

CLINICAL
EFFECTIVENESS &
EVALUATION UNIT



Royal College
of Physicians
Setting higher medical standards



College of
Occupational
Therapists

ROYAL COLLEGE OF PHYSICIANS
&
COLLEGE OF OCCUPATIONAL
THERAPISTS

OCCUPATIONAL THERAPY
STANDARDS FOR STROKE:
FEBRUARY 2008



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Occupational
Therapists

Specialist Section

Neurological
Practice

INTRODUCTION

The Royal College of Physicians have produced profession specific standards with the colleges of each profession (e.g. College of Occupational Therapists). The audits are designed as additions to the multidisciplinary stroke audit (now Sentinel Audit), which was developed by the Intercollegiate Working Party for Stroke under the auspices of the Royal College of Physicians. The Sentinel Audit builds on and replaces the original medical audit package produced in 1994 by the Royal College of Physicians and it provides a case mix profile, multi-disciplinary standards and an audit tool for the care of stroke survivors. It is recommended that each profession specific audit be used alongside the Sentinel Audit in order to get a complete picture of each professions service provision. Profession specific audits are available for occupational therapy, physiotherapy, speech and language therapy, nursing, and nutrition and dietetics.

The profession specific audits have been designed for use within a hospital setting and following an acute stroke. The package of profession specific standards should provide additional indicators of a quality service in hospital, the acute health setting, or a rehabilitation unit.

All occupational therapists are expected to know and work to the code of ethics and standards, policies and procedures documents published by the College of Occupational Therapists. It is expected that the latest standards of the College of Occupational Therapists would be used in any full audit of an occupational therapy service to stroke survivors, in addition to the Sentinel Audit and the profession specific standards for occupational therapy.

The audit proforma has been devised in relation to **minimum** occupational therapy standards. The package provides **basic** standards, based on the National Clinical Guidelines for Stroke: second edition¹, which should underpin any occupational therapy stroke service and should be viewed as formative to the further development of higher standards of practice and service delivery in stroke care.

Each standard is followed by criteria which take the form of key clinical activities which should be performed in order for each standard to be achieved. It is acknowledged that these standards may not yet be achievable in all cases; this is often due to resource issues. However occupational therapists should nonetheless be aiming to achieve these minimum standards. A range of outcome measures are included at the end of the occupational therapy audit.

The standards and audit proforma were drawn up by the occupational therapy members of the Intercollegiate Working Party assisted by members of the National Association of Neurological Occupational Therapists' (NANOT) Stroke Clinical Forum committee.

College of Occupational Therapists Standards

Since the early 1990's the College of Occupational Therapists (COT) has been providing standards for practice. As these are updated on a rolling programme, please see the COT website at www.cot.co.uk for details.

Alternatively, contact COT at:

106-114 Borough High Street,
Southwark,
London.
SE1 1LB

¹Intercollegiate Working Party for Stroke. National Clinical Guidelines for Stroke: second edition, Royal College of Physicians, London 2004.

ORGANISATIONAL STANDARDS

SERVICE STRUCTURE

Standard 1

There is an occupational therapy service agreement for stroke survivors within the trust which provides information on access, staffing, location of service provision, response times and local standards of practice.

Criteria
There is written evidence available regarding consultation which is updated within the previous two years.
A lead occupational therapist experienced in stroke rehabilitation is supervising provision of the occupational therapy stroke service. Suggested guideline: five years experience of which two will include stroke rehabilitation with evidence of continued professional development relating to stroke.

Standard 2

Stroke survivors and families / carers are informed of the scope of the occupational therapy service.

Criteria
There is a system in place which ensures that stroke survivors and families / carers have information which specifies the scope of the occupational therapy service i.e. via leaflet, video or other suitable medium.

Standard 3

There are formal links between the occupational therapy service and other statutory and voluntary services relevant to the stroke survivors' continuing care (e.g. local authority, Stroke Association).

Criteria
There is written evidence available on integrative and multidisciplinary service development and provision.

Standard 4

There is involvement of occupational therapists in research projects.

Criteria
Occupational Therapists are involved in research projects, either multidisciplinary or unidisciplinary.

CLINICAL STANDARDS

PROCESS OF CARE

Assessment

Standard 5

There is written evidence of the stroke survivor's previous performance in the areas of self-care, productivity and leisure.

Criteria
Following referral, an initial interview is conducted within the time scale guaranteed by the local occupational therapy service policy. Suggested guideline: within four working days of referral for a newly diagnosed stroke survivor.
Former levels of functioning within the areas of self-care, productivity and leisure are discussed with the stroke survivor.

Standard 6

Contact with family / carers is made at the earliest opportunity by the occupational therapist.

Criteria
Contact with family / carers is made at the earliest opportunity. Suggested guideline: within seven working days of the initial contact with the stroke survivor.

Standard 7

There is written evidence of the occupational therapy assessment.

Criteria
Occupational therapy assessment is conducted within the time scale guaranteed by the local occupational therapy service policy. Suggested guideline: within four working days of referral for a newly diagnosed stroke survivor.
The occupational therapy assessment includes: <ul style="list-style-type: none">• Appropriate advice on stopping smoking, regular exercise, diet and satisfactory weight, reducing salt intake, avoiding excess alcohol• The needs of younger stroke survivors• Assessment of cognitive, motor, and functional abilities.

Goal Setting and Intervention

Standard 8

There is written evidence of agreed goals and intervention plans.

Criteria
Time related goals of occupational therapy are negotiated and agreed with the therapist, stroke survivor and family / carers, and relate directly to the results of the assessment.
Stroke survivors have an intervention plan appropriate to their individual goals.

Standard 9

There is written evidence of the occupational therapy intervention.

Criteria
Intervention is offered to the stroke survivor, based on the occupational therapy assessment and the goals set for the stroke survivor.

Standard 10

The stroke survivor and family / carers are involved in the occupational therapy intervention.

Criteria
Relevant information and explanation concerning occupational therapy intervention is provided to the stroke survivor and family / carers (i.e. leaflet, video, verbal explanation), where appropriate.
Stroke survivors and family / carers are advised on the proper use and care of equipment, provided by the occupational therapist, and are given the contact number of the occupational therapist for advice or queries.

Standard 11

Multidisciplinary teamwork is essential for intervention to be effective and efficient.

Criteria
Occupational therapists participate in team meetings relating to the stroke survivor i.e. ward rounds, case conferences, discharge planning.
The occupational therapist communicates agreed goals to other professionals involved with the stroke survivor, their family / carers and links occupational therapy and team goals.

Transfer /discharge from OT

Standard 12

There is a planned transfer / discharge from occupational therapy.

Criteria
Transfer / discharge from occupational therapy includes a transfer / discharge summary, clearly recording that the stroke survivor has been discharged, and evidence that the stroke survivor has been given information regarding access to occupational therapy services in the future.

Standard 13

The occupational therapist reviews the outcome at the conclusion of the occupational therapy episode of care.

Criteria
Outcome of intervention is recorded in the occupational therapy record.

Standard 14

Stroke survivors are given the opportunity to be involved in research projects.

Criteria
Each stroke survivor has the opportunity to be involved in a research project.

ASPECTS OF OUTCOME WHICH OCCUPATIONAL THERAPISTS MAY WISH TO EVALUATE

Outcome	Measure	Comments	References
Activities of Daily Living			
Disability	Assessment of Motor and Process Skills (AMPS)	An evaluation of performance ability	Fisher AG. Multifaceted measurements of daily task performance: conceptualizing a test of instrumental ADL and validating the additional personal ADL tasks. <i>Phys Med Rehabil State Art Review</i> , 1997; 11 (2): 289-303.
Dependency on basic care	Therapy Outcome Measures		Enderby P, John A, Petheram B. <i>Therapy Outcome Measures: Physiotherapy, Occupational Therapy, Rehabilitation Nursing Manual</i> . Singular Publications; San Diego & London, 1998.
	Barthel Index	A widely known and simple guide to physical dependency	Collin C, Wade DT, Davies S, Horne V. The Barthel Index: a reliability study. <i>International Disability Studies</i> , 1988; 10: 61-63. Collin C, Wade DT. The Barthel ADL Index: a standard measure of physical disability. <i>Int Disability Studies</i> , 1988; 10: 64-67.
	Functional Independence Measure (FIM)	An increasingly used assessment of level of dependency	Granger CV, Hamilton BB, Sherwin FS. <i>Guide for the use of the uniform data set for medical rehabilitation</i> . Buffalo, NY: Medical Rehabilitation Project, 1986.
	Functional Assessment Measure	Developed from the FIM to include extra dimensions of disability	Hall KM, Hamilton BB, Gordon WA, Zasler ND. Characteristics and comparisons of functional assessment indices: Disability Rating Scale, Functional Independence Measure and Functional Assessment Measure. <i>Journal of Head Trauma Rehabilitation</i> , 1993; 8(2): 60-74.
	The Edmans ADL index		Edmans JA, Webster J. The Edmans ADL index: validity and reliability. <i>Disability and Rehabilitation</i> , 1997; 19(11): 465-476.
	Canadian Occupational Performance Measure (COPM)		Law M, Baptiste S, Carswell A, McColl M, Polatajko H, Pollock N. <i>Canadian Occupational Performance Measure manual 2nd edition</i> . Toronto: CAOT Publications, 1994. Law M, Polarajko H, Pollock N, McColl MA, Carswell A, Baptiste S. Pilot testing of the Canadian Occupational Performance Measure: clinical measurement issues. <i>Canadian Journal of Occupational Therapy</i> , 1994; 61(4): 191-197.
	Nottingham Stroke Dressing Assessment	An evaluation of dressing components for male and female	Walker MF, Lincoln NB. Reacquisition of dressing skills after stroke. <i>International Disability Studies</i> , 1990; 12: 41-43.

Outcome	Measure	Comments	References
Domestic / social activity	Canadian Occupational Performance Measure (COPM)		Law M, Baptiste S, Carswell A, McColl M, Polatajko H, Pollock N. Canadian Occupational Performance Measure manual 2 nd edition. Toronto: CAOT Publications, 1994. Law M, Polatajko H, Pollock N, McColl MA, Carswell A, Baptiste S. Pilot testing of the Canadian Occupational Performance Measure: clinical measurement issues. Canadian Journal of Occupational Therapy, 1994; 61(4): 191-197.
	Frenchay Activity Index	Validated for use in stroke, but used in other chronic conditions	Holbrook ME, Skillbeck CE. An activities index of use with stroke survivors. Age and Ageing, 1983; 12: 166-170.
	Nottingham Extended ADL Index	Widely used measure of high level activities of daily living	Nouri FM, Lincoln NB. An extended activities of daily living scale for stroke patients. Clinical Rehabilitation, 1987; 1: 301-305.
	Assessment of Motor and Process Skills (AMPS)	An evaluation of performance ability	Fisher AG. Multifaceted measurements of daily task performance: conceptualizing a test of instrumental ADL and validating the additional personal ADL tasks. Phys Med Rehabil State Art Review, 1997; 11 (2): 289-303.
Work / production activity	Canadian Occupational Performance Measure (COPM)		Law M, Baptiste S, Carswell A, McColl M, Polatajko H, Pollock N. Canadian Occupational Performance Measure manual 2 nd edition. Toronto: CAOT Publications, 1994. Law M, Polatajko H, Pollock N, McColl MA, Carswell A, Baptiste S. Pilot testing of the Canadian Occupational Performance Measure: clinical measurement issues. Canadian Journal of Occupational Therapy, 1994; 61(4): 191-197.
Driving	Nottingham Stroke Driving Test		Nouri FM, Lincoln NB. The Stroke Drivers Screening Assessment. Ashby de la Zouch, Leics: Nottingham Rehab Limited , 1994. Nouri FM, Lincoln NB. Predicting driving performance after stroke. BMJ, 1993; 307:482-483.
Leisure	Nottingham Leisure Questionnaire		Drummond A, Walker M. The Nottingham Leisure Questionnaire for stroke survivors. British Journal of Occupational Therapy, 1994; 57(11): 414-418.

Outcome	Measure	Comments	References
Past and present hobbies / interests	Canadian Occupational Performance Measure (COPM)		Law M, Baptiste S, Carswell A, McColl M, Polatajko H, Pollock N. Canadian Occupational Performance Measure manual 2 nd edition. Toronto: CAOT Publications, 1994. Law M, Polatajko H, Pollock N, McColl MA, Carswell A, Baptiste S. Pilot testing of the Canadian Occupational Performance Measure: clinical measurement issues. Canadian Journal of Occupational Therapy, 1994; 61(4): 191-197.
Goal attainment	TELER Binary Individualised Outcome Measure	Tool designed for clinical audit, care planning and documentation.	Le Roux B. TELER: the concept. Physiotherapy, 1993; 79(11): 755-758. Cook S, Spreadbury P. Trent occupational therapy clinical audit and outcomes project. Trent Regional Health Authority, 1995.
	Goal Attainment Scale		Ottenbacher KJ, Cusick A. Goal attainment scaling as a method of clinical service evaluation. American Journal of Occupational Therapy, 1990; 44(6): 519-525.
Service delivery			
	Numbers of people seen, length of stay, service delivery		
Focal impairment / disability			
Upper limb function	Jebson Hand Function Test	An easily administered, timed assessment of upper limb function, sensitive to neurological change	Jebson RH, Trieschmann R, Trotter N, Howard LA. An objective and standardised test of hand function. Archives of Physical Medicine and Rehabilitation, 1969; 50: 311-19.
	Nine-Hole Peg Test (NHPT)	A simple brief test of manual dexterity	Mathiowetz V, Weber K, Kashman N, Volland G. Adult norms for the nine-hole peg test of finger dexterity. Occupational Therapy Journal of Research, 1985; 5: 24-37.
	10 Hole Peg Test		Annett M. Five tests of hand skill. Cortex, 1992; 28: 583-600.
	Action Research Arm Test		Carroll D. A quantitative test of upper extremity function. Journal of Chronic Diseases, 1965; 18: 479-91.

Outcome	Measure	Comments	References
Physical function ability	Rivermead Mobility Index	An assessment of gross motor function from rolling in bed to running	Collen F, Wade D, Robb G, Bradshaw C. The Rivermead Mobility Index: a further development of the Rivermead Motor Assessment. <i>International Disability Studies</i> , 1991; 13: 50-54.
	Motricity Index		Demeurisse G, Demol O, Robaye E. Motor evaluation in vascular hemiplegia. <i>European Neurology</i> , 1980; 19: 382-9.
Psychological aspects			
Cognition	Mini-Mental State Examination (MMSE)	Widely used as a basic screening assessment of cognitive impairment	Folstein MF, Folstein SE, McHugh PR. "Mini-mental state" A practical method for grading the cognitive state of patients for the clinician. <i>Journal of Psychiatric Research</i> , 1975; 12: 189-198.
	Middlesex Elderly Assessment of Mental State (MEAMS)	A useful screening instrument for cognitive impairment in elderly people	Golding E. Middlesex Elderly Assessment of Mental State. Suffolk: Thames Valley Test Company, 1988. Shiel A, Wilson B. Performance of stroke survivors on the Middlesex Elderly Assessment of Mental State. <i>Clinical Rehabilitation</i> , 1992; 6: 283-289.
	Chessington OT Neurological Assessment Battery (COTNAB)	For specific perceptual / cognitive deficits people under 65 yrs	Tyerman R, Tyerman A, Howard P, Hadfield A. Chessington OT Neurological Assessment Battery. Ashby de la Zouch, Leics: Nottingham Rehab Limited, 1986.
Attention	Test of Everyday Attention		Robertson I, Ward T, Ridgeway V, Nimmo-Smith I. The Test of Everyday Attention. Suffolk: Thames Valley Test Company, 1994.
Memory	Rivermead Behavioural Memory Test (RBMT)	A simple widely used measure of functional memory	Wilson B, Cockburn J, Halligan P. The Rivermead Behavioural Memory Test. Thames Valley Test Company, Suffolk, 1985. Wilson B, Cockburn J, Baddeley A, Hiorns R. The development and validation of a test battery for detecting and monitoring everyday memory problems. <i>Journal of Clinical and Experimental Neuropsychology</i> , 1989; 11(6); 855-870.

Outcome	Measure	Comments	References
Perception	Rivermead Perceptual Assessment Battery		Whiting S, Lincoln NB, Bhavani G, Cockburn J. The Rivermead Perceptual Assessment Battery. Windsor: NFER-Nelson, 1985. Lincoln NB, Edmans JA. A shortened version of the Rivermead Perceptual Assessment Battery. Clinical Rehabilitation, 1989; 3: 199-204.
	Rey Figure	Useful perceptual screening assessment. Quick and easy to use and score	Rey A. Le teste de copie de figure complexe. Paris: Editions Centre de Psychologie Appliquee, 1959. Lezak MD. Neuropsychological assessment. Third edition. Oxford University Press, 1995.
	Visual Object and Space Perception Battery (VOSP)		Warrington E, James M. Visual Object and Space Perception Battery. Suffolk: Thames Valley Test Company, 1991.
	Cognitive Assessment of Minnesota (CAM)		Rustad R.A., DeGroot T.L., Jungkunz M.L., Freeberg K.S., Borowick L.G., Wanttie A.M. Cognitive Assessment of Minnesota. Psychological Corporation, London, 1993.
Neglect	Behavioural Inattention Test (BIT)	A battery for detecting and measuring severity of visuospatial neglect	Wilson B, Cockburn J, Halligan P. The Rivermead Behavioural Inattention Test. Thames Valley Test Company, Suffolk, 1987.
Anxiety / depression of stroke survivor and main carer	Hospital Anxiety and Depression Scale (HAD)	Designed for hospitalised, medically ill stroke patients, but has been used widely in many settings	Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. Acta Psychiatrica Scandinavica, 1983; 67(6): 361-370.
	Sickness Impact Profile	Measures different dimensions of quality of life	Bergner M, Bobbitt RA, Carter WB, Gibson BS. The Sickness Impact Profile: development and final version of a health status measure. Medical Care, 1981; 19: 787-805.
	SF-36	Measures different dimensions of quality of life	Ware JE, Sherbourne CD. The MOS 36-item short-form health survey (SF-36).1: Conceptual framework and item selection Medical Care, 1992; 30(6): 473-483.
	Life Satisfaction Index	Designed for use with older people	Neugarten B, Havighurst R, Tobin S. The measurement of life satisfaction. Journal of Gerontology, 1961; 16: 134-143.

Outcome	Measure	Comments	References
Anxiety / depression of stroke survivor and main carer (cont)	General Health Questionnaire (GHQ 28)	Widely used well validated, good reliability - some people find it upsetting to complete	Goldberg D. The detection of psychiatric illness by questionnaire. London: Oxford University Press, 1972. Goldberg DP, Hillier VE. A scaled version of the General Health Questionnaire. <i>Psychological Medicine</i> , 1979; 9: 139-145.
	General Health Questionnaire (GHQ 12)	A shortened version of GHQ 28	Goldberg DP, Williams P. A Users Guide to the General Health Questionnaire: Windsor: NFER-NELSON, 1992.
Relative stress	Caregiver Strain Index	A short measure designed to assess strain on the carer	Robinson BC. Validation of a Caregiver Strain Index. <i>Journals of Gerontology</i> , 1983; 38(3): 344-348.
	Relative Stress Scale	Originally used for psychiatric population - has been found to be useful in a community study	Greene JG, Smith R, Gardiner M, Timbury GC. Measuring behavioural disturbance of elderly demented stroke survivors in the community and its effects on relatives: a factor analytic study. <i>Age and Ageing</i> , 1982; 11: 121-126.

D Wade (1992). Measurement in Neurological Rehabilitation. Oxford, Oxford University Press has further information about many of these scales.

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Specialist Section – Neurological Practice contact

Dr Judi Edmans
Division of Rehabilitation and Ageing
B Floor
Medical School
Queens Medical Centre
Nottingham
NG7 2UH

College of Occupational Therapists

106-114 Borough High Street
Southwark
London
SE1 1LB

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