

Occupational Therapy Concise Guide for Stroke 2008

This concise guide contains recommendations extracted from the *National clinical guideline for stroke*, 3rd edition,¹ which contains over 300 recommendations covering almost every aspect of stroke management. The recommendations in this document have direct implications for occupational therapy and aim to provide occupational therapists with ready access to the latest guidance. They are given below with their number, so that they can be found in the main guideline.

This concise guide was compiled by Dr Judi Edmans and Dr Avril Drummond who represent the College of Occupational Therapists (COT) and the COT specialist section Neurological Practice.

Transfers of care – general (3.6.1)

- A All transfers between different teams and organisations should:
- occur at the appropriate time, without delay
 - not require the patient to again provide complex information already given
 - ensure that all relevant information is transferred, especially concerning medication
 - maintain a common set of patient-centred goals.
- B All organisations and teams regularly involved in seeing patients after stroke should use:
- a common, agreed set of data collection tools (measures and assessments)
 - a common, agreed terminology
 - a common, agreed document layout (structure) and content.
- C Patients should be
- involved in making decisions about their transfer
 - offered copies of transfer documents.
- patients and families are fully prepared, and have been fully involved in planning discharge
 - general practitioners, primary healthcare teams and social services departments (adult services) are all informed before or at the time of discharge
 - all equipment and support services necessary for a safe discharge are in place
 - any continuing treatment required will be provided without delay by an appropriate specialist service
 - patients and families are given information about and offered contact with appropriate statutory and voluntary agencies.
- B Patients should only be discharged early (before the end of acute rehabilitation) from hospital if there is a specialist stroke rehabilitation team able to continue rehabilitation in the community from the day of transfer and if the patient is able to transfer safely from bed to chair and if other problems can be safely managed at home.
- C Patients being discharged who remain dependent in some personal activities (eg dressing, toileting) should be offered a transition package of:

Transfers of care – discharge from hospital (3.7.1)

- A Hospital services should have a protocol, locally negotiated, to ensure that before discharge occurs:
- pre-discharge visits (eg at weekends)
 - individual training and education for their carers/family
 - telephone counselling support for three months.

- D Before discharge of a patient who remains dependent in some activities, the patient's home environment should be assessed and optimised, usually by a home visit with an occupational therapist.
- E Patients should not be discharged early from hospital to generic (non-specialist) community services (including both home and community hospitals) unless there is continuing active involvement by the specialist stroke service.
- F Carers of patients unable to transfer independently should receive training in moving and handling and the use of any equipment provided until they are demonstrably able to transfer and position the patient safely in the home environment.
- G All patients should continue to have access to specialist stroke services after leaving hospital, and should know how to make contact.

Rehabilitation treatment approach (3.12.1)

All members of a stroke service should:

- A use an agreed consistent approach for each problem faced by a patient, ensuring the patient is given the same advice and taught the same technique to ameliorate or overcome it
- B give as much opportunity as possible for a patient to practise repeatedly and in different settings any tasks or activities that are affected
- C work within their own knowledge, skills, competence and limits in handling patients and using equipment, being taught safe and appropriate ways to move and handle specific patients if necessary.

Rehabilitation treatment quantity (intensity of therapy) (3.13.1)

- A Patients should undergo as much therapy appropriate to their needs as they are willing and able to tolerate and in the early stages they should receive a minimum of 45 minutes daily of any therapy that is required.
- B The team should promote the practice of skills gained in therapy into the patient's daily routine in a consistent manner and patients

should be enabled and encouraged to practise that activity as much as possible.

- C Therapy assistants may facilitate practice but should work under the guidance of a qualified therapist.

General principles of rehabilitation (6.1.1)

- A All patients entering a period of active rehabilitation should be screened for common impairments using locally agreed tools and protocols.
- B Patients should always be informed of realistic prospects of recovery or success and should always have realistic goals set.
- C Specific treatments should only be undertaken in the context of and after considering the overall goals of rehabilitation and potential interaction with other treatments.
- D For any treatments that involve significant risk/discomfort to the patient and/or resource use, specific goals should be set and monitored using appropriate clinical measures such as numerical rating scales, visual analogue scales, goal attainment scaling or a standardised measure appropriate for the impairment.
- E The nature and consequences of a patient's impairment should always be explained to the patient (and to their family), and if necessary and possible they should be taught strategies or offered treatments to overcome or compensate for any impairment affecting activities or safety, or causing distress.

Evaluating and stopping treatments (6.2.1)

- A Every patient should have their progress measured against goals set at regular intervals determined by the patient's rate of change, for example using goal attainment scaling.
- B When a patient's goal is not achieved, the reason(s) should be established and:
 - the goal should be adjusted, *or*
 - the intervention should be adjusted, *or*
 - no further intervention should be given towards that goal.
- C When a therapist or team stops giving rehabilitation, the therapist or service should:

- discuss the reasons for this decision with the patient
- ensure that any continuing support the patient needs to maintain and/or improve health is provided
- teach the patient and, if necessary, carers and family how to maintain health
- provide clear instructions on how to contact the service for reassessment, and
- outline what specific events or changes should trigger further contact.

Splinting and stretching (to prevent and treat contractures) (6.14.1)

- A Any patient who has increased tone sufficient to reduce passive or active movement around a joint should have their range of passive joint movement assessed as a prelude to starting preventative actions.
- B Any patient whose range of movement at a joint is reduced or at risk of becoming reduced should have a programme of passive stretching of all affected joints on a daily basis and the programme should be taught to the patient and/or carers.
- C Inflatable arm splints enveloping the hand, forearm and elbow, and resting wrist and hand splints should not be used routinely.
- D If stretching alone does not control contractures, serial casting around a joint should be considered as a treatment for reducing contractures.

Task-specific training (6.16.1)

- A Task-specific training should be used to improve aspects of activities of daily living and mobility:
- standing up and sitting down
 - gait speed and gait endurance.

Depression (6.25.1)

- A Every patient entering rehabilitation should be screened for depression using a validated simple screening test (eg asking ‘Do you feel depressed?’ or the General Health Questionnaire (GHQ-12 or PHQ-9).

In addition:

- mood should also be assessed at later times, especially after stopping active rehabilitation or if depression is suspected
- screening tests such as ‘smiley faces’ or observational criteria alone should not be relied upon as the sole means of initial diagnosis
- questionnaires may be simplified to a *yes/no* format for people with communication difficulties
- the patient’s past should be investigated for any history of mood disturbance.

- B In people with aphasia and other impairments complicating assessment of mood, careful observations over time (including response to a trial of antidepressant medication if considered necessary) should be used.
- C Any patient with depressed mood should be provided with appropriate information and advice.
- D Any patient who has depression sufficient to cause distress and/or to impede rehabilitation should be assessed clinically for further treatment by an expert (eg clinical psychologist, appropriately trained physician, psychiatrist).
- E Any patient considered to have depression should be screened for anxiety and emotionalism.
- F Patients with minor depression should be monitored for progression and worsening and should be especially involved in one or more of:
- increased social interaction
 - increased exercise
 - goal setting
 - other psychosocial interventions (eg using voluntary sector resources).
- G Patients whose depression is more severe or persistent should be offered one or more of:
- antidepressant drug treatment
 - psychological therapy given by an appropriately trained and supervised practitioner
 - interventions to reduce any contributory factors such as pain and social isolation (eg attending voluntary sector stroke groups).

Anxiety (6.26.1)

- A Every patient entering the rehabilitation phase should be screened for anxiety, usually simply by asking about the patient's concerns or asking family members.
- B Any patient with anxiety should have the cause(s) established, and should be provided with appropriate information and advice.
- C Any patient whose anxiety is impeding their recovery and rehabilitation or causing distress should be:
- assessed and considered for psychological treatment, for example desensitisation or cognitive behavioural therapy
 - screened for emotionalism and depression.

Cognitive impairments – general (6.28.1)

- A Routine screening should be undertaken to identify the range of cognitive impairments that may occur.
- B Any patient not progressing as expected in rehabilitation should have a more detailed cognitive assessment to determine whether cognitive losses are causing specific problems or hindering progress.
- C The patient's cognitive status should be taken into account by all members of the multidisciplinary team when planning and delivering treatment.
- D Planning for discharge from hospital should include an assessment of any safety risks from persisting cognitive impairments.
- E People returning to cognitively demanding activities (eg some work, driving) should have their cognition assessed formally prior to returning to the activity.

Attention and concentration (6.29.1)

- A Any person after stroke who appears easily distracted or unable to concentrate should have their abilities to focus, sustain and divide their attention formally assessed.
- B Any person with impaired attention should have cognitive demands reduced through:

- having shorter treatment sessions
- taking planned rests
- reducing background distractions
- avoiding work when tired.

- C Any person with impaired attention should:
- be taught strategies to compensate for reduced attention
 - receive repeated practice of activities they are learning.

Memory (6.30.1)

- A Patients who complain of marked memory impairment and patients clinically considered to have difficulty in learning and remembering should have their memory assessed formally using a standardised measure such as the Rivermead Behavioural Memory Test.
- B Any patient found to have memory impairment causing difficulties in rehabilitation or undertaking activities should:
- be assessed medically to check that there is not another treatable cause or contributing factor (eg hypothyroidism)
 - have their profile of impaired and preserved memory abilities determined
 - have their nursing and therapy sessions altered to use techniques which capitalise on preserved abilities
 - be taught compensatory techniques to reduce their disabilities, such as using notebooks, diaries, audiotapes and electronic organisers and audio alarms
 - be taught approaches aimed at directly improving their memory
 - have therapy delivered in an environment that is as like the usual environment for that patient as possible.

Spatial awareness (eg neglect) (6.31.1)

- A Any patient with a stroke affecting the right hemisphere should be considered at risk of reduced awareness on the left, and should be tested formally if this is suspected clinically.
- B Any patient with suspected or actual impairment of spatial awareness should have

their profile of impaired and preserved abilities evaluated using a standardised test battery such as the Behavioural Inattention Test. The diagnosis should not be excluded on the basis of a single test.

- C Any patient shown to have impaired attention to one side should be:
- given cues to draw attention to the affected side during therapy and nursing procedures
 - monitored to ensure that they do not eat too little through missing food on one side
 - given a trial of visual scanning training
 - given trials of mental imagery training, structured feedback or using prisms if the unawareness is severe and persistent.

Perception – visual agnosia (6.32.1)

- A Any person who appears to have difficulty in recognising people or objects should be assessed formally for visual agnosia.
- B Any person found to have agnosia should:
- have the impairment explained to them, their family and their treating team
 - be taught strategies to compensate for the specific agnosia(s) as far as possible.

Apraxia (6.33.1)

- A Any person who has difficulties in executing tasks despite apparently adequate limb movement should be assessed formally for the presence of apraxia.
- B Any person found to have apraxia should:
- be given therapies and/or taught compensatory strategies specific to the deficits identified
 - have the impairment explained to them, their family, and their treating team.

Executive functioning (6.34.1)

- A Any person who appears to have adequate skills to perform complex activities but who fails to organise the tasks needed should be formally assessed for the dysexecutive syndrome, for example using the Behavioural Assessment of the Dysexecutive Syndrome (BADS).

- B Any person with an executive disorder and activity limitation should be taught compensatory techniques (eg use of electronic organisers or pagers, or use of written checklists).
- C When a patient's activities are affected by an executive disorder, the nature and effects of the impairment and ways of supporting and helping the patient should be discussed with others involved (eg family, staff).

Visual impairments and hemianopia (6.39.1)

- A Every patient should have:
- practical assessment of visual acuity wearing **their appropriate glasses**, checking their ability to see newspaper text and distant objects clearly
 - examination for the presence of hemianopia (visual field deficit).
- B Any patient who has a visual field deficit should be informed and, if a car driver, should specifically be informed about the consequences for driving (see 6.48.1).
- C Any patient whose visual field defect causes practical problems should be taught compensatory techniques.
- D Treatment for hemianopia using prisms should only be provided if:
- the treatment is supervised by someone with expertise in this treatment
 - the effects are evaluated
 - the patient is aware that it may not have any benefit for them.

Personal activities of daily living (dressing, washing etc) (6.46.1)

- A Every patient who has had a stroke should be assessed formally for their safety and independence in all personal activities of daily living by a therapist or nurse with the results recorded using a standardised assessment tool, preferably the Barthel Activities of Daily Living (ADL) index.
- B Any person who has limitations on any aspect of personal activities, especially but not only if acquired as a result of this stroke, should:

- be referred to an occupational therapist with experience in neurological disability, *and*
 - be seen for further assessment within four working days of admission, *and*
 - have treatment of identified problems from the occupational therapist who should also guide and involve other members of a specialist multidisciplinary team.
- C Specific treatments that should be offered (according to need) include:
- the opportunity to practise activities in the most natural (home-like) setting possible
 - assessment for and provision of and training in the use of equipment and adaptations that increase safe independence
 - training of family and carers in helping the patient.
- B The person or team responsible for any patient who wishes to drive should:
- ask about and identify any absolute bars to driving
 - consider the patient's capacity to drive safely
 - discuss driving and give advice to the patient
 - document the findings and conclusions, informing the GP and giving a written record to the patient.
- C Every healthcare professional giving advice on driving should ensure that it is accurate and up-to-date, and should consult the Driver and Vehicle Licensing Agency (DVLA) regulations (www.dvla.gov.uk/medical/atagance.aspx).
- D Every person who has a stroke or transient ischaemic attack and who has a group 2 licence (eg heavy goods vehicle (HGV)) should be told that they must inform the DVLA and that they will not be allowed to drive under this licence for at least 12 months.

Extended activities of daily living (domestic and community) (6.47.1)

- A Any patient who has had a stroke should be asked to what extent previous extended activities have been limited by the stroke.
- B Any patient whose activities have been limited should be:
- assessed by an occupational therapist with expertise in neurological disability
 - taught how to achieve activities safely and given opportunities to practise under supervision, if activities are potentially achievable
 - assessed for, provided with and taught how to use any adaptations or equipment needed to achieve safe activities.
- C Where a patient cannot undertake a necessary activity safely themselves, then alternative means of achieving the goal must be put in place to ensure safety and well-being.
- E Every person who has a stroke or transient ischaemic attack and who has a group 1 licence (ie ordinary licence) should be told that they must not drive for a minimum of four weeks, and that a return to driving is dependent on satisfactory recovery.
- F Every person who has a stroke leaving them with a neurological deficit of any type (eg visual or cognitive impairments) should be told that they must inform the DVLA.
- G Any person who wishes to return to driving should be assessed for factors that preclude safe driving and disbar them, at least at the time; for example:
- significant visual field defect or reduction in visual acuity (should seek further specialist assessment if necessary)
 - any epileptic seizure within last 12 months, excluding a seizure within the first 24 hours after stroke onset
 - disorders of focused attention, especially hemi-spatial neglect.

Driving (6.48.1)

- A Before they leave hospital (or the specialist outpatient clinic if not admitted), every person who has had a stroke or transient ischaemic attack should be asked whether they drive or wish to drive.
- H Any person who wishes to return to driving should be advised that:

- they will need sufficient muscle control to control the car, with or without adaptations
 - they will also need sufficient cognitive ability to drive safely on a busy road
 - clinic-based assessments of cognitive skills may predict failure of an on-the-road assessment, but are of low predictive accuracy
 - advice on mechanical adaptations can be obtained from various sources
 - on-the-road assessments are the best way to assess ability if there is any doubt
 - they should inform their insurance company before returning to driving.
- I Any person who needs rehabilitation of driving skills should be offered driving-specific computer-based training.

Vocational activities (6.49.1)

- A Every person should be asked about the vocational activities they undertook before the stroke.
- B Patients who wish to return to work (paid or unpaid employment) should:
- have their work requirements established with their employer (provided the patient agrees)
 - be assessed cognitively and practically to establish their potential
 - be advised on the most suitable time and way to return to work, if this is practical
 - be referred to a specialist in employment for people with disability if extra assistance or advice is needed (ie the Disability Employment Advisor, in England).
- C Patients who wish to return to or take up a leisure activity should have their cognitive and practical skills assessed, and should be given advice and help in pursuing their activity if appropriate.

Social interaction – interpersonal relationships (6.50.1)

- A Any patient whose style of social interaction after stroke is causing stress or distress to

others should be assessed by a clinical psychologist and, if necessary, by others (eg a psychiatrist or a speech and language therapist) to determine the underlying causes.

- B Following the assessment:
- the nature of the problems and their causes should be explained to the patient's family, to other people in social contact with them and to the rehabilitation team
 - the patient should be helped to learn the best way to interact successfully without causing distress
 - all those involved in social interactions should be taught how best to respond to inappropriate or distressing behaviour
 - if any specific treatable cause is found, the appropriate treatment should be given (eg an antidepressant or an antipsychotic).

Personal equipment and adaptations (6.51.1)

- A Every patient should have their need for specialist equipment assessed individually in relation to their particular limitations and environment, the need being judged against its effects on:
- safety of the patient or other during activity, and/or
 - independence of the patient undertaking activity, and/or
 - speed, ease or quality of activity being undertaken.
- B All aids, adaptations and equipment should be:
- as appropriate as possible for the patient's physical and social context
 - of known safety and reliability
 - provided as soon as possible.
- C All people (patient or carers) using any equipment or aids should be:
- trained in its safe and effective use
 - given details on who to contact, and how, in case problems arise.
- D The equipment should be reassessed regularly to check that:
- it is being used safely and effectively

- it is still needed
- it is still safe.

E Equipment and aids for communication should be considered by an appropriate specialist.

Environmental equipment and adaptations (6.52.1)

- A Every patient leaving hospital (or who is at home and was not admitted) should be assessed to determine whether equipment or adaptations can increase safety or independence.
- B Prescription and provision of equipment should be based on a careful assessment of:
- the patient and their particular impairments, *and*
 - the physical environment it is to be used in, *and*
 - the social environment it is to be used in.
- C All equipment supplied should:
- be of known (certified) reliability and safety
 - be checked at appropriate intervals.
- D The patient and/or carer(s) should be:
- trained in the safe and effective use of any equipment provided.
 - given a contact point for future advice about or help with any equipment provided.
- E The clinical suitability and use of equipment provided should be reviewed at intervals.

Further rehabilitation (7.1.1)

- A Any patient whose situation changes (eg new problems or changed environment) should be offered further assessment by the specialist stroke rehabilitation service.
- B Any patient with residual impairment after the end of initial rehabilitation should be offered a formal review at least every six months, to consider whether further interventions are warranted, and should be referred for specialist assessment if:
- new problems, not present when last seen by the specialist service, are present

- the patient's physical or social environment has changed.

C Further therapy should only be given if clear goals are identified.

Social participation (7.2.1)

- A The rehabilitation service should establish with each patient specific social activities they would like to undertake and should:
- advise the patient on the potential to undertake the necessary activities
 - identify any barriers to succeeding in the role, and advise the patient how to overcome those barriers
 - where appropriate make referral to community organisations (statutory and non-statutory) that can support the patient in fulfilling their desired roles.
- B Local services should facilitate social participation by disabled people through:
- ensuring a suitable community transport system
 - organising or supporting venues for social activities able to accommodate disabled people, especially people with communication problems
 - organising or supporting social networks to support disabled people (eg through voluntary groups).

Support (practical and emotional) (7.3.1)

- A Patients and their carers should have their individual practical and emotional support needs identified:
- when they leave hospital
 - when rehabilitation ends
 - at regular intervals thereafter.
- B Health and social services personnel should ensure that:
- any identified support needs are met somehow if at all possible
 - support services appropriate to the needs of the patient and carers are provided if they are the responsibility of statutory services

- patients are informed about organisations able to provide other needed services, and how to contact them
 - patients and carers receive all the financial and practical support that they are entitled to.
- C Health and social service organisations should ensure that accessing support and advice by and for disabled people is easy (eg through single points of access to all organisations).

Patients in residential care homes (including nursing homes) (7.4.1)

- A All patients in nursing homes, care home and residential homes should be able to receive assessment and treatment from specialist rehabilitation services.
- B All staff in nursing homes, care homes and residential homes should be familiar with the common clinical features of stroke and the optimal management of common impairments and activity limitations.

Carers (informal, unpaid) (7.5.1)

- A At all times the patient's views on the involvement of their family and other carers should be sought, to establish if possible the extent to which the patient wants family members involved.
- B The carer(s) of every patient with a stroke should be involved with the management process from the outset, specifically:
 - as an additional source of important information about the patient both clinically and socially
 - by being given accurate information about the stroke, its nature and prognosis and what to do in the event of a further stroke
 - by being given emotional and practical support as required.
- C With the patient's agreement, family and carers should be involved in all important decisions, as the patient's advocate if necessary.
- D During the rehabilitation phase, carers should be encouraged to participate in an educational programme that:

- explains the nature of stroke and its consequences
- teaches them how to provide care and support
- gives them opportunities to practise care with the patient
- emphasises and reiterates all advice on secondary prevention, especially lifestyle changes.

- E At the time of transfer of care to the home setting, the carer should:
 - be offered an assessment of their own support needs by social services
 - be offered the support identified as necessary
 - be given clear guidance on how to seek help if problems develop.
- F After the patient has returned to the home (or residential care) setting, the carer should:
 - have their need for information and support reassessed whenever there is a significant change in circumstances (eg if the health of either the patient or the carer deteriorates)
 - be reminded on a regular but not frequent basis of how they may seek further help and support.

Reference

- 1 Intercollegiate Stroke Working Party. *National clinical guideline for stroke*, 3rd edition. London: Royal College of Physicians, 2008.

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