

## Guide to the provision of Psychological Support following Stroke

The purpose of this document is to provide guidance for the commissioning and provision of efficient and effective psychological support services for Stroke survivors with cognitive and mood disorders and their carers. It summarises the advice available in a number of guidelines, publications and evidence base including the work of NHS Improvement and neighbouring clinical networks.

The cost and potential cost saving modelling for Psychological Care after Stroke by NHS Improvement is referenced. Their modelling confirmed that a service based on the model described below is almost cost neutral. An investment of around £69,000 annually in psychological care through a clinical psychologist-led service, with clinical psychology support and an appropriately trained multidisciplinary team, may deliver an annual financial benefit of around £63,100 in two years. Their modelling was based on a population of 250,000 and a stroke incidence rate of 2/1000.

More information is available in the publication detailed at the end of this document. A tool is available and provided with this document to model different populations and levels of need.

SERVICE	COST	AVERAGE INPUT PER WEEK
Screening & Level 1 support by MDT members	£23,201	16 screens 21 Level 1 sessions 6 Level 2 sessions
Training for MDT members	£1,471	
Clinical Psychology Assistant	£16,438	6 Level 2 sessions (.41 FTE)
Clinical Psychologist	£27,952	1.5 assessments (after Level 1 support) 2.9 Level 3 support sessions 3 hours supervision (0.44 FTE)
<b>Total</b>	<b>£68,969</b>	

	From Level 1	From Level 2 & 3	TOTAL
GP consultations	£2,453	£6,020	<b>£8,473</b>
Inpatient bed nights	£7,789	£19,118	<b>£26,907</b>
Outpatient procedures	£5,927	£14,546	<b>£20,473</b>
Anti-depressants	£2,094	£5,140	<b>£7,234</b>
<b>Total</b>	<b>£18,263</b>	<b>£44,824</b>	<b>£63,087</b>

Costs of service delivery – NHS Improvement

Savings to NHS from provision of psychological care over two years – NHS Improvement

The importance of psychological support after stroke is highlighted in a number of national guidelines:

- National Service Framework Older People
- The National Stroke Strategy 2007
- RCP National Clinical Guideline for stroke 5<sup>th</sup> edition 2016
- British Psychological Society 2002. Briefing paper 19
- Midlands and East Stroke Services Specification
- SSNAP Organisational Audit 2016

## Introduction

Stroke is one of the leading causes of morbidity in the UK, with over 100,000 people experiencing a stroke each year. It is characteristically considered to be a condition causing weakness and paralysis. In fact up to 20% of people have no weakness, and a further unknown number of people have clinically silent stroke. More importantly, all patients with cerebrovascular disease are at risk of cognitive loss and some cognitive loss is probably present in almost all patients.

Up to **75% of patients will have significant cognitive impairment**, including problems with memory, attention, language and perception as well as organisation of movement and thoughts. Mood disturbance is common after stroke and may present as depression or anxiety.

**Psychological mood disturbance is associated with higher rates of mortality, long term disability; hospital readmission; suicide and higher utilisation of outpatient services if untreated.**

**30% of patients will suffer from depression at some point post-stroke** and a significant proportion these remain undiagnosed or inadequately treated.

**Serious psychological problems and strain are common in carers of people with stroke.**

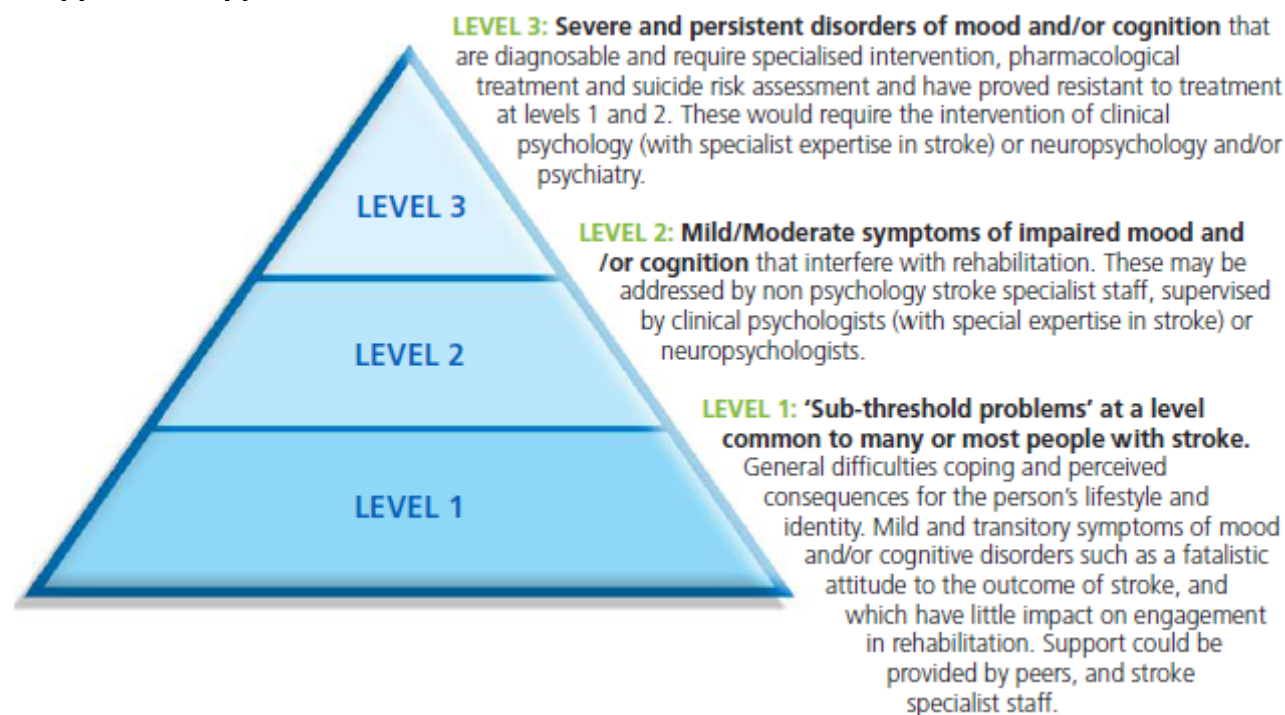
The risk of developing cardiovascular disease in people with depressive disorders can be at least one and a half times greater than that of the general population.

Significant improvements in psychological and emotional care after stroke can be made, by ensuring psychological support is considered by the multidisciplinary team (MDT) to be as critical to recovery from stroke as physical rehabilitation.

The National Institute for Health and Clinical Excellence (NICE) and the Royal College of Physicians (RCP) National Clinical Guidelines recommend routine assessment and management of mood and cognition after stroke. The National Stroke Strategy recognises the central importance of a psychological pathway of rehabilitation that addresses the psychological changes which can occur following a stroke. A key recommendation of the National Sentinel Audit (2010) was that commissioners “find resources that enable the service to provide clinical psychology expertise to acute and rehabilitation stroke patients”.

The 2016 SSNAP Acute Organisational audit of 2016 identified that the key indicator (at least one whole time equivalent (WTE) qualified clinical psychologist for every 30 stroke unit beds) is only being met in 6% of sites. These data suggest that only a small number of patients will be able to access input from a psychologist, which contrasts with the high levels of emotional distress and neuropsychological impairments reported by patients and their carers.

## Stepped care approach



### Stepped care model for psychological interventions after Stroke

Adapted by NHS Improvement from IAPT model with input from Professor Allan House and Dr Posy Knights

A stepped approach to psychological care is recommended by NICE guidelines for people suffering from depression and anxiety disorders.

Stepped care aims to offer patients psychological care in a hierarchical approach, offering simpler interventions first and progressing on to more complex interventions if required. Not all patients will progress through the system in a sequential manner. Over the course of their recovery patients may move in and out of this system several times and at different levels. This approach makes best use of skills of the multidisciplinary team and utilises more specialist staff for the patients with complex problems that require this level of help.

## Mood Assessment

The route to psychological care after stroke is through appropriate assessment. Screening is a brief assessment using a validated tool in conjunction with clinical judgement to decide if a person needs to be further assessed, monitored, or to gain access to psychological care.

National guidance requires that every patient receives a routine mood assessment. Assessment should be routinely achieved at about one month after stroke or just before hospital discharge if that is sooner. Second screen is timed around the 6 week post discharge review or at about three months after the stroke event with further assessments to be provided at 6 and 12 months to detect persisting long term problems.

The East Midlands Clinical Network developed a Six Month Reviews commissioning toolkit in collaboration with the Academic Health Science Network. <http://emahsn.org.uk/stroke-rehabilitation/specification-toolkit-six-month-reviews/>

All stroke survivors should be assessed for mood disorder using validated tools, examples of which include GHQ-12, HADS, PHQ-9, and Geriatric Depression Scale. Appropriate tools should be used for those with more severe communication or cognitive difficulties.

The HADS and PHQ-9 are free for use in the NHS and also commonly used in general practice. These tools will be used in addition to clinical observation or judgement. The type of tool to be used will be for local determination but there should be consistent use of a standardised tool.

MDT members need to be competent in psychological screening and training and competencies should align with the UK Stroke Forum Education and Training standards. The MDT needs to be competent to provide low level psychological care such as

- Active listening
- Normalising not minimising patient issues
- Providing advice and information for adjustment, goal setting and problem solving
- Signposting for informal support and further professional help when required.

For those with moderate / persistent mood and cognitive symptoms, the initial assessment will be followed by an interview with the stroke survivor and/or carer and routinely discussed in the multidisciplinary team as part of care planning processes. Staff will need to be aware of the referral and relevant treatment protocols and when and how to refer to mental health services should more severe symptoms emerge.

## **Assessment of cognition**

Cognitive assessment should be carried out as part of the comprehensive clinical assessment and not as an activity isolated from clinical decision making and treatment.

A brief screen such as the MoCA or ACE-R should be undertaken in the first few weeks in combination with functional assessment by occupational therapists. Following initial assessment, rehabilitation should be targeted to where there is a defined quantifiable need. If cognitive problems are obvious from functional assessment then only domains where there is no obvious deficit should be tested further.

In services without access to psychologists, therapists may wish to complete further assessments in conjunction with functional evaluation to clearly identify areas for targeted focus and to provide a baseline measure.

## **Interventions within the Interdisciplinary model of Stroke psychological support – costing**

IAPT services are already available to support stroke survivors although some stroke teams report that they are unable to refer patients. Commissioners and Stroke teams should work with IAPT providers to develop clear pathways of care that provide access to IAPT services for Stroke survivors.

Best practice examples include IAPT and Stroke MDT collaboration to provide psychological care.

Dr Vivienne Purcell presented the Talking Space service in Oxford for Stroke Patients at the UK Stroke Forum 2013. The initial request for their service to treat stroke survivors came from the commissioners. She was aware that one or two people with relatively mild problems had self-referred and been treated successfully, so a trial was agreed. At the same time the team delivered 'Psychological Skills for Stroke' training for the Stroke MDT. There is a pathway for stroke reviewers who see patients at their six month review to refer those they feel will benefit. The service also has a self-referral route. Stroke survivors referred to the service are all seen either by the Talking Space stroke team for face to face / home assessment, or Talking Health directly (if they can manage a phone assessment).

Stroke survivors should not be excluded from IAPT services. Commissioners are encouraged to work with IAPT and Stroke services to design appropriate care pathways that enable access to services at level 3 and to utilise IAPT provider skills to support the delivery of level 1 and 2 care within the Stroke MDT.

## Level 1 Psychological care

Psychological care should be delivered at Level 1 by the multidisciplinary stroke team to any patient with problems identified at screening. The NHS Improvement cost modelling assumes that the stroke team members involved are at the top of Agenda for Change band 5.

This first level of psychological care is anticipated to be carried out alongside current therapy and nursing interventions.

For the purposes of the modelling the amount of time the patient receives psychological care at Level 1 is equivalent to six sessions of 20 minutes. Training and supervision costs by a clinical psychologist for these staff are included in the model.

Level 1 psychological care comprises active listening, helping with adjustment, exploring and supporting the impact of the stroke, information giving, goal setting and identifying psychological difficulties. Peer support and befriending services can be an effective way to deliver level 1 support.

## Level 2 Psychological care

Comprehensive standardised assessments of the individual and/or their carer will also include follow up interview. The outcome will be routinely discussed at multidisciplinary team meetings to enable planning of intervention. For managing mood disorder at this level, psychological interventions may be applied such as Problem solving therapy, Motivational interviewing, Solution-focussed counselling and Behavioural activation. Staff will need to be aware of when and how to refer to mental health services should more severe symptoms emerge.

The NHS Improvement model assumes that Level 2 is provided by stroke team staff (AfC band 5) additionally trained by the clinical psychologist, or by a clinical psychology assistant following assessment of the patient by a clinical psychologist. The amount of time modelled is the equivalent to six sessions of 90 minutes.

Level 2 psychological care may comprise brief psychological interventions, advice and information and help with adjustment, goal setting and problem solving, motivational interviewing or group work using psychosocial education or relaxation groups.

This should be supported by robust supervision arrangements which may require complex case supervision in addition to general clinical supervision. There will be need to be a system in place to facilitate easy access to advice and onward referral to specialist stroke psychological services or mental health services supporting staff where specific complex symptoms emerge. It is important to ensure sufficient capacity for services provided by specialist stroke staff with extended skills, so as to account for the impact of providing this service on other aspects of stroke services also provided by this staff group.

Antidepressant medication should be considered with clearly defined and accessible management plans to review or stop medication.

### **Level 3 Psychological care**

A proportion of patients with more complex needs will require further psychological support at Level 3. Level 3 psychological care is delivered in the NHS Improvement model wholly by a clinical psychologist (mid AfC band 8a). The amount of time modelled is the equivalent to six sessions of 90 minutes. Level 3 care will comprise a more detailed assessment and use of a number of therapies for example cognitive behavioural therapy, solution focused therapy or motivational interviewing.

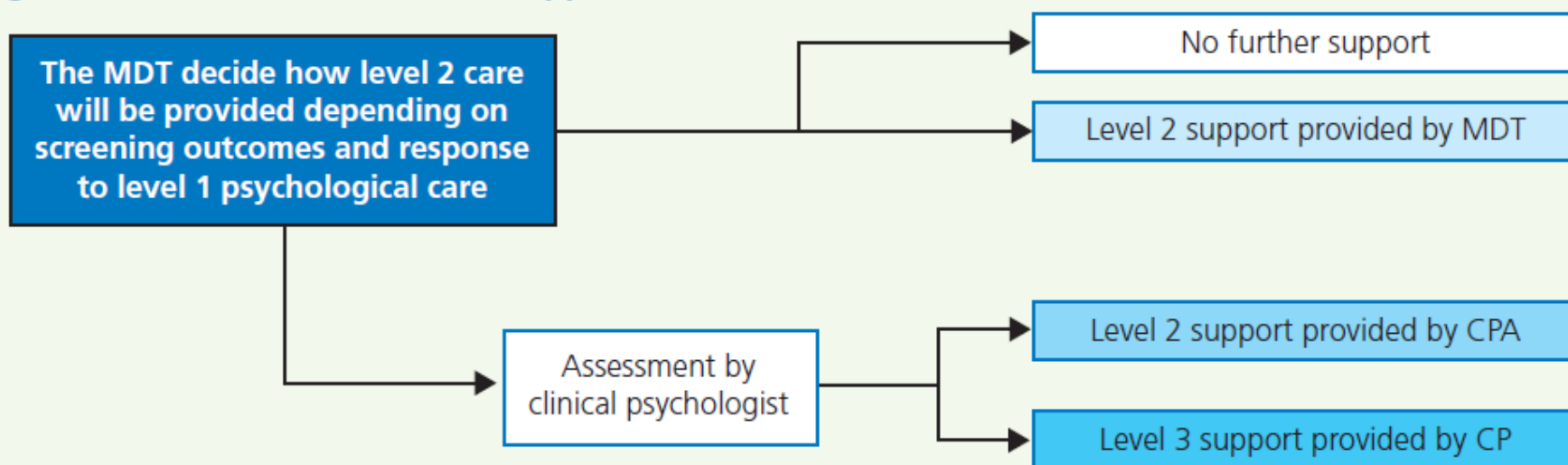
To ensure the most effective use of these scarce specialist skills robust policies must be in place that specify the criteria for referral, including urgent referral and who can make a referral into these services. Timely suicide risk assessment and prevention plans need to be carried out by the clinical psychologist followed by a mental health referral if there are complex or potential risk issues.

Antidepressant medication should be considered with clearly defined and accessible management plans to review or stop medication.

Stroke specialist clinical psychologists / neuropsychologists should be embedded as part of the stroke specialist multidisciplinary team and will have a key role in providing updates on a case by case basis on current developments and approaches to psychological / neuropsychological therapy to those practising at Levels 1 and 2. Services at this level will have robust supervision and clinical governance arrangements as defined by relevant professional bodies along with routine evaluation of interventions provided at this level.



Figure 2a: Structure of Level 2/3 support



**Structure of Level 2/3 Support**

From NHS Improvement publication – Psychological care after stroke: Economic modelling of a clinical psychology led team approach

## Key Features of a good stroke psychological support service

The following describes the key features of a high quality assessment and intervention service to inform commissioning and contractual arrangements. These are described at organisational and service level together with the key elements of governance that will be an essential part of a service specification. In some areas this may require additional investment in view of the historical paucity of stroke psychological support services.

### a. Organisational Level

- Commissioned services that respond flexibly to psychological needs at each stage of the pathway and are coordinated across all relevant agencies to deliver an integrated psychological support service. These services will include specialist stroke neuro rehabilitation services, community, mental health and primary care services and could involve social care, private and third sector partners.
- A comprehensive psychological support service with equal access to treatment for patients from different ethnic groups (in particular those from different cultural backgrounds), patients with disabilities, communication difficulties such as aphasia and younger people with stroke
- A service that addresses emotional and psychological needs in all care settings including home, community and hospital, with clear arrangements for escalation.
- A service where specialist clinical psychology and neuropsychologists with stroke specific experience is accessible and embedded as part of the specialist stroke multidisciplinary team.
- The service needs to be made known to primary generic services with local arrangements for emergency situations and robust communication arrangements throughout the pathway.

### b. Governance Arrangements

- Clearly defined locally agreed referral pathway across the entire range of services with clear lines of responsibility and accountability including at interfaces
- Written assessment, referral and treatment protocols for stroke psychological support including the use of locally agreed standardised assessment tools
- Supervision and clinical governance arrangements and structures in place for all staff providing psychological support service in accordance with their professional guidelines
- Specialist stroke nursing and therapist staff will be trained and supported in the administration and interpretation of the assessment tools and will have knowledge of the referral pathway and protocols and criteria for onward referral.
- All staff will know the limits of their capability and competence and be clear on when onward referral is required.
- Documented and agreed care plans that outline treatment interventions that clearly specify the stroke specific goals and expected outcomes of the intervention
- Information systems in place to enable the recording of individual psychological need, audit of referrals, the type of intervention, its duration and

outcomes linking into a dataset. This will be in addition to the audit of waiting times and service demand for each type in service along the pathway of psychological support. All stroke services will be expected to participate in the Stroke Sentinel National Audit Programme.

- Audit demonstrating equality of access to treatment for patients from different ethnic groups (in particular those from different cultural backgrounds), patients with disabilities, communication difficulties such as aphasia and younger people with stroke

### **c. Service characteristics**

- The service will be an integrated psychological support service competent to meet the needs of stroke survivors and their families. It will be provided by a range of staff e.g. clinical psychologist, psychiatrist, primary care mental health worker or be stroke specialists with additional expertise in managing people with these needs e.g. stroke specialist counsellor, stroke specialist nurses and AHPs.
- Staff providing stroke psychological support service will have demonstrable knowledge, competency and skill as described in the UK Stroke Forum Education and Training Standards to assess, treat and monitor people with these needs, including those with communicative difficulties
- The service will be characterised by prompt access to the appropriate specialist support e.g. clinical psychology, neuropsychology, and specialist stroke practitioners with extended skills. This will be based on triggers for escalation as defined in local pathways and will include urgent referrals
- The service will provide routine assessment of mood disorder for the stroke survivor and their carer and cognitive impairment for stroke survivors within 6 weeks after the stroke event. Further assessments are to be provided at 6 and 12 months when formal stroke reviews take place, to identify new, persisting and long term problems.
- The outcomes of these assessments will result in a management plan to enable access to appropriate treatment.
- Assessment will be based on the consistent use of validated assessment tools for mood and cognitive disturbance, administered by stroke specialist staff trained in the use of the tool and interpretation of the results.
- Appropriate assessment tools and methods should be used for those with more severe communication or cognitive difficulties
- Timely access to support and Intervention to be provided where a disturbance of mood, behaviour or cognition is found. The level of intervention should be matched according to the complexity of need and provided by staff with skills and competencies to provide the appropriate level intervention.
- The psychological support service should also include a support service to carers and families affected by stroke as required.
- A service will offer information to support self-management, informed choice and individual preferences
- The care planning approach will be used to support discharge arrangements for smooth transition home, to care home or between care environments
- The service will provide education and awareness of psychological support to staff and other organisations that support stroke survivors
- The service will take account of patient experience in the development of services
- It will also monitor service uptake, non-attenders and complaints and involve stroke survivors and their carers in improving quality and equity of service

### **Suggested Outcome measures of Psychological support for stroke**

In setting up a comprehensive support service the commissioner will agree a set of measures and information that can be used to monitor progress.

Suggested outcome measures for evaluating services may include:

- Rates of recovery demonstrated through changing scores against recommended clinical measurement tools
- Rates of readmission for those identified as having mood and/or cognitive disorder
- Lengths of stay in hospital services for those identified as having mood and/or cognitive disorder
- Improved SSNAP audit score for the local health economy
- Patient functional outcomes (e.g. Barthel on entry to service and after a period of intervention)
- Measures on long term dependency rates
- Recorded patient/carer satisfaction via appropriate questionnaire
- Well-being scores and indices indicating improvements in employment, social inclusion, participation in volunteering and activities of daily living
- Qualitative satisfaction levels of healthcare professionals

These measures will be in addition to the monitoring of routine service data such as:

- Activity data that includes waiting times in addition to the numbers
  - referred and source of referral
  - screened for psychological disorder
  - entering and completing treatment
- Demographic details to demonstrate equitable access
- Monitoring of demand including level of psychological need and the level of service provision at Levels 1 through to Level 3 of the interdisciplinary model of provision
- Recorded interventions and number of sessions required
- Manner of treatment e.g. face to face, telephone
- Data completion rates: Recording and monitoring of clinical outcomes for each patient e.g. outcome data available for at least 90% of patients

Sentinel Stroke National Audit Programme

The following measures captured by SSNAP are relevant to the provision of psychological support for stroke survivors

- 4.4 Was the patient considered to require this therapy [psychology] at any point in this admission?
- 4.5 On how many days did the patient receive this therapy across their total stay did the patient receive this therapy [physiotherapy] across their total stay in this hospital / team?
- 4.6 How many minutes of this therapy [physiotherapy] in total did the patient receive during their stay in this hospital/team?
- 6.7 Date patient screened for mood using a validated tool
- 6.8 Date patient screened for mood using a simple standardised measure

Six month review section

- 8.2 Was the patient screened for mood, behaviour or cognition since discharge using a validated tool?
- 8.2.1 Was the patient identified as needing support?
- 8.2.2 Has the patient received psychological support for mood, behaviour or cognition since discharge



Economic modelling by NHS Improvement is available at

<http://webarchive.nationalarchives.gov.uk/20130221101407/http://www.improvement.nhs.uk/stroke/Psychologicalcareafterstroke/HealthEconomicAnalysis.aspx>