634

Probabilistic sensitive analysis: The result of the probabilistic sensitive analysis presented as Cost-effectiveness Acceptability Curve (CEAC) in Figure 4 below shows the likelihood that a chosen intervention will be cost-effective relative to the alternative option at various level of willingness to pay threshold (WTP). For example, at willingness to pay threshold of £1,000 and above, the probability that psychosocial intervention plus TAU will be cost-effective if implemented ranges from 50% and above. For various WTP threshold level tested, the likelihood that psychosocial intervention will be an optimal strategy ranges from 42% to 97%.

Figure 4: Cost-effectiveness acceptability curve



Discussion

The economic analysis undertaken examined the cost effectiveness of psychosocial intervention as an additional intervention to TAU compared with TAU alone. The result of the economic modelling showed that to prevent an additional person from repeating an episode of self-harm by choosing 6 sessions of psychosocial intervention delivered by a nurse specialist instead of TAU alone, the NHS will be incurring an additional cost of about £200. Also demonstrated by this analysis was that the psychosocial intervention plus TAU has a greater likelihood of being cost-effective compared to TAU alone at various willingness to pay (WTP) levels of £1,000 and above. Hence, choosing the psychosocial intervention will depend more on the service provider's level of willingness-to-pay for an additional person prevented from self-harm repetition.

An important point in this analysis is the resources used to deliver the psychosocial intervention. The model analysed a realistic option as noted by the GDG comprising of 6 sessions delivered by a skilled and competent nurse. Nevertheless, some of the reviewed studies described a varied sessions of up to 12 sessions delivered by a clinical psychologist. Though the benefit of extra sessions and service delivery by a clinical psychologist could not be ascertained from the reviewed studies, it may be worth examining further to identify the advantages and/or possible disadvantages of such intensive option. However, from the sensitivity analysis in Table 35, such an intensive option may be incurring a much higher cost compared to the realistic option should the benefit of the two options be similar. Also, when the

1 long term resource impact of implementing psychosocial intervention is considered,
2 the model shows that psychosocial intervention has potential of being a more cost-
3 effective option notwithstanding significant uncertainty around some parameters.

4 *Limitations of the analysis*

5 The major issue that may limit the usefulness of this analysis is non-availability of
6 QALYs estimates. Nevertheless, from the reported potential gain of more QALY
7 following TAU compared to QALY less gained following a cognitive oriented MACT
8 intervention in the study by Byford and Colleagues (2003), it is uncertain whether
9 QALY gain or loss is a useful measure of outcome in long-term self-harm
10 management. In the same study, the authors were of opinion that self-harm as a
11 coping mechanism may be associated with improvement in quality of life than other
12 measures used to prevent it.

13
14 Another limitation is variation in the modalities of psychological interventions
15 among the studies included in the meta-analysis. Though the probabilistic method
16 used in this analysis substantially accounts for the associated uncertainties, it is
17 important to interpret the result of this analysis with caution especially in relation to
18 the cost of intervention and the relative risk.

19 **7.1.10 From evidence to recommendations**

20 Based on the clinical review summary, there is some evidence showing clinical
21 benefit of psychological interventions in reducing repetition of self-harm episodes,
22 compared with routine care. However, there is considerable uncertainty and
23 heterogeneity with respect to the population, treatment length and treatment
24 modality and settings, which lowers the quality of the evidence. Interventions in the
25 analysis included cognitive-behavioural, psychodynamic, or problem-solving
26 elements. The number of sessions in studies varied with an average of 6 sessions.
27 Therapists in these studies were experienced in working with people who self-harm.
28 They worked collaboratively with service users to identify problems causing
29 distress, or factors maintaining their self-harm.

30
31 From the health economic evidence, there is some evidence to suggest that
32 psychosocial intervention is potentially cost-effective in reducing repetition of self-
33 harm episodes. In the long term, its health and economic benefit is also significant.
34 However, given the extent of uncertainty around the treatment effect estimate, there
35 is need for be cautious in implementation of psychosocial intervention. Further
36 research is necessary to determine the extent of the benefit of intense psychosocial
37 intervention, usefulness of QALY as an outcome in self-harm interventions, and the
38 effect of the settings in which the intervention is delivered.

39
40 In light of the clinical and health economic evidence, health and social care
41 professionals may consider providing psychological interventions specifically
42 structured for people who self-harm.

7.2 RECOMMENDATIONS

Interventions for self-harm

7.2.1.1 Consider offering 3 to 12 sessions of a psychological intervention tailored to individual need that is specifically structured for people who self-harm with the aim of reducing self-harm. The intervention may include cognitive-behavioural, psychodynamic or problem-solving elements. Therapists should be trained and supervised in the therapy they are offering for people who self-harm, and be able to work collaboratively with the person to identify the problems causing distress or leading to self-harm.

7.2.1.2 Provide psychological, pharmacological, and psychosocial interventions for any associated conditions, for example those described in the following published NICE guidance:

- Alcohol-use disorders (NICE clinical guideline 115)
- Depression (NICE clinical guideline 90)
- Schizophrenia (NICE clinical guideline 82)
- Borderline personality disorder (NICE clinical guideline 78)
- Drug misuse (psychosocial interventions or opioid detoxification) (NICE clinical guidelines 51 and 52)
- Bipolar disorder (NICE clinical guideline 38).²⁴

7.3 RESEARCH RECOMMENDATIONS

7.3.1.1 Clinical and cost effectiveness of psychological therapy with problem-solving elements for people who self-harm

For people who have self-harmed, does the provision of a psychological therapy with problem-solving elements, compared with treatment as usual, improve outcomes? What is the differential effect for people with a past history of self-harm, compared with people who self-harm for the first time?

This question should be answered using a well-conducted randomised controlled trial. Consider six sessions of psychological therapy with problem-solving elements, delivered immediately after discharge for the index episode of self-harm. The therapist should be trained and experienced in working with people who self-harm. Participants' history of previous self-harm, methods used and psychiatric history should be noted. Primary outcomes should include both hospital-reported and self-reported repetitions of self-harm. Other important outcomes, such as quality of life, depressive symptoms, service users' experience and adverse events (for example,

²⁴ This recommendation also appears in section 8.5 where the pharmacological data is presented.

distress or exacerbation of symptoms associated with therapy), should be included. The study design should take into account the complex motives that underpin self-harm. Studies need to be large enough to determine the intervention's costs and cost effectiveness.

Why this is important

Although review of the research evidence suggests that psychological therapy with problem-solving elements offers promise, it is not clear which components are the active ingredients of any such intervention, or whether such an intervention is effective for people with a past history of self-harm compared with those who have self-harmed for the first time. Further, only a few studies have looked at a broad range of outcomes for different populations who self-harm.

7.3.1.2 Clinical effectiveness of low-intensity/ brief psychosocial interventions for people who self-harm

For people who self-harm, does the provision of potentially cheap low-intensity/brief psychosocial interventions, compared with treatment as usual, improve outcomes?

This question should be answered using a well-conducted randomised controlled trial. Consider using a variety of approaches, including postcards, emergency cards, phone calls, or the use of electronic media in community mental health settings. The outcomes should include service users' engagement and experience, and hospital-reported and self-reported repetitions of self-harm. Other important outcomes, such as quality of life, depressive symptoms and adverse events (for example, distress or exacerbation of symptoms associated with contact with services) should be included.

Why this is important

Many people do not engage with available treatments following self-harm. If acceptable, alternative approaches, such as the low-intensity contact interventions indicated above, can be relatively easily and widely implemented, with the potential to improve outcomes, at relatively low cost, in individuals who may be otherwise difficult to engage.

7.4 HARM REDUCTION

7.4.1 Introduction

The most desirable outcome for the treatment and care of people who self-harm would be to permanently stop self-harming, recover from any underlying psychiatric disorder and to have a good quality of life. For some people not self-harming may not be immediately attainable. Moreover, for some individuals who self-harm, this may not be possible in the medium to long term and there are individuals for whom self-harm functions to prevent suicide. For many people who self-harm, there will be a period in which the aim of treatment will be to reduce harm to the individual, either by reducing the frequency of self-harm, or reducing the harm associated with acts of self-harm.

This approach to harm reduction has been tried with significant success in helping people with substance misuse (including drug, alcohol, and smoking), and in relation to sexual activity ('safe sex') to prevent transmission of HIV and other sexually transmitted diseases. Indeed, harm reduction has been an acceptable, secondary aim of treatment in a broad range of chronic medical conditions where cure is either not possible or not immediately attainable. The application of this approach to self-harm has been controversial. The GDG nevertheless took the view that harm reduction should be considered in line with the above. In addition, the GDG decided to review the evidence available on the specific approach to harm reduction termed 'harm minimisation'.

7.4.2 Harm minimisation: definition

The term 'harm minimisation' has been used in a number of ways. For example, Pembroke describes "Harm minimisation is about accepting the need to self-harm as a valid method of survival until survival is possible by other means. This does not condone or encourage self-injury but is about facing the reality of maximising safety in the event of self-harm" (Pembroke, 2007). For some people, self-harm is a way of taking control (see Chapter 4); and treatment regimes that focus on removing control by enforcing abstinence may be counterproductive or even dangerous. For some people, harm minimisation rather than abstinence may be a more realistic goal.

Harm minimisation is sometimes described as 'harming oneself safely' (e.g. using a sterile, sharp blade to cut, being aware of the location of veins and arteries, see for example National Self-harm Network, 2000), but many health and social care professionals may find this concept troubling. One concern is that by highlighting the dangers of certain activities, staff may actually be alerting service users to them. Understandably, staff can be worried that this may be seen as condoning or endorsing harmful behaviours. It is widely agreed, however, that poisoning with

any substance cannot be done “safely”: there is no safe way of self poisoning (NICE, 2004).

7.4.3 Clinical review protocol

The review protocol, including the review questions, information about the databases searched, and the eligibility criteria used for this section of the guideline, can be found in Appendix 8. Further information about the search strategy can be found in Appendix 9.

Review question	For people who self-harm, does the provision of self management and/or harm reduction strategies, compared with no treatment or treatment as usual, improve outcomes?
Electronic databases	CINAHL, EMBASE, MEDLINE, PsycINFO
Date searched	All literature to 25 Jan 2011
Study design	N/A
Patient population	Self-harm population
Intervention(s)	Harm reduction strategies (such as replacement therapy, positive emotion technique etc)
Comparison	N/A
Critical outcomes	Repetition (reduction in frequency or severity)

7.4.4 Studies considered²⁵

The search strategy generated 4,747 references, in which titles and abstracts were sifted by the technical team. Full papers were retrieved where team members regard them with potential relevance. However, there were no RCTs, no cohort studies that meet our criteria.

The GDG therefore selected 3 publications that would help to illustrate some different approaches to harm reduction in the context of self harm. One paper looked at the different attitudes amongst healthcare professionals in a locality and within national professional organisations to a harm minimisation handbook. The second approach involved teaching young people techniques on how to cope better when the urge to self harm occurred so as prevent self-harm, backed up by a process of ward exclusion in the event of self harm. The final study describes using a ‘Positive Risk Taking’ approach in a female forensic service. These studies do not constitute evidence in our terms.

Narrative review

Pengelly and colleagues (2008) developed a handbook for people who repeatedly self-harm, to encourage collaboration between service users and front-line health professionals. The *Alternatives to Self-harm Handbook* (Pengelly & Ford, 2005) was designed for use within the Selby and York Primary Care Trust. It gives factual

²⁵ Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is in press or only submitted for publication, then a date is not used).

1 information about self-harm, helps identify support networks, and covers areas such
2 as understanding why people self-harm types of therapy of possible benefit and
3 techniques for problem-solving. , The booklet also provides advice on harm
4 reduction, including alternative behaviour to help distraction from the urge to self-
5 harm, and some advice on damage limitation.

7 Alternative behaviours suggested to help distract a person from the urge to self-
8 harm included pinching , squeezing an ice cube for a short time, using rubber bands
9 'snapping' them on one's wrist, exercising, yoga, kicking and punching something
10 soft such as a pillow.

12 Advice on damage limitation techniques included using a clean and sharp blade,
13 avoiding cutting areas near major veins and arteries not sharing instruments used to
14 self-harm so as to avoid infections, and to ensure each person had tetanus protection.
15 The approach also included having access to first aid and a basic knowledge of
16 medical care; avoiding alcohol/ drug use in association with self harm as this may
17 lead to more severe wounding; , and finally, to focus on reducing the severity and
18 frequency of episodes..

20 This paper reports feedback received about the handbook, from service users,
21 mental health professionals from the York and Selby Primary Care Trust and a
22 solicitor. The Royal College of Psychiatrists and the Nursing and Midwifery Council
23 were also approached for their comments and views.

25 Service users were pleased with the handbooks advice on harm reduction as they felt
26 it was encouraging a shift in attitude of professionals who expect service users to
27 stop self-harm completely: reducing the frequency and severity of self-harm was
28 considered a more realistic goal.

30 Local healthcare professionals expressed a range of views. For example a psychiatrist
31 expressed the view that service users should decide on which alternatives should be
32 considered. A psychodynamic therapist thought the handbook misunderstood the
33 nature of self harm as an act aimed at harming/hurting oneself; and that harm
34 reduction was missing this point. Moreover, advising on alternative forms could
35 raise legal issues as it may be seen as encouraging self-harm. These behaviours
36 could be misinterpreted or used in excess and are still harmful as they could cause
37 bruising or bleeding, such as if you snap rubber bands on your skin or pinch the skin
38 instead if cutting it. It is more important to understand the meaning of self-harm
39 and the motivation behind it for that individual.

41 Perhaps unsurprisingly, the legal view of the handbook from the trust solicitor drew
42 attention to possible legal challenges if it was implemented, but did acknowledge
43 that telling a person not to self-harm, or threatening detention is often unrealistic.
44 The Nursing and Midwifery Council underlined the need for practitioners to consult
45 with a wider clinical team before decisions are made and follow the Code of

1 Professional Conduct. The Royal College of Psychiatrists stressed the importance of
2 a full psychosocial assessment along with offering a comprehensive care package to
3 service users. It is important to note that this handbook was not intended to be a self-
4 help book but to be used as part of a comprehensive care plan.

5
6 Livesey (2009) conducted a pre-post design study set in an acute psychiatric
7 inpatient and day patient unit for young people who self-harm by cutting or over-
8 dosing. The interventions used in this study were two-fold. Firstly, they introduced
9 introduction of a 'no self-harm' policy, also described as a therapeutic contract. The
10 failure to comply with the no self-harm policy resulted in immediate suspension
11 from the unit. Subjects were then called back for an interview with their care giver,
12 to reconsider negotiating their therapeutic contract. Failure to comply a second time
13 would result in discharge from the unit. Secondly, staff encouraged the use of
14 alternative techniques such as ice, rubber bands and marker pens instead of sharp
15 objects. They also encouraged the use of diaries, relaxation, distraction and other
16 therapeutic interventions to address underlying distress and problems that a young
17 person may have. The results reported that 2 weeks following the introduction of
18 the new therapeutic regime, the mean number of self-harm episodes recorded per
19 week fell from a 6 month baseline level of 1.2 (SD 1.3) to 0.2 (SD 0.59). There was no
20 control group, the study was in a single unit and the numbers were small.

21
22 Birch and colleagues (2011) carried out an audit of self-harm and non fatal overdose
23 seen in 45 women from the Women's Service, who had long-standing and complex
24 mental health problems. The setting comprised of 3 units which the women resided
25 in; a medium secure unit, a community ward and supported community flats. The
26 study analysed the pattern and frequency of self-harm using a positive risk taking
27 (PRT) approach. PRT uses both harm reduction and 'relational security' which is
28 described as developing a relationship with a service user, where the healthcare
29 professional and service user reach a psychological understanding of the meaning of
30 self-harm to that individual and agree on a risk management plan. If the intention of
31 self-harm was communicated, it was met by a response which was supportive but
32 emphasised the importance of acting on feelings in other ways than self-harm.
33 Communication by talking was encouraged in group or individual therapy sessions.
34 The units reflected home-like environments with household objects that could be
35 used to self-harm. Continuous observation was used but not one-to-one
36 observation. The idea behind this approach was that self-harm is an individual's
37 choice and it should not be stopped until other forms of expression are found. PRT
38 aims to work with the self-harm rather than against it. During the study length of 6
39 years, data was collected from incidence forms that were completed in the unit (from
40 2004 to 2009). The results showed an overall decrease in the frequency of self-harm
41 during admission and over time, across all 3 units. The study had no control group,
42 had a small number of participants and was undertaken within a single service. The
43 design was essentially an audit.

7.4.5 From evidence to recommendations

The GDG found no evidence to support or to contradict a harm reduction approach for people who self harm. However, the GDG took the view that the resistance to employing harm reduction approaches in this context had no evidential support whilst there was significant evidence supporting harm reduction strategies in other areas of health care, most notably in the field of drug misuse. The GDG could not make broad generalised recommendations for harm reduction approaches for all people who self harm, but instead opted to, on the basis of GDG consensus, recommend tentative approaches to harm reduction for some people who self harm. The GDG also considered the role of inpatient unit in harm reduction, and whilst the GDG recognised that for some individuals admission may reduce self-harm, for other individuals, this may exacerbate it. The GDG therefore decided to make no recommendation about the use or the role of inpatient unit in harm reduction.

7.5 RECOMMENDATIONS

Harm reduction

7.5.1.1 If stopping self-harm is unrealistic in the short term:

- consider strategies aimed at harm reduction; reinforce existing coping strategies and develop new strategies as an alternative to self-harm where possible
- consider discussing less destructive or harmful methods of self-harm with the service user, their family, carers or significant others²⁶ where this has been agreed with the service user, and the wider multidisciplinary team
- advise the service user that there is no safe way to self-poison.

7.6 RESEARCH RECOMMENDATION

7.6.1.1 An observational study exploring different harm-reduction approaches following self-harm

What are the different approaches to harm reduction following self-harm in NHS settings?

A study should be carried out to investigate the different approaches to harm reduction following self-harm currently in use in NHS settings. This could use survey methodology with all, or a selected sample of, mental health service providers. Audit data should be used to provide a preliminary evaluation of potential utility. Promising interventions might be tested in small-scale pilot randomised controlled trials, which use frequency and severity of self-harm, and standard measures of distress and psychological symptoms, as outcome measures. Other outcomes such as quality of life, service users' experience and adverse events should be included.

²⁶ 'Significant other' refers not just to a partner but also to friends and any person the service user considers to be important to them.

Why this is important

Although cessation of the behaviour remains the treatment goal for many professionals providing care to people who self-harm, this may not be realistic or possible in the short term for some individuals. An alternative strategy for services is to reduce the severity and frequency of self-harm. Anecdotally, a variety of approaches to harm reduction are used in health service settings - for example minimising the physical harm associated with episodes or suggesting alternatives to self-harming behaviours. However, the extent to which such management strategies are used across services is uncertain, as is their effectiveness.

8 PHARMACOLOGICAL INTERVENTIONS

8.1 INTRODUCTION

Many people who self-harm take psychotropic medication (Murphy *et al.*, 2007), often as treatment for underlying conditions such as depression. However evidence for the efficacy of pharmacological interventions to reduce self-harm is lacking. Some research suggests that lithium and clozapine may have specific anti-suicidal properties (Cipriani *et al.*, 2005; Meltzer *et al.*, 2003). Other studies have reported that prescription of certain classes of antidepressants (for example SSRIs) may be associated with an increase in suicidal behaviour particularly in young people (Barbui *et al.*, 2009; Fergusson *et al.*, 2005). Those who self-harm are at increased risk of future episodes, including overdoses of medication. There are large differences in the toxicity of medication prescribed to people who self-harm (Hawton *et al.*, 2010).

Other NICE guidance discusses the pharmacological treatment of conditions that may be associated with self-harm (for example, NICE, 2009a; NICE, 2009b; NICE, 2009e). Our aim in the current chapter was to review the randomised controlled trial evidence specifically for pharmacological treatment of self-harm. Because of variation in the toxicity of medication we also include a discussion of studies which could help to inform safer prescribing practices.

8.2 PHARMACOLOGICAL INTERVENTIONS

8.2.1 Studies considered²⁷

An existing systematic review was identified (Hawton *et al.*, 2011) for which the authors made their data available to the NCCMH team. This review included 5

²⁷ Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is in press or only submitted for publication, then a date is not used).

studies (HIRSCH 1982; MONTGOMERY 1979; LAUTERBACH 2008; BATTAGLIA 1999; HALLAHAN 2007). However, the GDG decided to exclude 2 studies (MONTGOMERY1983 and VERKES1998) from the meta-analysis because they looked at people who had a diagnosis of personality disorder. Pharmacological treatment options in the treatment of personality disorder are partly covered in the NICE Borderline Personality Disorder guideline (NICE, 2009e).

Additional systematic searches were undertaken to update the review. The last search was dated in January 2011. No additional studies that met inclusion criteria were found.

8.2.2 Clinical evidence for antidepressants versus placebo

One study compared antidepressants with placebo (HIRSCH1982). This was reviewed in the NICE guideline *Self-Harm: Short Term Management* (NICE, 2004) and there were no new studies identified for this comparison. Study characteristics can be found in

Table 36: Summary study characteristics of trials comparing antidepressants versus placebo

	Antidepressants versus placebo
Total no. of trials (N)	1 RCT (N=114)
Study ID	HIRSCH1982
Diagnosis	Not reported
Recruitment setting	Patients were admitted to hospital after deliberate self-poisoning
Treatment length	6 weeks
Country	UK
Prior history of self-harm	Not reported
Intervention	30-60mg mianserin or 75-150mg nomifensine
Control	Placebo
Note. N = Total number of participants.	

There was insufficient evidence to differentiate clinical effectiveness between treatment and placebo on the reduction of repetition during first 6 weeks of treatment (N=114; RR 1.6, 95% CI 0.63 to 4.04). There was insufficient evidence to determine the effect on death by suicide, or the acceptability of treatment.

Evidence from each important outcome and overall quality of evidence were presented in Table 36. The full evidence profiles and associated forest plots could be found in Appendix 15 and Appendix 16, respectively.

Borderline personality disorder

Two studies (MONTGOMERY1983 and VERKES1998) compared antidepressants versus placebo among people with personality disorders. All participants (MONTGOMERY1983) and 92% of participants (VERKES1998) had a diagnosis of personality disorders. Thus, the GDG decided not to include these two studies in the meta-analysis. However, a brief narrative review follows.

In MONTGOMERY1983 participants took 30mg of mianserin for 6 months. Participants in VERKES1998 took 40 mg paroxetine for 12 months and both groups received psychotherapy. However, there was insufficient evidence to determine differences between groups.

8.2.3 Clinical evidence for antipsychotic medication versus placebo or low-dose antipsychotic medication

Two studies included antipsychotics as one of their treatment arms (MONTGOMERY1979, BATTAGLIA1999). A narrative review for each study was included in the previous NICE guideline on Self-Harm (NICE, 2004) and no new studies had been identified since then. In MONTGOMERY1979, flupenthixol depot (20mg) or placebo was administered every 4 weeks for 6 months. In BATTAGLIA1999, 12.5 mg of fluphenazine or 1.5 mg fluphenazine was administered once a month for 6 months. Study characteristics can be found in Table 37.

Table 37: Summary study characteristics of trials comparing antipsychotics versus other comparators

	Antipsychotic medication versus placebo or low-dose antipsychotic medication	
Total no. of trials (N)	1 RCT (N=37)	1 RCT (N=58)
Study ID	MONTGOMERY1979	BATTAGLIA1999
Diagnosis	Not reported	79% diagnosis of substance abuse, 35% mood disorder, 29% anxiety disorder.
Recruitment setting	Patients admitted to a general hospital following a suicidal act.	Patients presenting to a psychiatric hospital for suicide attempt.

Treatment length	6 months	6 months
Country	UK	USA
Prior history of self harm	All were repeaters	Suicide attempt within 30 days before study entry and at least 2 prior attempts
Intervention	20mg intramuscular flupenthixol decanoate/4 per week.	Low dose (12mg) fluphenazine decanoate.
Comparison	Placebo	Ultra low dose (1.5mg) fluphenazine decanoate.

There was limited evidence (MONTGOMERY1979) suggesting that there was statistically significant clinical difference between flupenthixol and placebo on reducing repetition of self-harm (N=37; RR=0.29, 95% CI 0.1 to 0.81). Despite the observed effect, a wide variability in the confidence interval was observed due to the small sample size. No statistically significant difference was found between groups regarding treatment compliance (N=37; RR=0.92, 95% CI 0.67 to 1.26). There were a total of 7 drop outs, 2 of which were due to Parkinsonian side effects, and other reasons were not specified. As a result, it was not possible to make a recommendation based on this single trial.

There was insufficient evidence (BATTAGLIA1999) to differentiate clinical effectiveness between 12.5mg and ultra low dose 1.5mg fluphenazine on reducing repetitions during 6 months after trial entry (N=53; RR= 1.28, 95% CI 0.65 to 2.52). There were no suicide deaths reported in either trial arm. It was also unclear how the different dosage reduced the likelihood of leaving treatment early (N=58; RR= 1.12, 95% CI 0.71 to 1.76).

8.2.4 Clinical evidence for other pharmacological medication versus placebo

Two studies (LAUTERBACH2008, HALLAHAN2007) included neither antidepressants nor antipsychotics as their treatment arms, and were narratively reviewed. In LAUTERBACH2008, lithium was administered using a fixed schedule of dose augmentation increased by 200mg per week for 3 to 4 weeks. At 1 year, the doses were reduced by half and discontinued at the 13th month. The majority of the participants had a diagnosis of depression. In HALLAHAN2007, participants were randomized to receive omega-3 fatty acid supplement (n=22) of 1.2g eicosapentaenoic acid (EPA) and 0.9g decosahexaenoic acid (DHA), or placebo for 12 weeks. Four identical capsules were given each morning to each group containing either an active ingredient or placebo. The active capsules contained a total dose which equaled to 2128mg/day of EPA plus DHA. Patients continued to receive psychiatric care. The majority of participants had a diagnosis of personality disorder. Study characteristics could be found in Table 38.

Table 38: Summary study characteristics of trials comparing other medications versus placebo

	Other medications versus placebo	
Total no. of trials (N)	1 RCT (N=167)	1 RCT (N=49)
Study ID	LAUTERBACH2008	HALLAHAN2007
Diagnosis	DSM-IV 76% had diagnosis of major depressive disorder, 19% adjustment disorder, 5% other. Comorbidity: 8% substance use disorder, 7% anxiety disorder, 34% personality disorder.	41% had diagnosis of alcohol misuse and 82% personality disorder
Recruitment setting	Patients presenting to the emergency department following a suicide attempt at one of 5 study centres.	Patients presenting to hospital after deliberate self-harm.
Treatment length	3-4 weeks	12 weeks
Country	Germany	Ireland
Prior history of self harm	44% were repeaters	All are recurrent repeaters
Intervention	Lithium 200mg per week	Omega-3 fatty acid supplement (EPAX 5500 capsules) plus usual psychiatric care
Comparison	Placebo	Placebo plus usual psychiatric care.

There were no statistically significant clinical differences between lithium and placebo on any reported outcomes (LAUTERBACH2008). There were no differences in reducing repetition of self-harm at 12 months from trial entry (N=167; RR=0.99, 95% CI 0.36 to 2.69). There were no differences in terms of depression scores (measured by Hamilton Depression Rating Scale) at 3 months (SMD -0.05, 95% CI -0.42 to 0.33), 6 months (SMD 0.07, 95% CI -0.36 to 0.50) and 12 months (SMD -0.05, 95% CI -0.54 to 0.44). There were no differences in terms of Beck Hopelessness Scale at 3 months (SMD -0.1, 95% CI -0.49 to 0.3), at 6 months (SMD -0.12, 95% CI -0.67 to 0.42), and at 12 months (SMD -0.03, 95% CI -0.58 to 0.52). There were 3 cases of suicides in the placebo arm, and none in the treatment arm. However, these suicide attempts occurred within the context of a depressive spectrum disorder. Several limitations should be noted: there were more people who had personality disorders ($p<0.05$) and multiple suicide attempts ($p<0.001$) in the lithium group and participants in the placebo group had higher baseline suicide ideation scores

($p < 0.05$). Furthermore, the high proportion of participants lost to follow up (approximately 60%) might indicate the results were overestimated.

There was no statistical significant difference between omega-3 fatty acid supplement and placebo group during 12 weeks treatment when looking at repetition as an outcome ($N=49$; $RR=1.23$, 95% CI 0.51 to 2.97) (HALLAHAN2007).

There was limited evidence to show a small reduction in depression scores ($N=49$; $SMD=-0.3$, 95% CI -0.87 to 0.26). There was fewer participants in the treatment group reported suicidal ideation at 12 weeks after trial entry, compared with placebo ($N=49$; $RR 0.47$, 95% CI 0.24 to 0.9). There were slightly more participants (but not statistically significant) completing treatment ($N=49$; $RR=1.17$, 95% CI 0.88 to 1.54). A few limitations should be noted: at baseline, there were more married participants in the treatment group, and the depression scores in the treatment group were higher than the placebo group. These limitations might inflate the effects.

8.2.5 Clinical evidence summary

The evidence base for the pharmacological treatment for self-harm remains very limited since the publication of the previous NICE guideline *Self-Harm: Short Term Management* (NICE, 2004). With regards to the effects of antidepressants and antipsychotics on the reduction of self-harm behaviour, no new trials were identified. The clinical efficacy of these medications remains uncertain. The variations in the treatment lengths, follow up period, and participants' psychiatric diagnosis in these trials made it more difficult to warrant conclusions about the clinical effects of these medications.

There were two new trials looking at effects of lithium and omega-3 fatty acid supplement versus placebo. There was no evidence of reduction in repetitions in either trial. There might be a small improvement in a few symptom measures, however, these trials were too small to detect a statistical significant effect. There were baseline differences between groups in the two studies which might over estimate the clinical effects for some measures. Moreover, the population of these two studies had a high prevalence of psychiatric disorders (depressive disorder, alcohol misuse and personality disorder), which might limit generalisability of the findings.

8.2.6 Health economic evidence

No evidence on the cost effectiveness of pharmacological interventions for the management of self-harm was identified by the systematic search of the economic literature. Details on the methods used for the systematic search of the economic literature are described in Section 3.6.1.

1 According to the guideline systematic review of clinical evidence, the clinical
2 efficacy of pharmacological interventions for the treatment of self-harm is uncertain;
3 therefore, no economic modelling was undertaken in this area.

4 **8.3 SAFER PRESCRIBING**

5 The issue of safer prescribing is not limited to treatment with psychotropic
6 medications and is relevant to all prescribing to those with a known history of self-
7 harm or who are at risk of self-harm. Prescribed medications may also be used to
8 effect self-harm either as an end in itself, or as a consequence of use for other aims,
9 for example the manipulation of, or neglect of insulin regimes to influence weight.
10 The risks associated with the prescription of other potentially dangerous drugs such
11 as warfarin should be assessed with reference to the health consequences of not
12 prescribing and consideration of alternatives.
13

14 There have been wider public health measures to limit the volumes of potentially
15 hazardous drugs in the population. Consideration of certain of these measures are
16 beyond the remit of this guideline, but the recent limitation on prescription of co-
17 proxamol has already been shown to result in fewer deaths from poisoning and
18 suicides using coproxamol with no increase in those due to other analgesics
19 (Hawton *et al.*, 2009).
20

21 Generally, prescription of potentially toxic psychotropic medications such as
22 Lithium is undertaken in secondary care with close attention to the risks of overdose.
23 The majority of antidepressants are prescribed in primary care. Commonly, the
24 selective serotonin reuptake inhibitors (SSRIs) are regarded as being of low toxicity
25 and knowledge of the variation within this group and differences between serotonin
26 and noradrenaline reuptake inhibitors (SNRIs) and other antidepressants may not be
27 widely appreciated.

28 **8.3.1 Studies considered**

29 A comprehensive search was conducted which resulted in 6183 references. Sifting
30 was conducted by three members of the technical team based on the titles and
31 abstracts of the references. Full texts of the papers of potential relevance were
32 retrieved. Studies were excluded on the basis of the outcomes reported. Studies in
33 which fatal toxicity index or case fatality index were reported were included. A total
34 of 18 papers met these criteria, of which, the GDG decided to include only the most
35 recent papers. Due to the changes in regulatory policy and development of newer
36 drugs over years, only papers published in the last 5 years were reviewed.
37 AFSHARI2005, HAUKKA2009 and HAWTON2010 were included.
38

39 Toxicity is the primary outcome examined in the review. Toxicity can be measured
40 by fatal toxicity index (FTI) or case fatality index (CFI). Fatal toxicity index is
41 calculated by the number of deaths divided by the number of prescriptions of a
42 particular drug. However, the interpretation of toxicity using FTI can be confounded

by differential prescribing of drugs to particular groups of people (for example, people at highest risk of self-harm being preferentially prescribed particular medications). This is referred to as confounding by indication. Case fatality index is calculated by dividing the number of suicides divided by the number of fatal and non-fatal poisonings of a particular drug. CFI might be a more reliable indicator of toxicity because it partly accounts for this 'confounding by indication'.

8.3.2 Narrative review

AFSHARI2005

This study was conducted in Scotland, which aimed to look at relative toxicity of co-proxamol in overdose compared to co-codamol and co-dydramol. Prescription data, number of overdoses, and deaths relating to these popular paracetamol-opioid compound analgesics were collected. Co-proxamol was ten times more toxic compared with co-codamol or co-dydramol in terms of its fatal toxicity index, even after the differences in prescription data are accounted for.

HAUKKA2009

This study was conducted in Finland, which aimed to look at a national cohort of antidepressant users, and how it related to the risk of suicide from 1999-2003. Data included in the study were the participants' years of usage, and the number of suicides relating to that drug. Data were reported both by drug class and individual drugs. It was possible to calculate the fatal toxicity index for drug classes or individual drugs based on the data reported in the paper. This showed Tricyclic antidepressants (TCAs) were more toxic than SSRIs. When individual drugs were considered mirtazapine was most toxic, followed by venlafaxine, followed by moclobemide. It was unclear whether the data was accounted for confounding by indication. People at higher risk of self-harm might be prescribed a certain drug, which might not be accounted for in the calculation of fatal toxicity index.

HAWTON2010

This was an observational study of prescriptions and suicide by self-poisoning in the UK, which aimed to provide updated toxicity data of antidepressants to aid clinicians' decision making about prescriptions. Data included the death rate by suicide, prescriptions rate, and self poisoning rate for each individual antidepressant for people aged over 10 years from 2000-2006. Fatal toxicity index and case fatality index were then calculated. Data can be found in Appendix 16. The paper reported a very high correlation between the rankings of the results from fatal toxicity and case fatality index (which may be a more reliable indicator of potential toxicity because CFI accounted for confounding by indication). The findings showed that TCAs as a drug class was more toxic than SSRIs. Dosulepin and doxepin were the most toxic antidepressants in terms of its fatal toxicity and case fatality index.

In addition, the paper reported venlafaxine was less toxic in overdose than other TCA drugs. It was, however, still more toxic than SSRIs. Although SSRIs generally had lower toxicity, not all drugs within the class were the same. There was a greater than three-fold variation in case fatality rates between individual SSRIs.

8.3.3 Clinical evidence summary

Three recent papers reviewed the toxicity of different drugs that were commonly used for self-poisoning (analgesics and antidepressants). These papers included different individual drugs in their comparison, hence it was not possible to synthesise the toxicity data across these studies. Nevertheless, a common finding could be concluded for antidepressants. Tricyclic antidepressants (TCAs) as a drug class were more toxic than selective serotonin reuptake inhibitors (SSRIs).

8.4 EVIDENCE TO RECOMMENDATION

There was insufficient evidence to determine whether the provision of pharmacological treatment would reduce the likelihood of repetition of self-harm. No new trials looking at antidepressants or antipsychotics had been identified. Hence, no recommendations could be drawn.

It is suggested that healthcare professionals provide pharmacological interventions for any associated or underlying conditions as described in the relevant NICE guidelines. When prescribing drugs, toxicity of prescribed drugs in overdose should be taken into consideration. There was recent evidence suggesting TCAs as a drug class were more toxic than SSRIs. When clinicians are considering antidepressants, SSRIs might be preferred in those at risk of suicidal behaviour. In particular, the more toxic TCAs such as dosulepin should be avoided.

8.5 RECOMMENDATIONS

8.5.1.1 Do not offer drug treatment as a specific intervention to reduce self-harm.

Treating associated mental health conditions

8.5.1.2 Provide psychological, pharmacological, and psychosocial interventions for any associated conditions, for example those described in the following published NICE guidance:

- Alcohol-use disorders (NICE clinical guideline 115)
- Depression (NICE clinical guideline 90)
- Schizophrenia (NICE clinical guideline 82)
- Borderline personality disorder (NICE clinical guideline 78)
- Drug misuse (psychosocial interventions or opioid detoxification) (NICE clinical guidelines 51 and 52)
- Bipolar disorder (NICE clinical guideline 38).²⁸

8.5.1.3 When prescribing drugs for associated mental health conditions to people who self-harm, consider the toxicity of prescribed drugs in overdose. For example, when considering antidepressants, selective serotonin reuptake inhibitors (SSRIs) may be preferred because they are less toxic than other classes of antidepressants. In particular, do not use tricyclic antidepressants, such as dosulepin, because they are more toxic.

²⁸ This recommendation also appears in section 7.2 where the pharmacological data is presented.

9 CONSENT, CAPACITY, AND CONFIDENTIALITY

9.1 INTRODUCTION

The ongoing management of self-harm can be complex and the issues that arise when individuals refuse the treatment that healthcare professionals feel they need are especially difficult (David, 2010). Often healthcare professionals are unsure whether they should provide treatment to a person under these circumstances. Another important principle of care is confidentiality. There is a need to balance the protection of sensitive data with the appropriate sharing of information in order to ensure optimal care.

In this chapter we will focus on issues of consent and confidentiality. There are important overlaps between this chapter and Chapter 6 of the Self-harm Short Term Management Guideline (NCCMH, 2004). However, there have been significant legislative changes in the interim, particularly with respect to the introduction of the Mental Capacity Act 2005 (HMSO, 2005).

9.2 MENTAL CAPACITY

Mental capacity refers to the ability of an individual to make a decision (or take a particular course of action) at a time when it is needed (HMSO, 2007b). Capacity can change over time, for example if an individual's level of consciousness changes or they are under the influence of alcohol or drugs. It is also important to note that capacity may vary according to the decision that needs to be made. An individual may have capacity to make simple everyday decisions but may lack capacity to make more complex decisions about treatment. Assessment of capacity should therefore be made on a case by case basis.

9.2.1 Mental Capacity Act 2005

The Mental Capacity Act 2005 (HMSO, 2005) provides a legal basis to enable decisions to be made on behalf of those who lack the mental capacity to make decisions for themselves. The Act is based on principles previously established by individual legal cases (that is, 'common law'). All people aged 16 years and over are presumed to have capacity. Any decision made on behalf of someone who lacks capacity must be made in their best interests. The Act aims to balance an individual's right to make decisions for themselves with their right to be protected from harm. Text Box 2 summarises the five statutory principles of the Act (HMSO, 2007b).

Text Box 2: The Mental Capacity Act establishes five principles

A person must be assumed to have capacity unless it is established that he lacks capacity.

A person is not to be treated as unable to make a decision unless all practicable steps to help him to do so have been taken without success.

A person is not to be treated as unable to make a decision merely because he makes an unwise decision.

An act done, or decision made, under this Act for or on behalf of a person who lacks capacity must be done, or made, in his best interests.

Before the act is done, or the decision is made, regard must be had to whether the purpose for which it is needed can be as effectively achieved in a way that is less restrictive of the person's rights and freedom of action.

Assessing capacity

To enable a person to make a decision about receiving medical treatment, that person must receive sufficient information about the specific treatment that is being offered and in a form that can be understood by him/her. Information must be provided about the seriousness and the nature of problems that are associated with the condition under question, the objectives of the treatment, the consequences of being treated, and the consequences of not being treated. Throughout treatment attempts must be made to provide information when necessary and to obtain the person's consent.

Any individual assessing capacity should do so as part of a two stage process, as outlined in Text Box 3 (HMSO, 2007b).

Text Box 3: two stages for assessing capacity from Mental Capacity Act Code of Practice

Stage 1: Does the person have an impairment of, or a disturbance in the functioning of, their mind or brain?

Stage 1 requires proof that the person has an impairment of the mind or brain, or some sort of or disturbance that affects the way their mind or brain works. If a person does not have such an impairment or disturbance of the mind or brain, they will not lack capacity under the Act.

Stage 2: Does the impairment or disturbance mean that the person is unable to make a specific decision when they need to?

For a person to lack capacity to make a decision, the Act says their impairment or disturbance must affect their ability to make the specific decision when they need to. But first people must be given all practical and appropriate support to help them make

the decision for themselves. Stage 2 can only apply if all practical and appropriate support to help the person make the decision has failed.

A person will be deemed to be unable to make a particular decision if they cannot perform the tasks set out in Text Box 4.

Text Box 4: assessing ability to make informed decisions

A person is unable to make a decision if they cannot

1. understand information about the decision to be made (the Act calls this 'relevant information')
2. retain that information in their mind
3. use or weigh that information as part of the decision-making process, or
4. communicate their decision (by talking, using sign language or any other means).

Who can make assessments of capacity?

In practice, in most healthcare settings it will be the professional providing care for the individual at the time the decision needs to be made who makes the assessment of capacity. Multidisciplinary teams may be involved in the process but the final decision must be made by the person proposing the treatment. There is no prerequisite that the assessor must have mental health experience. More complex or difficult decisions may require assessments of capacity by professionals whose role is to advise the decision maker (for example psychiatrists, psychologists, social workers, occupational therapists). Examples of complex decisions include: those with potentially serious consequences; those where there is disagreement between family members and carers; those where the person being assessed has expressed different views to different people or has repeatedly made decisions that has put them at risk or caused harm (HMSO, 2007b). Legal advice should be available to assessors through their NHS organisations.

Factors that affect capacity

Factors that can impair capacity include long-term mental illness or disability, or more temporary factors such as impairment due to medication, drugs, alcohol, acute illness, or emotional distress. In such circumstances, staff should decide whether the treatment of a person should be withheld (if it is considered safe to do so) until the person regains capacity.

9.2.2 Advance decisions and statements

In England and Wales the Mental Capacity Act 2005 (HMSO, 2005) allows individuals aged 18 years and over who are capable of making an informed choice to refuse specified medical treatment at a time in the future, even if this might result in death. These refusals are referred to as 'advance decisions' in the Mental Capacity Act and are legally binding (HMSO, 2007b). Although people can make advance decisions to refuse treatment, there is no legal right to demand specific treatment (either at the time or in the future). However, people can state their preferences for treatment in the form of 'advance statements' which healthcare professionals can take into account, but they do not carry the same imperative as advance decisions.

Advance decisions should specify which treatment is to be refused and include as much detail as possible regarding the circumstances under which the advance decision will apply. They will only come into force once an individual has lost the capacity to make a particular treatment decision for themselves. Healthcare professionals need to be satisfied that an advance decision is valid and applicable and they should consult as widely as possible in order to establish this. Decisions may not be valid or applicable if the person concerned has done anything that clearly goes against their decision, has withdrawn their decision, has conferred the power to make a decision on an attorney, or would have changed their decision if they had known more about the current circumstances. Decisions to refuse life saving treatment must satisfy the requirement of the Mental Capacity Act (Text Box 5).

Text Box 5: advance decisions

If the advance decision refuses life-sustaining treatment, it must:

be in writing
be signed and witnessed, and
state clearly that the decision applies even if life is at risk

9.2.3 Young people

The Mental Capacity Act does not in general apply to children under 16, whose care and treatment will be determined by common law principles. Most provisions of the Mental Capacity Act apply to young people aged 16-17, with the exception of making advance treatment decisions (individuals need to be 18 years old and over to make advance decisions). If a young person aged 16-17 years has capacity and refuses treatment there may be difficulties if those with parental responsibility wish to consent on their behalf. The Family Division of the High Court can rule on such cases (HMSO, 2007b).

For those aged 16-17 who lack capacity, parents can consent on their behalf. However, it should be noted that healthcare professionals are able to provide treatment regardless of whether parental consent has been given as long as the

- 1 principles of the Act are followed and the course of action is judged to be in the
- 2 young person's best interests.
- 3
- 4 Healthcare professionals who have contact with young people should be aware of
- 5 the Mental Health Act and Children Acts and how these relate to capacity and
- 6 consent in young people.

9.2.4 Capacity and Advance Decisions in the context of self-harm

The ethical and practical issues raised by treatment refusals and advance decisions are complex, but are even more difficult in the context of suicidal behaviour. In clinical practice there is often sufficient doubt about an individual's capacity after self-harm to justify treatment. For example, if a person seems relatively calm in making their decision to refuse treatment and expresses a wish to die by suicide, this could be rebutted by providing evidence that the person: does not understand the consequence of their decision; that their decision is influenced by another person; that their judgement is impaired by emotional distress, or that they are ambivalent about their decision. However, if the person in question is judged to be mentally capable of making a decision about whether or not to receive treatment, then this decision must be respected, even if it is at risk of causing permanent risk to that person's health or premature death.

With respect to advance decisions one of the most important questions is whether someone who has completed an advance decision refusing treatment should be allowed to die from the consequences of a suicidal act. The Mental Capacity Act states that health workers will be protected from liability for not providing treatment if they reasonably believe that a valid advance decision exists. However, it has also been argued that advance decisions to refuse treatment following episodes of suicidal behaviour raise a number of specific issues (Kapur, 2010b). It has been suggested that clinicians should proceed especially cautiously, in view of the acute distress, ambivalence, and changeability that often characterise suicidal thoughts and behaviour (Kapur, 2010b).

If an individual is detained under the Mental Health Act, physical healthcare can be administered as long as it is part of the treatment for the mental disorder and its consequences (HMSO, 2007b). Therefore treating the physical consequences of the patient's suicidal behaviour is authorised under the Mental Health Act if that behaviour has been caused by the patient's mental disorder. Apart from advance decision to refuse ECT, an advance decision to refuse treatment is not valid if the treatment is being provided under Part 4 of the Mental Health Act. If treating under the Mental Capacity Act staff must act in the person's best interest and within good medical practice. The use of minimal force or restraint should only be considered when immediately necessary and as a last resort.

9.3 PRINCIPLES INTO PRACTICE

Treatments for underlying psychological symptoms or psychiatric disorders will generally involve informed consent, or less commonly, administration under the Mental Health Act. General principles that healthcare professionals should take into account include:

- Offering comprehensive information about the intervention and any consequences if it is not carried out. In many cases, spending time with the individual, listening to their concerns, explaining the issues in a comprehensible fashion, and reducing the overall emotional tone of the situation, can lead to the individual making a decision to consent to treatment
- Not gaining consent through being coercive (e.g. threats to use the Mental Health Act if the person refuses)
- Involving family members and friends in decision-making, within the bounds of confidentiality. Healthcare professionals might also be advised to consult with colleagues (if appropriate) and come to a consensus as to the proper course of action. Making a decision in isolation should be avoided.
- Considering the content of any crisis card or advance decisions and statements
- Recording all actions and the reasons behind them.

9.4 CONFIDENTIALITY

Protecting the personal information of service users is a key principle in the provision of health services. Healthcare professionals have a legal and professional obligation to protect confidentiality, but there are circumstances in which personal information can be disclosed (General Medical Council, 2009) as outlined in Text Box 6.

Text Box 6: confidentiality

- If it is required by law (for example, by regulatory bodies, judges)
- If the patient consents implicitly for the sake of their own care (for example, disclosure to other members of the care team, or for local clinical audit) or if the patient consents specifically for other purposes (for example, disclosure, to employers, insurers, or benefit agencies)
- If it is justified in the public interest (for example to protect society or individuals from harm or to enable medical research or other uses of data that will benefit society over time)

For disclosures to be made in the public interest the risks posed by non-disclosure need to outweigh the risks posed by disclosure. One situation which may be particularly relevant to the management of self-harm is disclosure to protect the individual themselves. The General Medical Council guidance suggests that professionals should usually abide by a competent adult's refusal to consent to disclosure even if this decision leaves them (but no-one else) at risk of serious harm. Individuals should be encouraged to consent to disclosure under these circumstances, be warned of the possible consequences of non-disclosure, and given information about possible sources of help. However, disclosures without consent are permitted if non-disclosure exposes other people to a risk of death or serious

harm (for example, in situations where a serious crime might be prevented or detected). Disclosures are also permitted in situations where individuals lack capacity, as long as this is in their best interests.

Sharing information with families is often a difficult issue, particularly so in the management of individuals who self-harm. It is important to establish with service users who they would like their information shared with and the circumstances under which this should occur. If a family member wishes to share their concerns about an individual, healthcare professionals should not refuse to discuss these on the basis of confidentiality. This information may be helpful in informing management. It should be made clear to the family members that the details of the conversation may be relayed to the individual themselves. However, before talking to family members in this way, guidance suggests that professionals should consider whether the service users would regard such conversations as a breach of trust (GMC, 2009).

Confidentiality issues for children and young people

Issues of confidentiality are particularly challenging with children and young people²⁹ who self-harm who have capacity yet refuse the involvement of their parents or carers in their treatment or refuse consent to disclose issues relating to their safety to their parents or carers. In these circumstances healthcare professionals need to weigh carefully the rights of the young person to confidentiality and the risk to the therapeutic relationship of a breach of confidentiality with providing the family and carers with sufficient information to enable them to appropriately protect and care for their young person. The younger the service user and the more risky or severe the self-harm the less justifiable a decision to maintain confidentiality may be considered to be. Healthcare professionals making these judgements are encouraged to discuss with a senior colleague and / or consult with the Named Doctor / Named Nurse for Safeguarding. If the healthcare professional decides on balance that a breach of confidentiality is warranted, involving the young person as much as possible in how and when this is done can mitigate some of the damage to the therapeutic relationship.

9.5 SAFE GUARDING

Although it is essential to work collaboratively with people who self-harm, it is also important to recognise that those dependent upon them may also need help, and sometimes protection, according to the Common Assessment Framework. The care co-ordinator or key worker may need to ensure that children's services are alerted to the need for assessment and possible help for the child. Similarly, when dependent

²⁹ Where it refers to children and young people, this applies to all people who are between 8 and 17 years inclusive.

or vulnerable adults are involved, the vulnerable adult may need to be assessed at home, the risks assessed and any necessary safeguarding procedures initiated.

Young people who self-harm may present safeguarding concerns either because of the nature of the social circumstances in which they live, for example, a young person caring for a parent with a chronic illness who self-harms daily by cutting to manage difficult emotions about their circumstances, or because of the frequent and potential lethality of their behaviour, for example, a young person who frequently ties ligatures around their neck and often stands on a local high bridge contemplating jumping off. Health professionals should consider both during initial assessment and treatment whether safeguarding concerns warrant involvement of other agencies. Often the Named Dr or Named Nurse for safeguarding as well as social services departments can provide advice. In circumstances where social circumstances are germane to the causation of the self-harm or where repeated self-harm is potentially lethal, multi-agency treatment plans may need to be developed. Such plans need to be based on a comprehensive assessment of the young person's health, educational and social needs. In endeavouring to serve the needs of young people with complex needs, occasionally involvement of one agency may decrease the involvement of another or even in some circumstances precipitate their withdrawal. This is never helpful nor is it consistent with prioritising the needs of the young person. Health professionals may need to provide training to staff in other agencies to help them understand their role in supporting/helping a young person who self-harms as often self harm is medicalised solely as a mental health issue and wider contextual factors are either ignored or misunderstood.

Treatment is particularly challenging in the context where a young person is at high risk and where there is a need to balance their immediate safety with improving longer-term outcomes, which may require a degree of positive risk taking. In these situations, multi-agency involvement to agree the balance of risks and benefits of different treatment options may prove helpful in forming an intervention plan. These discussions must involve the young person and his or her family in decision making.

9.6 RECOMMENDATIONS

General principles of care

Consent and confidentiality

9.6.1.1 Health and social care professionals who work with people who self-harm should be trained to:

- understand and apply the principles of the Mental Capacity Act (2005) and Mental Health Act (1983; amended 1995 and 2007)
- assess mental capacity, and

- make decisions about when treatment and care can be given without consent.

9.6.1.2 Be familiar with the principles of confidentiality with regard to information about a person's treatment and care, and be aware of the circumstances in which disclosure of confidential information may be appropriate and necessary.

9.6.1.3 Offer full written and verbal information about the treatment options for self-harm, and make all efforts necessary to ensure that the person is able, and has the opportunity, to give meaningful and informed consent.

9.6.1.4 Take into account that a person's capacity to make informed decisions may change over time, and that sometimes this can happen rapidly in the context of self-harm and suicidal behaviour.

9.6.1.5 Understand when and how the Mental Health Act (1983; amended 1995 and 2007) can be used to treat the physical consequences of self-harm.

9.6.1.6 Health and social care professionals who work with people who self-harm should have easy access to legal advice about issues relating to capacity and consent.

9.6.1.7 Health and social care professionals who have contact with children and young people who self-harm should be trained to:

- understand the different roles and uses of the Mental Capacity Act (2005), the Mental Health Act (1983; amended 1995 and 2007) and the Children Act (1989; amended 2004) in the context of children and young people who self-harm
- understand how issues of capacity and consent apply to different age groups

- assess mental capacity in children and young people of different ages.

They should also have access at all times to specialist advice about capacity and consent.

Safeguarding

9.6.1.8 CAMHS professionals who work with children and young people who self-harm should consider whether the child's or young person's needs should be assessed according to local safeguarding procedures³⁰.

9.6.1.9 If children or young people who self-harm are referred to CAMHS under local safeguarding procedures:

- use a multi-agency approach, including social care and education, to ensure that different perspectives on the child's life are considered
- consider using the Common Assessment Framework³¹; advice on this can be sought from the local named lead for safeguarding children.

If serious concerns are identified, develop a child protection plan.

9.6.1.10 When working with people who self-harm, consider the risk of domestic or other violence or exploitation and consider local safeguarding procedures for vulnerable adults and children in their care. Advice on this can be obtained from the local named lead on safeguarding adults.

³⁰ www.safeguardingchildren.org.uk

³¹ www.cwdcouncil.org.uk/caf It should be noted that the Common Assessment Framework is not applicable in Wales.

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Appendices 1-17 are in separate files.