

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

PUBLIC HEALTH DRAFT GUIDANCE

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Promoting the mental wellbeing of children in primary education

NICE public health guidance X

Introduction

The Department of Health (DH) asked the National Institute for Health and Clinical Excellence (NICE or the Institute) to produce public health guidance on promoting the mental wellbeing of children in primary schools.

The guidance is for teachers, school governors and professionals with public health as part of their remit working in education, local authorities, the NHS and the wider public, voluntary and community sectors.

The Public Health Interventions Advisory Committee (PHIAC) has considered the reviews of the evidence and the economic appraisal.

This document sets out the preliminary recommendations developed by the Committee. It does not include all the sections that will form part of the final guidance. The Institute is now inviting comments from stakeholders (listed on the NICE website at: www.nice.org.uk).

Note that this document does not constitute the Institute's formal guidance on promoting the mental wellbeing of children in primary schools. The recommendations made in section 1 are provisional and may change after consultation with stakeholders and fieldwork.

The process the Institute will follow after the consultation period (which includes fieldwork) is summarised below. For further details see 'The public health guidance development process: An overview for stakeholders including

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public health practitioners, policy makers and the public' (this document is available on the Institute's website at: www.nice.org.uk/phprocess).

- The Committee will meet again to consider the consultation comments, the fieldwork reports and the stakeholder evidence.
- After that meeting, the Committee will produce a second draft of the guidance.
- The draft guidance goes to the NICE Guidance Executive for final sign off.

The key dates are:

Closing date for comments: 21 December 2007.

Second Committee meeting: 18 January 2007 (tbc).

Details of PHIAC membership are given in appendix A and key supporting documents used in the preparation of this document are listed in appendix E.

This guidance was developed using the NICE public health intervention process.

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1 Recommendations

The Public Health Interventions Advisory Committee (PHIAC) considered the evidence of effectiveness and cost effectiveness in drafting the recommendations. Note: this document does not constitute the Institute's formal guidance on this intervention. The recommendations are preliminary and may change after consultation.

This guidance complements existing national guidance and programmes on the social and emotional aspects of learning. In particular, it should be considered within the context of the Social and Emotional Aspects of Learning (SEAL) programme (Department for Education and Skills 2005a; 2005b) and related community-based initiatives.

The evidence statements underpinning the recommendations are listed in appendix C. The evidence reviews, supporting evidence statements and economic appraisal are available on the Institute's website at

<http://guidance.nice.org.uk/page.aspx?o=350205>

Comprehensive programmes

Recommendation 1

Who is the target population?

Professionals working with children in primary schools.

Who should take action?

Commissioners and providers of services to children in primary schools including: those working in children's trusts, local authority education and children's services, schools, primary care trusts (PCTs) and child and adolescent mental health services.

What action should they take?

- Develop and agree arrangements, as part of the 'Children and young people's plan' (and as part of joint commissioning activities), to ensure

primary schools promote the emotional and social wellbeing of children. All primary schools should provide a comprehensive programme which:

- is based on a ‘whole school’ approach that promotes an ethos of positive behaviour and successful relationships. It should include support for all pupils and parents. It should also include specific help for those children most at risk (or already showing signs) of emotional and behavioural problems and their parents
 - is offered as part of the school’s policies for attaining the National Healthy Schools Standard and reaching the outcome framework targets¹
 - includes training and support for teachers and non-teaching staff in schools provided by appropriately qualified people. The trainers may be working in healthy schools teams, community nursing or specialist educational, family support and mental health services (levels 1 and 2) or in the voluntary or private sectors.
- Put in place the coordinating mechanisms needed to ensure primary schools have access to the skills, advice and support they need to deliver a comprehensive programme (see recommendations 2–4). In particular, schools and local authority children’s services should work closely with child and adolescent mental health and other services to develop and agree local protocols to include a ‘stepped care’ approach to the prevention and management of mental health problems. The protocols should cover assessment and referral. They should also define the role of schools and other agencies in delivering different interventions, taking into account local capacity and configuration of services.

(See also NICE clinical guideline 28 on depression in children and young people at www.nice.org.uk/CG028 and NICE technology appraisal 102 on

¹ HM Government (2004) Every child matters: change for children. London: Department for Education and Skills.

parent training and education programmes in the management of children with conduct disorders at www.nice.org.uk/TA102)

Universal approaches

Recommendation 2

Who is the target population?

Children in primary schools (aged 4–11 years), their parents or carers and teachers.

Who should take action?

- Head teachers, teachers and non-teaching staff working with children in primary schools.
- Those working in (and with) local authority education and children's services (including healthy schools teams), primary care (such as school nurses) and child and adolescent mental health services (levels 1 and 2).

What action should they take?

Provide a comprehensive programme to promote children's emotional and social wellbeing that is based on an ethos of positive behaviour and successful relationships. This should include:

- training and development for teachers and non-teaching staff in how to manage behaviour and improve relationships between children and adults
- a curriculum on emotional and social development (covering the development of skills such as problem solving, coping, conflict management and emotional literacy). This should be provided throughout primary education by appropriately trained teachers and non-teaching staff
- training and development to ensure teachers and non-teaching staff can deliver the curriculum
- help to develop parents' or carers' parenting skills. This may involve providing information or small, group-based programmes run by community nurses (such as school nurses and health visitors) or other appropriately trained practitioners

- integrated activities to promote emotional and social wellbeing within all areas of school life. For example, classroom-based teaching should be reinforced in assemblies, homework and play periods (in class as well as in the playground).

Targeted approaches

Recommendation 3

Who is the target population?

Children in primary schools (aged 4–11 years) who are experiencing anxiety or emotional distress and their parents or carers.

Who should take action?

- Teachers and non-teaching staff working with children in primary schools.
- Those working in (and with) local authority education and children's services (including healthy schools teams), primary care (such as school nurses) and child and adolescent mental health services (levels 1 and 2).

What action should they take?

- Ensure teachers and non-teaching staff are appropriately trained to identify and assess the early signs of anxiety and emotional distress among primary schoolchildren (and can make an appropriate referral for specialist assessment, where necessary). Early signs may include poor peer relations, low self-esteem, being withdrawn and behavioural problems. Children at risk may be living in difficult or socially disadvantaged circumstances. They may include looked after children and children: who persistently refuse to go to school; in families where there is marital conflict or little stability; who have experienced particular adverse life events (such as parental divorce); or have been exposed to violence.
- Identify and assess children who are experiencing early signs of anxiety or emotional distress using existing methods such as the common assessment framework (CAF). Normally, only refer them for detailed

specialist assessment if they have a combination of risk factors and/or the difficulties are recurring or persistent.

- Discuss the options for tackling these problems in conjunction with the child and their parents or carers and agree an action plan, as the first stage of a ‘stepped care’ approach (as defined in NICE clinical guideline 28 on depression in children and young people).
- Offer a range of interventions, dependent on the child’s needs. These should be provided in conjunction with other services (including specialist services) based in schools and other settings. Where appropriate, this may include:
 - tailored group sessions delivered by appropriately trained specialists who are ‘in receipt of supervision’ and using a specific psychological intervention. The sessions should help children with their emotional and social development by giving them practical skills such as problem-solving techniques and coping and conflict management strategies
 - group sessions to help the parents or carers of these children to develop their parenting skills (including how to manage the child’s behaviour and his/her anxiety or emotional distress). These sessions should be organised to run in parallel with the children’s sessions.
- Ensure parents or carers living in disadvantaged circumstances are given the support they need to participate fully in the sessions above. This may include the provision of childcare or transport costs.

Recommendation 4

Who is the target population?

Children in primary schools (aged 4–7 years) who are at risk of developing (or who already display) disruptive behaviour problems and their parents or carers.

Who should take action?

- Teachers and non-teaching staff working with children in primary schools.
- Those working in (and with) local authority education and children's services (including healthy schools teams) and primary care (such as school nurses) child and adolescent mental health services (levels 1 and 2).

What action should they take?

- Ensure teachers and non-teaching staff are trained to identify and assess children at risk of developing (or who already display) disruptive behavioural problems (and can make an appropriate referral for specialist assessment, where necessary). Children at risk may be living in difficult or socially disadvantaged circumstances. They may include looked after children and children: who persistently refuse to go to school; in families where there is marital conflict or little stability; who have experienced particular adverse life events (such as parental divorce); or have been exposed to violence
- Identify and assess children who are at risk of developing (or who display) disruptive behavioural problems, using existing methods such as CAF. Normally, only refer them for detailed specialist assessment if they have a combination of risk factors and/or the difficulties are recurring or persistent.
- Discuss the options for tackling these problems with the child and their parents or carers and agree an action plan, as part of the first stage of a 'stepped care' approach.
- Offer a range of interventions, dependent on the child's needs. These should be provided in conjunction with other services (including specialist services) based in schools and other settings. Where appropriate, provide tailored support to prevent or reduce disruptive behavioural problems. This additional support may include:

- group sessions delivered by appropriately trained specialists who are ‘in receipt of supervision’ and using a specific psychological intervention. The sessions should help develop the children’s social skills (including problem solving, conflict resolution, anger management and communication skills)
 - group parenting sessions for the parents or carers of these children. These sessions should be organised to run in parallel with the children’s sessions
- Ensure parents or carers living in disadvantaged circumstances are given the support they need to participate fully in the sessions above. This may include the provision of childcare or transport costs.

(See also: NICE clinical guideline 28 on depression in children and young people at www.nice.org.uk/CG028, NICE technology appraisal 102 on parent training and education programmes in the management of children with conduct disorders at www.nice.org.uk/TA102 and NICE clinical guideline on attention deficit hyperactivity disorder (due July 2008).

2 Public health need and practice

For the purposes of this guidance, mental wellbeing is defined as good emotional, psychological and social health (NHS Scotland 2006). Young children’s mental wellbeing is important because it affects their physical health (both now and in the future). It can determine whether or not they develop healthy lifestyles. It can also determine how well they do at school. Good emotional, psychological and social health protects them against emotional and behavioural problems, violence and crime, teenage pregnancy and the misuse of drugs and alcohol (Adi et al. 2007).

In 2004, 10% of children and young people aged 5–16 had a clinically diagnosed mental disorder (Office for National Statistics 2004). Older children (aged 11–16 years) were more likely than younger children (aged 5–10) to be affected (12% compared with 8%). Mental disorders among young people increased between 1974 and 1999 (Collishaw et al. 2004). However, this

upward trend was halted during 1999–2004, according to the most recent national survey of 5–16 year olds (Office for National Statistics 2004).

In 2004, boys were generally more likely to have a mental disorder than girls, and the prevalence of mental illness was greater among children living:

- within disrupted families (lone parent, reconstituted)
- with parents who have no educational qualifications
- within poorer families and in disadvantaged areas (Office for National Statistics 2004).

There is variation by ethnicity. Children aged 5–10 who are white, Pakistani or Bangladeshi appear more likely to have a mental disorder than black children. Indian children are least likely to have such problems. Looked after children aged 5–10 were at least five times more likely than average to have a mental disorder (42% versus 8%) (Office for National Statistics 2004).

Policy background

The guidance will support the following national service frameworks (NSFs) and other government policies:

- ‘National service framework for children, young people and maternity services’ (DH 2004a)
- ‘National service framework for mental health’ (DH 1999)
- ‘Every child matters’ green paper (HM Government 2003), and ‘Every child matters: change for children’ programme (HM Government 2004)
- ‘Higher standards, better schools for all’ (Department for Education and Skills 2005a)
- ‘Promoting children’s mental health within early years and school settings’ (Department for Education and Employment 2001)
- ‘Excellence and enjoyment: social and emotional aspects of learning’ (Department for Education and Skills 2005b)
- ‘Healthy minds: promoting emotional health and wellbeing in schools’ (Ofsted 2005)
- ‘Bullying – a charter for action’ (Department for Education and Skills 2003a)

- ‘Bullying: effective action in secondary schools’ (Ofsted 2003)
- ‘The respect action plan’ (Home Office 2006)
- ‘Healthy living blueprint for schools’ (Department for Education and Skills 2004)
- ‘Choosing health: making healthier choices easier’ (DH 2004b)
- National healthy school status – a guide for schools’ (Department for Education and Skills 2005c)
- ‘Our health, our care, our say’ (DH 2006)
- ‘Making it possible: improving mental health and well-being in England’ (National Institute for Mental Health in England 2005)
- ‘Aiming high: raising the achievement of minority ethnic pupils’ (Department for Education and Skills 2003b)
- ‘Promoting the health of looked after children’ (DH 2001)
- ‘A better education for children in care’ (Social Exclusion Unit 2003)
- ‘Managing pupil mobility’ (Department for Education and Skills 2003c)
- ‘Special education needs: third report of session 2005–06’ (House of Commons Education and Skills Committee 2006).

3 Considerations

- 3.1 PHIAAC took account of a number of factors and issues in making the recommendations. PHIAAC adopted an holistic approach to mental wellbeing within primary schools. This emphasises the importance of a supportive and secure environment and ethos. It includes support for pupils with special needs.
- 3.2 This guidance should be used within the context of a range of services and processes which promote the mental wellbeing of children in primary education. These may range from school-based, universal approaches promoting social and emotional wellbeing to the referral and treatment of children with a mental illness.

(See also: NICE clinical guideline 28 on depression in children and young people at www.nice.org.uk/CG028, NICE technology

appraisal 102 on parent training and education programmes in the management of children with conduct disorders at www.nice.org.uk/TA102 and NICE clinical guideline on attention deficit hyperactivity disorder [due July 2008].)

- 3.3 PHIAAC considered that universal approaches aiming to prevent social and emotional problems among children in primary education should be the main focus. A strong focus on prevention could also avoid inappropriate referrals to clinical services. This preventive approach includes early identification of children at risk of having their learning disrupted by social and emotional difficulties.
 - 3.4 Children's mental wellbeing is influenced by a range of factors, from their individual make-up and family background to the community within which they live and society at large. As a result, school-based activities to develop and protect their mental wellbeing can only form one element of a broader, multi-agency strategy. Other elements will include the development of policies to improve the social and economic circumstances of children living in disadvantaged circumstances.
 - 3.5 It is important to recognise and respond to the needs of children from different socioeconomic, cultural and ethnic backgrounds.
 - 3.6 Lack of investment in mental health promotion in primary schools is likely to lead to significant costs for society. Research shows that a child's emotional, social and psychological wellbeing influences their future health, education and social prospects. Children who experience emotional and social problems are more likely, at some point, to: misuse drugs and alcohol, have lower educational attainment, be untrained, unemployed or involved in crime.
 - 3.7 The evidence on cost effectiveness is subject to uncertainties.
- Targeted and intensive school-based interventions do not appear
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to be cost effective in the short term. However, they could prevent the negative behaviours which can lead to costly consequences for the NHS, social services and the criminal justice system. PHIAC considered that they are likely to be cost-effective in the medium term.

- 3.8 When using group-based approaches, care is needed with groups that include both aggressive and non-aggressive children, as this approach may have adverse consequences on the latter. It is also important to respond to individual needs.
- 3.9 Teachers and non-teaching staff in primary schools need training to promote young children's mental wellbeing if they are to be successful. PHIAC hopes that the relevant training and education organisations will acknowledge this need and seek to equip schools' staff with the necessary competencies. Schools can use their evaluation processes to identify ongoing professional development needs in this area.
- 3.10 This guidance does not consider:
- interventions that address the relationship between mental wellbeing and factors such as physical activity levels and nutrition
 - assessment of children with special needs
 - clinical interventions for established mental illness.

4 Implementation

NICE guidance can help:

- NHS organisations meet DH standards for public health as set out in the seventh domain of '[Standards for better health](#)' (updated in 2006). Performance against these standards is assessed by the Healthcare Commission and forms part of the annual health check score awarded to local healthcare organisations.

- NHS organisations and local authorities (including social care and children's services) meet the requirements of the government's 'National standards, local action, health and social care standards and planning framework 2005–2008'.
- National and local organisations within the public sector meet government indicators and targets to improve health and reduce health inequalities.
- Local authorities fulfil their remit to promote the economic, social and environmental wellbeing of communities.
- Local NHS organisations, local authorities and other local public sector partners benefit from any identified cost savings, disinvestment opportunities or opportunities for re-directing resources.
- Provide a focus for children's trusts, health and wellbeing partnerships and other multi-sector partnerships working on health within a local strategic partnership.

NICE has developed tools to help organisations implement this guidance. The tools will be available on our website (www.nice.org.uk/PHxxx). For provisional details see below:

- Costing tools:
 - costing report to estimate the national savings and costs associated with implementation
 - costing template to estimate the local costs and savings involved.
- Other tools:
 - slides highlighting key messages for local discussion
 - practical advice on how to implement the guidance and details of national initiatives that can provide support
 - audit criteria to monitor local practice.

5 Recommendations for research

This section will be completed in the final guidance document.

More detail on the evidence gaps identified during the development of this guidance is provided in appendix D.

6 Updating the recommendations

This section will be completed in the final guidance document.

7 Related NICE guidance

Published

Behaviour change at population, community and individual levels. NICE public health guidance 6 (2007). Available from: www.nice.org.uk/PH006

Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people. NICE public health intervention guidance 4 (2007). Available from: www.nice.org.uk/PHI004

Interventions in schools to prevent and reduce alcohol use among children and young people. NICE public health guidance 7 (2007). Available from: www.nice.org.uk/PH007

Computerised cognitive behaviour therapy for depression and anxiety. NICE technology appraisal 97 (2006). Available from: www.nice.org.uk/TA097

Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder (ADHD) in children and adolescents. NICE technology appraisal 98 (2006). Available from: www.nice.org.uk/TA098

Parent-training/education programmes in the management of children with conduct disorders. NICE technology appraisal 102 (2006). Available from: www.nice.org.uk/TA102

The management of bipolar disorder in adults, children and adolescents in primary and secondary care. NICE clinical guideline 38 (2006). Available from: www.nice.org.uk/CG038

Depression in children and young people: identification and management in primary, community and secondary care. NICE clinical guideline 28 (2005).

Available from: www.nice.org.uk/CG028

Obsessive compulsive disorder: core interventions in the treatment of obsessive compulsive disorder and body dysmorphic disorder. NICE clinical guideline 31 (2005). Available from: www.nice.org.uk/CG031

Eating disorders: core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. NICE clinical guideline 9 (2004). Available from: www.nice.org.uk/CG009

Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. NICE clinical guideline 16 (2004). Available from: www.nice.org.uk/CG016

Under development

Attention deficit hyperactivity disorder: pharmacological and psychological interventions in children, young people and adults. NICE clinical guideline (due July 2008).

8 References

Adi Y, Killoran A, Janmohamed K et al. (2007) Systematic review of the effectiveness of interventions to promote mental wellbeing in children in primary education. Report 1: universal approaches (non-violence related outcomes). London: National Institute for Health and Clinical Excellence.

Collishaw S, Maughan B, Goodman R et al. (2004) Time trends in adolescent mental health. *Journal of Child Psychology and Psychiatry* 45 (8): 1350–1360.

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Department for Education and Skills (2003b) Aiming high: raising the achievement of minority ethnic pupils. London: Department for Education and Skills.

Department for Education and Skills (2003c) Managing pupil mobility. London: Department for Education and Skills.

Department for Education and Skills (2004) Healthy living blueprint for schools. London: Department for Education and Skills.

Department for Education and Skills (2005a) Higher standards, better schools for all. London: Department for Education and Skills.

Department for Education and Skills (2005b) Excellence and enjoyment: social and emotional aspects of learning. London: Department for Education and Skills.

Department for Education and Skills (2005c) National healthy school status – a guide for schools. London: Department of Health.

Department of Health (1999) National service framework for mental health. London: Department of Health.

Department of Health (2001) Promoting the health of looked after children. London: Department of Health.

Department of Health (2004a) National service framework for children, young people and maternity services. Core standards. London: Department of Health.

Department of Health (2004b) Choosing health: making healthier choices easier. London: Department of Health.

Department of Health (2006) Our health, our care, our say. London: Department of Health.

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House of Commons Education and Skills Committee (2006) Special education needs: third report of session 2005–06. London: HM Government.

National Institute for Mental Health in England (2005) Making it possible: improving mental health and well-being in England. London: National Institute for Mental Health in England.

NHS Scotland (2006) Monitoring positive mental health. Scotland: NHS Scotland.

Office of National Statistics (2004) The health of children and young people. London: Office of National Statistics.

Ofsted (2003) Bullying: effective action in secondary schools. London: Ofsted.

Ofsted (2005) Healthy minds: promoting emotional wellbeing in schools. London: Ofsted.

Social Exclusion Unit (2003) A better education for children in care. London: Office of the Deputy Prime Minister.

Appendix A: membership of the Public Health Interventions Advisory Committee (PHIAC), the NICE Project Team and external contractors

Public Health Interventions Advisory Committee (PHIAC)

NICE has set up a standing committee, the Public Health Interventions Advisory Committee (PHIAC), which reviews the evidence and develops recommendations on public health interventions. Membership of PHIAC is multidisciplinary, comprising public health practitioners, clinicians (both specialists and generalists), local authority employees, representatives of the public, patients and/or carers, academics and technical experts as follows.

Professor Sue Atkinson CBE Independent Consultant and Visiting Professor, Department of Epidemiology and Public Health, University College London

Mr John F Barker Associate Foundation Stage Regional Adviser for the Parents as Partners in Early Learning Project, DfES National Strategies

Professor Michael Bury Emeritus Professor of Sociology, University of London. Honorary Professor of Sociology, University of Kent

Professor Simon Capewell Chair of Clinical Epidemiology, University of Liverpool

Professor K K Cheng Professor of Epidemiology, University of Birmingham

Dr Richard Cookson Senior Lecturer, Department of Social Policy and Social Work, University of York

Mr Philip Cutler Forums Support Manager, Bradford Alliance on Community Care

Professor Brian Ferguson Director, Yorkshire and Humber Public Health Observatory

Mr Howard Gilfillan Former Head Teacher, Branksome Comprehensive School, Darlington

Professor Ruth Hall Regional Director, Health Protection Agency, South West

Ms Amanda Hoey Director, Consumer Health Consulting Limited

Mr Alasdair J Hogarth Head Teacher, Archbishops School, Canterbury

Mr Andrew Hopkin Assistant Director, Local Environment, Derby City Council

Dr Ann Hoskins Deputy Regional Director of Public Health/Medical Director, NHS North West

Ms Muriel James Secretary, Northampton Healthy Communities Collaborative and the King Edward Road Surgery Patient Participation Group

Professor David R Jones Professor of Medical Statistics, Department of Health Sciences, University of Leicester

Dr Matt Kearney General Practitioner, Castlefields, Runcorn. GP Public Health Practitioner, Knowsley

Ms Valerie King Designated Nurse for Looked After Children, Northampton PCT, Daventry and South Northants PCT and Northampton General Hospital. Public Health Skills Development Nurse, Northampton PCT

CHAIR Professor Catherine Law Professor of Public Health and Epidemiology, University College London Institute of Child Health

Ms Sharon McAteer Public Health Development Manager, Halton and St Helens PCT

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Professor Klim McPherson Visiting Professor of Public Health
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Professor Susan Michie Professor of Health Psychology, BPS Centre for
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Dr Mike Owen General Practitioner, William Budd Health Centre, Bristol

Ms Jane Putsey Lay Representative. Chair of Trustees of the Breastfeeding
Network

Dr Mike Rayner Director, British Heart Foundation Health Promotion
Research Group, Department of Public Health, University of Oxford

Mr Dale Robinson Chief Environmental Health Officer, South
Cambridgeshire District Council

Ms Joyce Rothschild School Improvement Adviser, Solihull Local Authority

Dr Tracy Sach Senior Lecturer in Health Economics, University of East Anglia

Professor Mark Sculpher Professor of Health Economics, Centre for
Economics (CHE), University of York

Dr David Sloan Retired Director of Public Health

Dr Dagmar Zeuner Joint Director of Public Health, Hammersmith and Fulham
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Expert cooptees:

Ms Karen Batesman Consultant Clinical Psychologist/Child and Adolescent
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Mrs Anne Devrell Head Teacher, Langley Primary School, Solihull

Ms Sue Mackay Health Promotion Specialist, Kent Health Promotion Service

Ms Marilyn Phipps Head Teacher, Damson Wood Infant School, Solihull

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Mr Peter Scott Blackmann Chief Executive Officer, The Afiya Trust

Expert testimony:

Ms Deborah Michel Programme Lead for Social and Emotional Aspects of Learning, Primary and Secondary National Strategies, Department for Children, Schools and Families

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Mike Kelly

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James Jagroo

Analyst

Dylan Jones

Analyst

Catherine Swann

Analyst

Nichole Taske

Analyst

Bhash Naidoo

Technical Adviser (Health Economics).

External contractors

External reviewers: effectiveness reviews

Review 1: 'Systematic review of the effectiveness of interventions to promote mental wellbeing in children in primary education. Report 1: universal

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approaches (non-violence related outcomes)' was carried out by the Health Sciences Research Institute (HSRI), Warwick Medical School, University of Warwick. The principal authors were: Yaser Adi, Amanda Killoran, Kulsum Janmohamed, Sarah Stewart-Brown.

Review 2: 'Mental wellbeing of children in primary education (targeted/indicated activities)' was carried out by the University of Teesside (a NICE national collaborating centre). The principal authors were: Susan Jones, Janet Shucksmith, Carolyn Summerbell, Vicki Whittaker.

Review 3: 'Systematic review of the effectiveness of interventions to promote mental wellbeing in primary schools: universal approaches with a focus on prevention of violence and bullying' was carried out by the Health Sciences Research Institute (HSRI), Warwick Medical School, University of Warwick. The principal authors were: Yaser Adi, Amanda Killoran, Anita Schrader McMillan, Sarah Stewart-Brown.

External reviewers: economic appraisal

The economic review 'A systematic review of cost-effectiveness analyses of whole school and focused primary school-based interventions to promote children's mental health' was carried out by the Academic Unit of Health Economics (AUHE), Leeds Institute of Health Sciences, University of Leeds. The principal author was Christopher McCabe.

The economic analyses 'Estimating the short-term cost effectiveness of a mental health promotion intervention in primary schools' and 'Cost effectiveness of mental health promotion in schools – focused interventions supplementary analysis' were carried out by the AUHE, Leeds Institute of Health Sciences, University of Leeds. The principal author was Christopher McCabe.

Appendix B: summary of the methods used to develop this guidance

Introduction

The reports of the reviews and economic appraisal include full details of the methods used to select the evidence (including search strategies), assess its quality and summarise it.

The minutes of the PHIAC meetings provide further detail about the Committee's interpretation of the evidence and development of the recommendations.

All supporting documents are listed in appendix E and are available from the NICE website at: <http://guidance.nice.org.uk/page.aspx?o=350205>

The guidance development process

The stages of the guidance development process are outlined in the box below.

1. Draft scope
2. Stakeholder meeting
3. Stakeholder comments
4. Final scope and responses published on website
5. Reviews and cost-effectiveness modelling
6. Synopsis report of the evidence (executive summaries and evidence tables) circulated to stakeholders for comment
7. Comments and additional material submitted by stakeholders
8. Review of additional material submitted by stakeholders (screened against inclusion criteria used in reviews)
9. Synopsis, full reviews, supplementary reviews and economic modelling submitted to PHIAC
10. PHIAC produces draft recommendations
11. Draft recommendations published on website for comment by stakeholders and for field testing
12. PHIAC amends recommendations
13. Responses to comments published on website
14. Final guidance published on website

Key questions

The key questions were established as part of the scope. They formed the starting point for the reviews of evidence and facilitated the development of recommendations by PHIAC. The overarching question was:

Which universal, ‘whole school’, indicated and targeted interventions effectively promote the mental wellbeing of children aged 4–11 in primary education?

The subsidiary questions included the following.

1. What elements of 'whole school' approaches are effective (and cost effective) in promoting the mental wellbeing of children aged 4–11 years?
2. What elements of targeted approaches are effective (and cost effective) in promoting the mental wellbeing of children aged 4-11 years?
3. What type of activities are most effective?
4. What is the frequency, length and duration of an effective intervention?
5. Is it better if teachers, school support staff or a specialist (such as a psychologist or school nurse) delivers the intervention?
6. What is the role of governors?
7. What is the role of parents?
8. What are the barriers to – and facilitators of – effective implementation?
9. Does the intervention lead to any adverse or unintended effects?

Reviewing the evidence of effectiveness

Two reviews of effectiveness were conducted.

Identifying the evidence

The following databases were searched for whole school, universal and targeted interventions (from January 1990 to June 2007):

- ASSIA (Applied Social Science Index and Abstracts)
- CENTRAL (BioMed Central)
- CINAHL (Cumulative Index of Nursing and Allied Health Literature)
- Cochrane Database of Systematic Reviews
- DARE (Database of Abstracts of Reviews of Effectiveness)
- EMBASE (Excerpta Medica)
- ERIC (Education Resources Information Centre)
- Medline

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- PsycINFO (Psychological Information)
- SIGLE (System for Index of Grey Literature in Europe)
- Sociological Abstracts.

Searches were also conducted of the following websites:

- CASEL: www.casel.org/
- Community Guide: www.thecommunityguide.org/
- Joseph Rowntree Foundation: www.jrf.org.uk/
- Joseph Rowntree Trust: www.jrf.org.uk/
- Search Institute: www.search-institute.org/

In addition, bibliographies of reviews and studies known to the research teams were searched to identify further studies that might be suitable for inclusion. Further details, including details of the databases, search terms and strategies used, are included in the review reports.

Selection criteria

Studies were included if they:

- promoted the mental wellbeing of children aged 4–11 in primary education (maintained, independent and special schools)
- (whole schools review) spanned primary and secondary schools but the mean age was below 12
- (whole school review) adopted a whole school or universal approach
- (targeted/indicated review) adopted a targeted/indicated approach
- (targeted/indicated review) described interventions lasting more than 1 month.

Studies were excluded if they:

- included children aged above 12 years
- included children who did not attend school
- (targeted/indicated review) were aimed at secondary school pupils
- (targeted/indicated review) had no connection with school other than being delivered to school-aged children

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- (targeted/indicated review) were not based in school
- (whole school/universal review) did not include a control group
- (whole school/universal review) were not published in English
- (whole school/universal review) were carried out in developing countries (according to World Bank/IMF classifications)
- (whole school/universal review) were published before 1990.

For further details of the inclusion and exclusion criteria for each effectiveness review, see: <http://guidance.nice.org.uk/page.aspx?o=440949>

Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in the NICE technical manual 'Methods for development of NICE public health guidance' (see appendix E).

Each study was described by study type and graded (++, +, -) to reflect the risk of potential bias arising from its design and execution.

Study type

- Meta-analyses, systematic reviews of randomised controlled trials (RCTs) or RCTs (including cluster RCTs).
- Systematic reviews of, or individual, non-randomised controlled trials, case-control studies, cohort studies, controlled before-and-after (CBA) studies, interrupted time series (ITS) studies, correlation studies.
- Non-analytical studies (for example, case reports, case series).
- Expert opinion, formal consensus.

Study quality

- ++ All or most criteria have been fulfilled. Where they have not been fulfilled the conclusions are thought very unlikely to alter.
- + Some criteria fulfilled. Those criteria that have not been fulfilled or not adequately described are thought unlikely to alter the conclusions.

- Few or no criteria fulfilled. The conclusions of the study are thought likely or very likely to alter.

The interventions were also assessed for their applicability to the UK.

Summarising the evidence and making evidence statements

The review data was summarised in evidence tables (see full reviews and the synopsis of the evidence at <http://guidance.nice.org.uk/page.aspx?o=440949>).

The findings from the reviews were synthesised and used as the basis for a number of evidence statements relating to each key question. The evidence statements reflect the strength (quantity, type and quality) of evidence and its applicability to the populations and settings in the scope.

Economic appraisal

The economic appraisal consisted of an economic review (covering universal approaches and targeted initiatives) and two cost-effectiveness analyses.

Review of economic evaluations

In addition to scanning the effectiveness evidence the following databases were searched:

- Econlit
- Health Economics Evaluation Database (HEED)
- NHS EED (NHS Economics Evaluation Database).

The search strategies for these reviews were developed by NICE in collaboration with the Centre for Reviews and Dissemination at the University of York. Further detail can be found in the full reviews:

<http://guidance.nice.org.uk/page.aspx?o=440949>

Studies were reviewed if they provided economic evidence directly linked to whole school, universal, targeted and indicated approaches. Published studies that met the inclusion criteria were rated to determine the strength of the evidence using the Drummond checklist. ('Guidelines for authors and peer

reviewers of economic submissions to the BMJ' Drummond MF, Jefferson TO [1996] British Medical Journal 313: 2075–283.)

Cost-effectiveness analysis

An economic model was constructed to incorporate data from the whole school and targeted effectiveness reviews (reviews 1 and 2).

The 'Health utilities index mark 2' (HUI2) was used to estimate the cost effectiveness of a combined parent/classroom-based intervention in the short term. Modelling was used to predict how targeted interventions could lead to longer term cost savings for the health, social, voluntary and legal sectors (by improving children and young people's mental health and consequently, their behaviour).

The results are reported in 'Estimating the short-term cost effectiveness of a mental health promotion intervention in primary schools', and 'Cost effectiveness of mental health promotion in schools – focussed interventions supplementary analysis'. They are available on the NICE website at:

<http://guidance.nice.org.uk/page.aspx?o=440949>

Fieldwork

This section will be completed in the final document.

How PHIAC formulated the recommendations

At its meeting in July 2007 PHIAC considered the evidence of effectiveness and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of quantity, quality and applicability) to form a judgement
- whether, on balance, the evidence demonstrates that the intervention is effective or ineffective, or whether it is equivocal
- where there is an effect, the typical size of effect.

PHIAC developed draft recommendations through informal consensus, based on the following criteria.

- Strength (quality and quantity) of evidence of effectiveness and its applicability to the populations/settings referred to in the scope.
- Effect size and potential impact on population health and/or reducing inequalities in health.
- Cost effectiveness (for the NHS and other public sector organisations).
- Balance of risks and benefits.
- Ease of implementation and the anticipated extent of change in practice that would be required.

Where possible, recommendations were linked to an evidence statement(s) (see appendix C for details). Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence).

Appendix C: the evidence

This appendix sets out the evidence statements taken from three reviews and links them to the relevant recommendations (see appendix B for the key to study types and quality assessments). The evidence statements are presented here without references – these can be found in the full review (see appendix E for details). It also sets out a brief summary of findings from the economic appraisal.

The three reviews of effectiveness are:

- Review 1: 'Systematic review of the effectiveness of interventions to promote mental wellbeing in children in primary education. Report 1: universal approaches (non-violence related outcomes)'.
- Review 2: 'Mental wellbeing of children in primary education (targeted/indicated activities)'.
- Review 3: 'Systematic review of the effectiveness of interventions to promote mental wellbeing in primary schools: universal approaches with a focus on prevention of violence and bullying'.

Evidence statement number **UES1** indicates that the linked statement is numbered 1 in review 1; evidence statement **TES1** indicates that the linked statement is numbered 1 in review 2; and evidence statement **VPES1** indicates that the linked statement is numbered 1 in review 3.

The reviews and economic appraisal are available on the NICE website (<http://guidance.nice.org.uk/page.aspx?o=440949>). Where a recommendation is not directly taken from the evidence statements, but is inferred from the evidence, this is indicated by IDE (inference derived from the evidence) below.

Recommendation 1: Evidence statement VPES2, IDE

Recommendation 2: Evidence statements UES1, VPES1

Recommendation 3: Evidence statements TES1, TES2

Recommendation 4: Evidence statement TES5

Evidence statements

Evidence statement VPES1

There is evidence from three out of four 'moderate' quality RCTs and two out of two good quality controlled trials (CTs) that multi-component programmes comprising teacher training in management of behaviour, parenting education and a social skills development curriculum are effective in improving outcomes relevant to bullying, violence and mental health, as measured by observed aggression in the playground.

Two of these studies have reported positive long-term outcomes (RCT [+]) reporting on arrests at 3 years post intervention and reporting violent delinquent acts and school misbehaviour at 18 years.

Examples of this type of multi-component programme include: the Linking Interests of Families and Teachers (LIFT) programme, the Seattle Social Development Project and the Resolving Conflict Creatively programme.

Evidence statement VPES2

There is evidence from a 'good quality' RCT and a 'moderate' quality RCT indicating that the Peace Builders programme is effective in improving outcomes related to violence and mental health (as measured by teacher report on social competence and aggressive behaviour and visits to the school nurse for injury). The main focus of the Peace Builders programme is on change to the school ethos and environment. This aims to incorporate positive social values and ways of behaving among children and staff into every aspect of school life. The programme also includes peer mentoring, parent engagement behaviour management and a small classroom component. While no long-term studies are available, effects have been demonstrated at 2 years post-implementation of the intervention (as measured by teacher report on social competence and aggression).

Evidence statement UES1

There is good evidence (five randomised or non-randomised controlled trials of high quality [++]) to support the implementation of multi-component programmes to promote positive social skills and behaviour. These include a significant component of teacher training and are offered to children within classroom teaching sessions. Most successful programmes adopted a whole school approach with attempts to change the school ethos and environment in some way.

There is good evidence from these trials to support the inclusion of a parenting support component in school mental health promotion programmes.

Although these multi-component programmes are likely to need adapting for UK use, there is no reason to suppose that they should not be widely applicable in the UK. School-based interventions with similar characteristics are available in the UK but have not been the subject of robust trials. There are a number of robust UK-developed parenting programmes and some good quality foreign programmes have been evaluated and shown to be effective in the UK. Several programmes are currently being evaluated in the 'UK pathfinders evaluation of interventions for parents'.

Evidence statement TES1

Cognitive behavioural therapy (CBT) based programmes targeted at reducing anxiety disorders have been transferred successfully between countries, indicating a high degree of generalisability or applicability.

Two studies (both quality rated 1 [++]) show that brief (10 weeks and 9 weeks) targeted interventions aimed at reducing anxiety or preventing the development of symptoms into full blown disorders appear to be successful in groups of children showing the precursor symptoms associated with anxiety disorders. One study (quality rated 1 [++]) was able to demonstrate that when parent training is combined with child group CBT there are additional benefits for children.

Two studies (quality rated 1 [++]) of indicated interventions aimed at children of divorce and children who are anxious school refusers show sustained benefit for children from CBT-based skills training.

Evidence statement TES2

All studies examined use CBT-based approaches. One study (quality score 1 [+]), the Penn Prevention Programme, showed that it may be possible to relieve and prevent depressive symptoms using a targeted school-based approach where a traditional cognitive behaviour component was allied with a social problem-solving component.

Evidence from other treatment programmes with children with mild to moderate depressive symptoms is mixed. Co-morbid conditions with depression (often conduct or hyperkinetic disorders) make intervention delivery difficult and can confound treatment effects.

One study (quality rating 1 [+]) assessed the effectiveness of an 8 week programme comprising small group-based cognitive-behavioural sessions (entailing role play, games, video and homework activities) in producing improvements in depression scores in children scoring high on the 'Children's depression inventory'. Children receiving the intervention were significantly more likely to have reduced levels of depressive symptoms immediately post-intervention and at 9 months follow-up, compared with children receiving the no-treatment control.

One study (1 [+]) found that social competence training (1 hour sessions for 8 weeks) for children (aged 7–11 years) who were within the 'clinical depression range' of the 'Children's depression inventory', did not significantly improve depression scores at 2 months follow-up, compared with either an attention placebo or no treatment control. Interventions directed at indicated subgroups show some degree of success (two 1 [+]). One study (quality rating 1 [+]) of young people exposed to violence and showing clinical symptoms of post-traumatic stress disorder (PTSD) showed reasonable effect sizes. The programme involved a high proportion of black and minority ethnic children and also used trained school personnel to deliver part of the programme.

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Evidence Statement TES5

Multi-component interventions designed for targeted groups of children suffering from conduct disorders show that improved social problem-solving and the development of positive peer relations are among the outcomes with the strongest programme effects. Two studies (both rated 1 [++]) showed improved academic achievement as significant outcomes of intervention.

Timing may be critical. Complex longitudinal multi-component studies like that undertaken by the Metropolitan Area Child Study Research Group (quality rating 1 [++]) support the case for early intervention with aggressive disruptive children, but also attest to the improved benefits of giving a booster intervention towards the end of primary education. Significant 'school effects' were found in the study. Better understanding of school effects, including impediments and resources, is called for.

Recruitment and retention into parent programmes is clearly a major challenge, even when incentives (for example, childcare and transport costs) are offered. Given a choice, evidence from one study (quality rating 1 [++]) indicates that parents may prefer targeted children to receive the intervention at school rather than at home.

Some adverse effects are reported by Metropolitan Area Child Study Research Group (quality rating 1 [++]) as a consequence of bringing aggressive hostile children together in small groups only in later elementary stages, with such groups setting up negative norms of aggressive behaviour.

Cost-effectiveness evidence

Overall, universal interventions to promote mental health in primary schools do lead to short-term health benefits and are cost effective. In the longer term, these interventions could lead to further benefits for society as a whole, making them even more cost effective.

Targeted interventions are not cost effective in the short term, as they incur similar costs to universal interventions but only a small proportion of the school population benefits. However, they may be cost effective in the longer

term (after 4 years) when both the health and broader societal benefits are taken into account.

The systematic review did not find any published analyses of the cost effectiveness of universal interventions and only one for focused (targeted) initiatives.

Appendix D: gaps in the evidence

PHIAC identified a number of gaps in the evidence relating to the interventions under examination, based on an assessment of the evidence. These gaps are set out below.

1. There is a need for valid methods of measuring the emotional and social wellbeing of primary schoolchildren and monitoring changes over time.
2. There is a lack of evidence on the cost effectiveness of interventions to promote the emotional and social wellbeing of primary schoolchildren, particularly multi-component programmes. There is also a lack of evidence on the effect of these interventions on social, health and education outcomes (and costs) in the longer term.
3. There is a lack of evidence on the relationship between standard measures of emotional and social wellbeing and those used to measure quality adjusted life years (QALY).
4. There is a lack of UK evidence on the effectiveness and cost effectiveness of interventions to prevent and manage stress, including the use of relaxation and cognitive behavioural techniques.
5. There is a lack of evidence on effective and cost effective ways of promoting the emotional and social wellbeing of vulnerable primary schoolchildren. Vulnerable children include those from certain black and minority groups, those who are looked after and others at risk of experiencing emotional problems.
6. There is a lack of evidence on effective ways to involve the parents or carers of primary schoolchildren in school-based programmes to improve their children's emotional and social wellbeing. Evidence is particularly needed on how to engage parents or carers from disadvantaged backgrounds.

Appendix E: supporting documents

Supporting documents are available from the NICE website (<http://guidance.nice.org.uk/page.aspx?o=350205>). These include the following.

- Reviews of effectiveness:
 - Review 1: ‘Systematic review of the effectiveness of interventions to promote mental wellbeing in children in primary education. Report 1: universal approaches (non-violence related outcomes)’
 - Review 2: ‘Mental wellbeing of children in primary education (targeted/indicated activities)’
 - Review 3: ‘Systematic review of the effectiveness of interventions to promote mental wellbeing in primary schools: universal approaches with a focus on prevention of violence and bullying’.
- Economic appraisal:
 - Economic review: ‘A systematic review of cost-effectiveness analyses of whole school and focused primary school-based interventions to promote children’s mental health’
 - Economic analyses: ‘Estimating the short-term cost effectiveness of a mental health promotion intervention in primary schools’ and ‘Cost effectiveness of mental health promotion in schools – focused interventions supplementary analysis’.

For information on how NICE public health guidance is developed, see:

- ‘Methods for development of NICE public health guidance’ available from: www.nice.org.uk/phmethods

- 'The public health guidance development process: an overview for stakeholders including public health practitioners, policy makers and the public' available from: www.nice.org.uk/phprocess