Stroke rehabilitation
DRAFT - Process and protocol framework for post consultation GDG consensus meeting

Background

The draft version of the full guideline was made public for stakeholder consultation from the 30th August 2011 to 25th October 2011. During consultation, substantial stakeholder comments were received which raised a number of significant issues in relation to the guideline scope and recommendations developed in the guideline.

The issues raised by stakeholders are broadly summarised as the following key themes (see also appendix II):

- Inconsistency between the remit and the guideline scope
- Lack of stroke rehabilitation patient care pathway
- Lack of recommendations on service delivery, roles and responsibility of the multidisciplinary team/stroke rehab services
- Lack of recommendations on holistic assessment, care planning, goal setting, ongoing review and monitoring
- Lack of recommendations on transfer of care/discharge planning and interface with social care, including care/nursing home
- Lack of recommendations on long-term health and social support for people after stroke
- Lack of recommendations on patient information needs
- Other areas commented as important that need to be included:
    - those covered by the scope: mood disorders (depression and anxiety), physical fitness and exercise, other speech and language therapies, diplopia.
    - Those not covered by the scope: nutrition and diet, spasticity, pain, incontinence, fatigue.

Stakeholders had concerns that because the guideline did not present a complete stroke rehabilitation patient pathway this may lead to services being

reduced or even withdrawn. Stakeholders also noted the agreed approach to rehabilitation was a holistic one that reflected individual patient need provided by a multidisciplinary team but this was not considered by the guideline which had focused only on the delivery of interventions.

From scoping of the guideline it was apparent to the developers that it would not be possible to cover all aspects of what is a complex area, and that the evidence base was also weak for many of these areas. The approach taken was to concentrate on rehabilitation for which there was some evidence, and to focus on questions which would have the greatest impact on improving patient outcomes. The starting point of the guideline as stated in the introduction, is that all people should receive a package of rehabilitation, but there is variation in practice, both in the amount and content. The focus of the outcomes for the interventions included in the guideline has been on function and mobility as these were considered by the GDG to have the biggest impact on patients' lives. However many stakeholders considered that the patient experience and holistic approaches to care had been neglected and represented a major gap in the guidance.

In light of the comments received from stakeholders, the GDG agreed that additional work could be carried out for some of these areas or reference made to other NICE guidance, in order to produce a more complete piece of guidance that would be useful to health professionals delivering rehabilitation to a stroke population. The current guidance has followed standard NICE methodology and the GDG were in agreement that for those areas where either weak or no evidence was available a robust process needed to be followed that would be defendable.

In agreement with NICE and the members of the Guideline Development Group (GDG) the NCGC technical team will conduct additional work following an agreed process as detailed in this protocol.

Process and methodology

Overview

Additional work will be conducted to address the structure and process of stroke rehabilitation such as, multi-disciplinary team working, assessment and ongoing review and care planning, and delivery in different settings which was not included in the original scope. These and the areas highlighted by stakeholders as outlined in appendix II will be considered.

Additional searches and reviews of the clinical and economic literature will be undertaken following the usual NICE process and presented to the GDG who will use this evidence as a basis for further recommendations to be made. Where there are recommendations in other NICE guidance that are relevant to the stroke population and address comments highlighted by stakeholders, cross reference will be made to these rather than undertaking further original work.

In conjunction with the NICE editor a stroke rehabilitation pathway will be developed to provide a framework for the recommendations and signpost to other NICE guidance.

The current layout and order of the guideline will be reviewed and an additional section incorporated covering the prerequisites for rehabilitation including: assessment for rehabilitation, goal setting, and information and communication.

Where there is a lack of published evidence the NCGC technical team will identify and invite relevant health professionals from both health and social care sectors, to participate in the development of consensus statements based on the literature available or their expert opinion using a modified Delphi formal consensus technique. The resulting statements will form the basis for the GDG to consider and utilise to develop further recommendations,

No new economic modelling is currently planned due to the limited scope of this additional work and the likelihood that clinical evidence will be limited.

Stage One

Mapping of patient care pathway:

In partnership with the NICE editor and GDG input an algorithm will be developed outlining the structure, process and outcomes of the framework for stroke rehabilitation and the current recommendations will be incorporated.
The additional areas identified to be included will be mapped to the NICE pathway, and any new recommendations made following the additional work carried out will be added.

Signposts will be made to other relevant NICE guidance for those areas outside of the scope or that provide additional sources of information for those areas covered by the scope. Where other relevant NICE guidance is available no additional original work will be conducted.

Expected outputs from Stage One:

Sign posts to NICE guidance will be made and relevant recommendations cross referred to in the following:

- Patient Experience in adult NHS services (CG138): to address patient information needs, care planning and continuity of care. .
- Depression: the treatment and management of depression in adults (CG 90), Depression in adults with a chronic physical health problem (CG 91) and Generalised anxiety disorder and panic disorder (with or without agoraphobia) in adults (CG113): to address mood disorders
- Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition (CG32) and Stroke: diagnosis and initial management of acute stroke and transient ischaemic attack (CG 68): to address nutrition and dietary support.
- Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings (CG 96): to address some aspects of pain.
- Urinary incontinence in neurological disease: management of lower urinary tract dysfunction in neurological disease (publication august 2012) and faecal incontinence: the management of faecal incontinence in adults (CG 49): to address incontinence.
- Spasticity in children and young people with non progressive brain disorders: management of spasticity and co-existing motor disorders and their early musculoskeletal complications (publication June 2012): to address spasticity within a sub population.

Stage Two

Systematic reviews: develop review questions, PICO(s) and review protocol(s)

Evidence for the following areas will be sought as described below:

1. Service delivery, multidisciplinary team working
2. Assessment for rehabilitation, care planning, goal setting, and ongoing review of patients.
3. Transfer of care, discharge planning and interface between health and social care
4. Long term health and social support for people after stroke.
5. Visual impairment including Diplopia
6. Speech and language therapies
7. Shoulder pain

The patient experience guideline will be cross referred to for the above areas where adequately covered and in agreement with the GDG. For areas not covered by the Patient Experience guideline, literature searches will be undertaken to identify relevant evidence. As noted by the GDG there may be a large literature base for many of these topics much of which will be of limited value in terms of enabling further recommendations to be made, therefore the following strategy will be used.

Firstly, a search will be undertaken to identify the areas where useful evidence exists to guide drafting of formal review questions. The search will be a comprehensive literature search of databases with terms designed to identify evidence related to the topics outlined above. It will be conducted following the NICE process but filters will be applied to restrict the retrieval to other guidelines and systematic reviews only. In addition a similar scoping search will be done for economic evidence relating to the same areas. The search strategy will be the same as that used to identify clinical evidence except that it will not be limited to systematic reviews or guidelines and will have instead a search filter to capture only economic evaluations (NCGC recommended economics filter). A first sift will be undertaken to identify potentially relevant economic papers related to the topics listed above.

Where recent systematic reviews are found these will be used as the basis for drafting formal review questions and protocols in collaboration with the GDG and signed off by the group (see appendix III). Full searches will then be undertaken for these review questions. Inclusion will be restricted to the review and any new studies that update the reviews. Systematic reviews will be assessed using the usual NICE quality check list and will be reviewed following NICE methods. Economic evidence will also be sought using the same search strategy and an economic filter. Economic analyses based on studies included in the clinical review will be critically appraised using standard NICE methods. This evidence will be presented to the GDG for their consideration and recommendations will be drafted following usual NICE process. From the scoping search conducted, systematic reviews have been identified for the following areas:

- Physical fitness/exercise.
- Goal setting
- speech and language therapies
- Service delivery – stroke units

Relevant guidelines that are identified from the scoping search will be quality assessed using the AGREE II tool checklist. Those of sufficient quality will be reviewed for recommendations relating to the topics outlined at the start of this section. The evidence base for these recommendations will be checked to ensure that no areas with a significant evidence base have been missed by the approach taken above.

The guideline recommendations will be used as the starting point for consensus work (see Stage 3 below). Once consensus work is completed the economic scoping sift results will be rechecked to see if there are any economic analyses relating to areas where recommendations will be made. Due to the nature of the process set out above it is possible that economic analyses may be identified where clinical evidence has not been formally reviewed. This may make interpretation of the

economic studies difficult. We will make a judgement at the time in discussion with the GDG about whether it is useful to include such economic studies.

Patient information needs

As agreed with the GDG relevant recommendations from the patient experience guideline will be incorporated where appropriate. In addition, consensus statements will be developed as part of the modified Delphi survey that will enable the GDG to provide specific information for the stroke population.

Stage 3

Develop draft consensus statements:

Once the areas for which there is little or no evidence have been established, a combination of the GDG with identified health care professionals, supported by the NCGC technical team will form the targeted consensus group of approximately 150 people. The modified Delphi approach will provide a strong primary research output from the expert group for the GDG to interpret and distil into consensus based recommendations. Relevant health care professionals will be identified through nominations made by the GDG, the RCP Intercollegiate Stroke Working Party and NICE colleagues. The group will reflect the health professional community who deliver care to patients after stroke, and as a minimum will represent those professions delivering care for the topics included in the survey. Both the Chair of the GDG and the RCP Intercollegiate Stroke Working Party will review the list of nominees to ensure that relevant experts have been identified and are representative of the stroke rehabilitation professional constituency. Invited Delphi consensus participants will comply with NICE methods and will have no other input into the subsequent development of the guideline.

The technical team will distil key aspects of the national guidelines identified by the search and appraised using the AGREE II tool to map the areas for which there is no evidence or limited evidence. This document will provide the basis for statements that will feature in Round 1 of the modified Delphi Survey.

This pre-survey development phase will be managed by the NCGC technical team in collaboration with two external independent consultant experts who will be co-opted onto the guideline to support this important additional work. The consultant experts' role will be to provide guidance to the technical team in the formulation and validation of consensus statements at each round of the survey. They will not be participants in the survey or have any other involvement in further development of the guideline. The survey questionnaire will be sent to all members of the consensus group utilising Survey Monkey software. Responses will remain anonymous to an external audience, but individual participants will carry a unique code that enables the technical team to feedback original responses alongside group responses in the latter sequential rounds. It is anticipated that the whole process will be conducted electronically, with a 4-6 week cycle time between rounds. This will allow for the

questionnaire invitation to be sent, two reminders and for the analysis to be conducted prior to the next sequential round.

The NCGC technical team has the expertise to analyse the survey results and it is expected that a further two to three rounds of questionnaires will be necessary to produce the robust consensus output for GDG consideration.

Once the modified Delphi Survey is completed, a report of the analysis and final results will be circulated to all consensus group participants for their information. A GDG meeting will be convened where the results will be presented by the NCGC technical team and discussed by the GDG. This process will be similar to consideration of evidence reviews with final recommendations formulated that will populate discrete areas of the stroke rehabilitation pathway. The whole process will be written up and will feature as part of the methods section, and captured in the Link of evidence to recommendations (LETR) sections of the guidance to illustrate the rationale used to form recommendations.

Modified Delphi Technique

The Delphi technique has been used successfully for generating, analysing and synthesising expert view, and moving this through iteration to reach a consensus position. The technique uses sequential questionnaires to solicit individual responses, with the potential threat of peer pressure removed[1]. This is an important consideration and is a key strength of the technique.

Strauss and Ziegler's[2] (1975) seminal work on the technique highlights the features of the technique:

- Enables the effective use of a panel of experts
- Data is generated through sequential questioning
- Highlights consensus and divergent opinion
- Anonymity is guaranteed
- Iterative in style, it facilitates controlled feedback
- Results are summarised from previous rounds and then communicated to participants
- It handles judgemental data effectively

The modification to the technique largely focuses on the preparation of a Round 1 questionnaire. Typically experts may be asked to highlight the top five priorities in any given area. We believe that this should be replaced and informed by the synthesis of national guidelines identified from the search published and quality assured by the AGREE II instrument. The technical team will work to develop initial statements validated by the co-opted and independent (from the GDG and

[1] Goodman C (1986) A Delphi Survey of clinical nursing research priorities within a regional health authority. Unpublished MSc Thesis University of London

[2] Strauss H and Ziegler H (1975) The Delphi Technique and its uses in social sciences research. Journal of Creative Behaviour 9 (4) 253-259

Intercollegiate Group) consultant experts in forming the Round 1 questionnaire. Sequential rounds will then move the whole group of participants to a consensus position. It is anticipated that we will need to conduct 3 iterations (sequential rounds) via Survey Monkey conducted fairly rapidly to ensure we maintain high return from the invited group of participants. As with any research methodology, it has potential limitations, particularly around accountability for expressed views due to anonymity. In considering the application of this technique to stroke rehabilitation, we do not think this is a risk at all, given the interest generated in the area and the desire by the specialists' professional groupings to get this guidance right.

The consensus group participants will rate each round of statements using a four point Likert scale. Results will be summarised from previous rounds and communicated to participants through Survey Monkey. The second and third rounds of surveys will invite participants to re-rate the statements until consensus is reached. The threshold of 70% will be used as a measure of consensus agreement for each statement and these statements will not be included in subsequent rounds.

Quantitative data results will be analysed using relevant statistical tests (eg. paired T test). Qualitative data will be through conventional themed analysis. The process will be written up as a discrete section in the full guideline, and targeted for peer review publication.

As reported by Sleep et al (1995)[3], the technique offers a significant tool for prioritising issues, offering a cost effectiveness solution in determining consensus which can inform policy. This seems to be the ideal technique that is fit for this purpose with Sim and Wright (2000)[4] agreeing that the technique is ideal for collecting structured quantitative data. This with regard to the current challenges with stroke rehabilitation seems ideal.

Stage 4

GDG meetings

An agenda and relevant paperwork will be circulated to GDG members prior to the meeting. The areas to be covered, the methods that will be employed on the day, the attendees and their role within the meeting and the outputs of the meeting will have been agreed and circulated beforehand and will act as the terms of reference. Dr Diane Playford will be the Chair of this and any other GDG meetings held. Only the areas listed on the agenda will be discussed.

[3] Sleep J, Bullock I and Grayson K (1995) Establishing priorities for research in education within one college of nursing and midwifery. Nurse Education Today 15 439-445

[4] Sim J and Wright C (2000) Research in Healthcare: Concepts, Design and Methods. Stanley Thomas Publishing: Cheltenham.

The consensus statements emerging from the iterative modified Delphi technique will be presented to the GDG and will form the basis of discussion. The GDG will formulate recommendations based on the consensus statements. The original modified Delphi survey participants will not attend any GDG meetings and will not play any part in the decision making, formulation of new recommendations or in the editing/changing of recommendations made previously.

Outputs

Minutes for all additional GDG meetings held will be circulated and NICE minutes made available via the NICE website. The process and methodology used for all additional work conducted will be recorded in the methods section of the guideline. The additional questions reviewed and evidence presented will be incorporated into the relevant chapter of the guideline and resulting discussion and rationale behind recommendations made will be entered into the 'recommendations and link to evidence' section of the chapter. For those topic areas where recommendations are made resulting from formal consensus methods, an additional section will be added to the link of evidence to recommendations (LETR) section and a synopsis of the process, discussion and decision making will be made explicit.

All additional work conducted and recommendations made will be subject to a second consultation where stakeholders will be invited to comment on the changes made following usual NICE process.

Appendix II

Summary of key themes on issues raised by stakeholders

1) Inconsistency between the remit and the guideline scope

There are significant comments from stakeholders that the elements of 'social care', 'long-term' and 'support' in the remit were not currently covered by the guideline scope and guideline recommendations.

2) Lack of stroke rehabilitation patient care pathway

- There are stakeholders that commented the guideline recommendations are narrowly focused on a range of very specific interventions, without any context.
- There are stakeholders that commented there is a lack of clarity on stages of rehabilitation in terms of patients pathways and timescales, include care pathway from hospital to community based rehabilitation

3) Lack of recommendations on service delivery, roles and responsibility of the multidisciplinary team/stroke rehab services

- There are stakeholders that commented there is a lack of recommendations for the following:
    - Composition of MDT/Stroke rehab services
    - Roles and responsibility of MDT/stroke rehab services at different stages of patient care pathway
    - Coordination of patient care plan by MDT/stroke rehab services at different stages patient care pathway

4) Lack of recommendations on holistic assessment, care planning, goal setting, ongoing review and monitoring

- There are stakeholders that commented there is a lack of recommendations for the following:
    - Assessment and care planning based on individual needs
    - Goal setting at different stages of patient pathways
    - Patient performance review and ongoing monitoring

5) **Lack of recommendations on transfer of care/discharge planning and interface with social care, including care/nursing home**
   - There are stakeholders that commented there is a lack of recommendations on transfer of care/discharge planning for the following:
     - between hospital and primary/community care
     - between health and social care, including transitional process for admitting/returning to care/nursing home
     - role of MDT on coordinating the discharge planning/transfer of care

6) **Lack of recommendations on long-term health and social support for people after stroke**
   - There are stakeholders that commented there is a lack of recommendations on the following:
     - Self-care/self management on patient activities of daily living/extended activities of daily living (i.e. "Life after stroke")
     - Employment
     - Driving
     - Housing/finance
     - Leisure/social participation
     - Relationships/family life
     - Carer support

7) **Lack of recommendations on patient information needs for example**
   - There are stakeholders that commented there is a lack of recommendations on patient information needs on the following areas:
     - Standard of information provision
     - Specific information on dietary needs
     - Specific information on Early supported discharge
     - Specific information on transition between health and social care
     - Review of information needs throughout the different stages of patient care pathway (not just at the start and on completion)
     - The emphasis on the positive effect of information provision on mood and well being

8) Other topics commented as important that need to be included in the guideline

- There are stakeholders that commented the following topics need to be included in the guideline:
    - Topics covered by the scope:
    - ❖ Mood disorders (depression and anxiety)
    - ❖ Physical fitness/exercise
    - ❖ Other speech and language therapies
    - ❖ Diplopia
    - Topics not covered by the scope
    - ❖ Nutrition and diet
    - ❖ Spasticity
    - ❖ Pain including shoulder pain
    - ❖ Incontinence

Appendix III

Areas to address	**Evidence**
service delivery • multidisciplinary teams • stroke units	• consensus • systematic review indentified
• assessment for rehab • care plans • goal setting • ongoing monitoring	• consensus • consensus • systematic review identified • consensus
• discharge planning/transfer of care • interface with social care	• consensus • consensus
long term health and social support	consensus
visual impairment (diplopia)	consensus

physical fitness	systematic review identified
speech and language therapies aphasia apraxia dysarthia	 • systematic review identified • consensus • consensus
shoulder pain	consensus
patient information	• cross refer to NICE guidance • consensus

Review protocols

Review Protocol stroke rehab – fitness training	
Component	Description GDG – post consultation (exercise training to increase fitness after stroke)
Review question	In people after stroke does cardiorespiratory or resistance training improve outcome (fitness, function, quality of life, mood and reduce disability)?
Population	Adults and young people 16 or older who have had a stroke
Intervention	Any cardiorespiratory or resistance fitness training such as: • Aquatic physical exercise • Cycle, rowing or treadmill ergometry • Weight bearing resistance training • Dynamic and isokinetic muscle strength training
Comparison	Usual care (other physiotherapy)
Outcomes	Mortality rate, dependence / or level of disability, physical fitness, mobility, physical function, quality of life and mood (indices and scales may include: blood pressure, body mass, maximal oxygen uptake (peak VO2 (ml/kg/min)), endurance, Barthel, Rivermead mobility index , SF-36, EuroQuol, HADS, Becks, Geriatric depression scale, Epidemiologic studies for depression scale (CES-D))
Exclusion	In the resistance group outcomes will be dropped that had already been reported in the completed guideline review on strength training (see chapter 9 of the Stroke rehab guideline)

Search strategy	Cochrane search strategy
Search terms	Cochrane search terms
The review strategy	▪ Only studies restricted to stroke patients to be included ▪ Post stroke but irrespective of the time since onset of stroke ▪ No minimum time of follow-up ▪ Outcome assessments at the end of intervention or at the end of follow-up period

Review Protocol stroke rehab – stroke rehabilitation units	
Component	Description GDG – post consultation organisation of rehabilitation stroke care
Review question	In people after stroke does organised rehabilitation care (comprehensive or rehabilitation stroke units) improve outcome (mortality, dependency, requirement for institutional care and length of hospital stay)?
Population	Adults and young people 16 or older who have had a stroke
Intervention	Organised stroke units such as: • Stroke ward (including a multidisciplinary team in a discrete area caring exclusively for stroke patients). Subdivided into: o Rehabilitation stroke units (accepting patients after acute management) o Comprehensive (combined acute as well as rehabilitation) • Mixed rehabilitation (a multidisciplinary team including specialist nursing staff providing rehabilitation service)
Comparison	• General medical ward: care in an acute medical or neurology ward without routine multidisciplinary input.
Outcomes	Primary outcomes: Death, dependency and requirement for institutional care at the end of scheduled follow up of the original trial. • Dependency is defined as a requirement for physical attention such as assistance for transfers, mobility, dressing, feeding or toileting. This would be equivalent to a modified Rankin score of 0 to 2, a Barthel Index of more than 18 out of 20 or an Activity Index (AI) of more than 83. • Requirement for long-term institutional care is taken to mean care in a residential home, nursing home, or hospital at the end of scheduled follow up.

	• Quality of life • Patient and carer satisfaction • Duration of stay in hospital or institution or both.
Exclusion	Studies not focusing solely on patients with stroke.
Search strategy	systematic reviews Search for randomised control trials which have been published since the search of the Cochrane review search cut-off date (April 2006)
Search terms	Cochrane search terms
The review strategy	▪ Only studies restricted to stroke patients to be included ▪ Post stroke but irrespective of the time since onset of stroke ▪ No minimum time of follow-up ▪ Mortality by length of follow-up ▪ Type of organised stroke unit (comprehensive / rehabilitation)

Review Protocol stroke rehab	
Component	Description GDG – post consultation (goal setting)
Review question	Does the application of patient goal setting as part of planning stroke rehabilitation activities lead to an improvement in psychological wellbeing, functioning and activity ?
Population	Adults and young people 16 or older who have had a stroke
Intervention	Any patient goal setting approach
Comparison	Alternative rehabilitation goal setting approaches
Outcomes	Psychological measures and health related quality of life physical function ADL These may include: Barthel, Nottingham extended activities of daily living, FIM, rating scales, survey data (quantitative), themes identified by qualitative studies
Exclusion	Studies with mixed neurological populations where the proportion of patients with stroke is < 50%
Search strategy	The databases to be searched are Medline, Embase, Cochrane Library, CINAHL, Psychinfo, Sports Discuss Guidelines

	systematic reviews (if new search is conducted it should include observational and qualitative studies)
Search terms	If systematic reviews are identified search strategies could be checked and used by the IS for an update or new search
The review strategy	▪ Post stroke but irrespective of the time since onset of stroke ▪ No minimum time of follow-up ▪ No minimum participant numbers

Review Protocol stroke rehab – aphasia	
Component	Description GDG – post consultation aphasia after stroke
Review question	In people after stroke is speech and language therapy compared to no speech and language therapy or placebo (social support and stimulation) effective in improving language / communication abilities and / or psychological wellbeing?
Population	Adults and young people 16 or older who have had a stroke
Intervention	Speech and language therapy: • Any form of targeted practice tasks or methodologies with the aim of improving language or communication abilities
Comparison	• No speech and language therapy. • Placebo (social support and stimulation)
Outcomes	Functional communication which mean the ability to communicate in 'real world settings' (defined as language or communicational skills sufficient to permit the transmission of a message via spoken, spoken, written or non-verbal modalities, or a combination of these channels). Measures include • Formal measures of receptive language skills (language understanding) • Formal measures of expressive language skills (language production) • Overall level of severity of aphasia as measured by specialist test batteries (may include Western Aphasia Battery or Porch Index of Communicative Abilities) • Psychological or social wellbeing including depression, anxiety and distress • Patient satisfaction / carer and family views • Compliance / drop-out

Exclusion	Studies not focusing solely on patients with stroke.
Search strategy	systematic reviews Search for randomised control trials which have been published since the search of the Cochrane review search cut-off date (April 2009)
Search terms	Cochrane search terms
The review strategy	▪ Only studies restricted to stroke patients to be included ▪ Post stroke but irrespective of the time since onset of stroke ▪ No minimum time of follow-up ▪ Type of control (SLT vs. no SLT and in a second analysis SLT vs. Social support and stimulation)

Consensus protocols

consensus protocols - stroke rehab	
Component	Description GDG – post consultation organisation of rehabilitation stroke care
Population	Adults and young people 16 or older who have had a stroke
Review question	What should be the constituency of a multidisciplinary rehabilitation team and how should the team work together to ensure the best outcomes for people who have had a stroke?
Intervention	a) the constituency of a multidisciplinary rehabilitation team b) Working practices, such as communication and co-ordination of services (team and family meetings, co-ordination of care between rehab specialties and other agencies)
Outcomes	• Patient and carer satisfaction • optimised strategies to minimise impairment and maximise activity/participation
Review question	In planning rehabilitation for a person after stroke what assessments and monitoring should be undertaken to optimise the best outcomes?
intervention	a) assessment b) care plans c) monitoring
outcomes	• Patient and carer satisfaction • optimised strategies to minimise impairment and maximise activity/participation

review question	What planning and support should be undertaken by the multidisciplinary rehabilitation team before a person who had a stroke is discharged from hospital or transfers to another team/setting to ensure a successful transition of care?
intervention	discharge planning, emotional/educational support and co-ordination and resources of other services/agencies
outcomes	• Patient and carer satisfaction • successful discharge • quality of life • optimised strategies to minimise impairment and maximise activity/participation
review question	What ongoing health and social support does the person after stroke and their carer(s) require to maximise social participation and long term recovery?
intervention	a) continued monitoring and re-access into rehab b) long term support/care at home c) social participation activities d) carer/family support & education
outcomes	• Patient and carer satisfaction • quality of life • optimised strategies to minimise impairment and maximise activity/participation
Review question	How should people with shoulder pain after stroke be managed to reduce pain?
intervention	a) assessment b) pain management c) FES d) physical therapies
outcomes	• mobility & function • pain
review question	What interventions improve communication in people with apraxia or dysarthia after a stroke?

intervention	a) assessment b) speech and language therapies c) communication aids
outcomes	• quality of life • communication skills • social participation
review question	How should people with visual impairments including diplopia be best managed after a stroke?
intervention	a) screening & assessment b) information on compensatory strategies
outcomes	• quality of life • Activities of daily living • social participation