QIPP Stroke Psychology Project

Pathway of care from acute to community

Joint project:
SUHFT & SEPT
National Guidance

• NICE Guidelines
  - *Stroke (2013)* – Clinical Psychologists are core MDT members in acute and community
  - *Depression & Chronic Physical Health Problem (2009)* - depression leads to poorer health and functional outcomes

• NHS Improvement
  - *Psychological Care After Stroke (2013)* - details a pathway wide approach to psychological need and intervention post stroke in cognition and mood is vital for effective stroke rehabilitation

• Royal College of Physicians
  - *National Clinical Guideline for Stroke (2012)* – all patients should have access to comprehensive mood and neuropsychological assessment.

  “The recommendations will require a considerable increase in the provision of some specialities in stroke services, especially clinical psychology and social workers.”
Background

• Clinical Implementation of project started in February 2013

• Service Structure
  • 1 x wte Principal Clinical Psychologist (0.75 Acute and 0.25 Community)
  • 1 x 0.6 Clinical Psychologist (Community)
  • 1x 0.5 Assistant Psychologist (0.25 Acute, 0.25 Community)

• Prior to project:
  • No specific MDT member for neuro/ cognitive, emotional & psychological needs
  • No specific stroke mood, cognition, adjustment screening measures
  • No pathway for neuro/ cognitive, emotional/psychological needs for patient or family
  • No training for MDT members in managing psychological wellbeing
  • No groups supported by health for patients or carers
  • No management of stroke mimics
  • Services did not meet the minimum criteria for cognitive or psychological needs in stroke

After the project – all in place and fully compliant
Stroke Recovery

• Stroke recovery is a two/three part process:
  1. Acute (medical – days/weeks)
  2. Specialist Unit Rehabilitation (about 5%)
  3. Rehabilitation – years

• If people are not given the correct support at the right time their outcome is affected.

• Good medical care is not sufficient for an effective recovery – without effective rehabilitation people are more dependant upon family members/services and their quality of life is reduced.
Rehabilitation

- Rehabilitation is the process of helping the person to restore, adjust and/or manage the change in their abilities.

- NICE Stroke Guidelines 2013: **Core** Rehab MDT members
  - Physiotherapists
  - Occupational Therapists
  - Doctors
  - Nurses
  - *Stroke Specialist Clinical Psychologists / Neuropsychologists*
  - Speech and Language Therapists
  - Rehabilitation Assistants
  - Social workers
Barriers to effective rehabilitation: Psychological Adjustment Groups

<table>
<thead>
<tr>
<th>75% have significant cognitive problems post stroke*:</th>
<th>50-67% experience mood problems post stroke*:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Memory</td>
<td>• Anxiety</td>
</tr>
<tr>
<td>• Concentration</td>
<td>• Depression</td>
</tr>
<tr>
<td>• Planning, organising, controlling action/thought/word</td>
<td>• Post Traumatic response</td>
</tr>
<tr>
<td>• Emotional Lability</td>
<td>• Loss of confidence/self belief</td>
</tr>
<tr>
<td>• Behavioural difficulties</td>
<td>• Loss of confidence in body</td>
</tr>
<tr>
<td>• Insight problems</td>
<td>• Low motivation</td>
</tr>
</tbody>
</table>

50% have interpersonal problems post stroke*:
• Loss of identity/role
• Loss of intimate relationship with partner

* Taken from: NHS Improvement (2013) & Stroke Association (2013)
Why does this affect rehabilitation?

- These difficulties are interwoven with the individual’s ability to function
  - **Confidence in body/self** – e.g. affects wanting to get out of bed / or try walking
  - **Cognitive difficulties** – e.g. affects coordination of action/ awareness of safety/ management social situations
  - **Low mood** – e.g. affects being motivated, so may decline rehab or any intervention
  - **Emotional lability** – e.g. causes concern in the MDT (?pain/?scared) intervention stopped
The Psychological Impact of Stroke

• Stroke patients are estimated to cost society £8 billion per year (£3 billion is direct to the NHS).
• For those who have co-morbid mental health needs there is on average an additional 40% increase annual spend.
• This is because untreated emotional and cognitive difficulties result in:
  – Reduced functional outcomes
  – Reduced QOL
  – Longer hospital stays
  – Greater use of community services
  – Higher rate of mortality - depression has an effect on other health conditions which increase risk factors
  – Less effective condition management
  – Evidence demonstrates that pharmacological intervention has a reduced effect in stroke populations

Responding appropriately to these needs?

- The interventions Clinical Neuropsychologists do as part of the stroke MDT with stroke patients, family members and staff are about:
  - Cognitive problems and associated behavioural difficulties
  - Mood in relation to the change in abilities
  - Interpersonal and Identity difficulties
  - Identifying pre-existing Mental Health or Cognitive problems
  - Consultation, training, supervision and guidance to staff in relation to the above

*Most people do not have premorbid mood/cognitive difficulties – their needs are related to their stroke and it’s consequences.*
Psychology in the MDTs

Acute Care & Early Supported Discharge

- Assessment and intervention – cognition & mood
- Family support – 1:1/Family meeting
- Joint work with MDT team
- Consultation for all patients
- Training of MDT in mood and cognition assessment & level 1 intervention
- Staff support
- Stroke Mimic and Severe Adjustment Difficulties Clinic
- Consultation for ESD patients

Community Care

- Assessment and intervention – cognition & mood
- Family intervention
- Group work
- Joint work with MDT team
- Consultation as required
- Training of MDT in mood and cognition assessment & level 1 intervention
- Staff support
- Comprehensive neuropsychological assessment
How does the integrated pathway work?

Patient and family needs are reassessed due to change of circumstance and care plan adjusted if needed. If not care continued.

Reassessment as required and at 6 months

Needs and current care plan is shared with the community team in preparation for discharge

Patient is assessed on the ward in relation to mood and cognition and intervention given as needed.

Family needs are identified and family members are supported as needed.
Why is a cohesive pathway important?

- Evidence and patients and family member accounts state how early support is vital in:
  - Supporting the person to understand why they cannot do things in the way they used to – cognitive/physical problems
  - Explaining that changes in mood are common, normal and expected
  - Supporting family members feelings and addressing fears
  - Working with patients, family members and staff on what the future might be and how to manage uncertainty

- Evidence and patient and family accounts also talk about how these needs change across the recovery pathway:
  - The cognitive problems become more apparent as more day-to-day tasks are seen
  - As more difficulties are seen, insight increases and can affect mood
  - The difficulties often mean that the person needs support – changing the way they see themselves and how they are seen by others
  - Frustration, mood, personality and behavioural changes can be difficult for the person and family to manage putting strain on relationships

- In the longer term
  - Support is needed to assess someone's ability to return to work/have meaningful activities in their day
    - neuropsychology assessment
  - Look at how relationships can be restored from patient/carer to e.g. husband/wife, father/daughter
    - family work
  - Acceptance work about those difficulties which will be long term challenges

In order for this to be effective joint working with the MDT is vital throughout the pathway
LEVEL 3:
Those with the most substantial need both in relation to management of significant mood and cognitive changes. This might be due to significant injury or those with a lesser injury but significant acceptance and adjustment problems. Intervention as below but with more intensive 1:1 psychology intervention and family/carer intervention.

These would require the intervention of a Clinical Psychologist (with specialist expertise in stroke).

LEVEL 2: These difficulties are related to interwoven difficulties where a single focus intervention is not appropriate. All aspects need to be considered and joint working with MDT is vital alongside 1:1 sessions. Although this may be addressed by non psychology stroke specialist staff, a training programme and supervision by clinical psychologists (with special expertise in stroke) is obligatory.

LEVEL 1: General difficulties coping and perceived consequences for the person’s lifestyle and identity. Mild and transitory symptoms of mood and/or cognitive disorders, which have little impact on engagement in rehabilitation. Support could be provided by peers, and stroke specialist staff.

Taken from ‘Psychological care after stroke’, NHS Improvement (2013)
Why would this be difficult to achieve in IAPT/Primary Care Therapy?

- IAPT services cater for low level mental health needs. They are not trained in physical health models or cognitive models of psychological difficulties.
- Without this understanding the interwoven nature of problems are seen out of context – meaning people are considered to have an isolated mental health condition rather than a combination of factors which lead to mood problems
- The difficulties with cognition mean that ways of working need to be appropriately adapted requiring longer interventions
- In order to adapt to individual need clinicians need to understand the cognitive strengths and weaknesses – Only Clinical Psychologists are trained in neuropsychology (detailed cognitive assessment encompassing neurological models)
- Joint work and consultation with other members of the MDT is vital in working out where the difficulties reside in rehab and how to manage them
- Family/carer work is often paramount to help the individual transition effectively and keep people in their own homes
Case Study – Stroke Mimic

• 85 year old lady, 1st admission December 2012 – diagnosis: stroke
• Prior to psychological intervention: 4x readmissions within 6 months re: high family anxiety & diet mismanagement - £30,131.80

• Work by Psychology Service
  – Joint work with dietician on the ward to develop easily understandable diet plan to enhance compliance
  – 1x f2f with family members on the ward to discuss difficulties and develop management strategies
  – 2x telephone calls, 3x f2f in the community re: review strategies and manage patient and family anxiety
  – Joint work with Community Stroke Team to maintain the above

• Patient and Family Outcomes
  – No readmissions during or since discharge from psychology intervention
  – Family report feeling more supported and less anxious about health problems
Case Study – Rehab & Mood

• **Community Stroke Team** were concerned about a 75 year old gentleman who was becoming tearful in rehab sessions.
• They were not sure how to manage this and so rehab sessions were cut short.
• **Work by Psychology Service**
  — 1 x joint session with rehab. Psychologist was able to distinguish lability from depression and think about strategies.
  — This helped the community team, the patient and his wife understand the emotional response and manage it.
• **Patient and family outcomes**
  — Improved confidence in the patient and family members – increase rehab tolerance and patient achieved his goals.
  — Greater skill in the team in recognising and managing lability.

*This work is common place in both the community and acute service.*
**Financial Outcomes – 1st 6 months**

<table>
<thead>
<tr>
<th>Data source</th>
<th>Outgoing</th>
<th>Saving</th>
<th>Total Financial Benefit at 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project cost to date (1.6 x CP &amp; 0.5 x AP)</td>
<td><strong>£66,060.00</strong>**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Stay (Rehabilitation Ward)</td>
<td></td>
<td><strong>£214,956.79</strong></td>
<td></td>
</tr>
<tr>
<td>Stroke Mimics (readmission cost)</td>
<td></td>
<td><strong>£58,091.09</strong></td>
<td></td>
</tr>
<tr>
<td>Antidepressant Use (acute)</td>
<td></td>
<td><strong>£2,288.00</strong></td>
<td></td>
</tr>
<tr>
<td>Length of Community Visit</td>
<td></td>
<td><strong>£4,635.00</strong></td>
<td><strong>29 extra patients can be seen per month</strong></td>
</tr>
<tr>
<td>Total</td>
<td><strong>£66,060.00</strong></td>
<td><strong>£279,970.00</strong></td>
<td><strong>£213,910.88</strong></td>
</tr>
</tbody>
</table>

*Total sample n=326 (6% prescribed 2012, 2% prescribed 2013)

** Includes operational costs
How this was calculated

• Cost of the Project for the 1st 6 months

• Length of stay based on hospital data for the 6 months the project has been running and the same 6 months last year = difference 2 days saved

• Stroke Mimics are those who have or have not had a stroke 1st admission but return without a stroke 2nd admission. The original admission is not counted stroke or not

• Antidepressant is based on an internal audit which was done for the 6 months since service started and same 6 months last year. Notes were reviewed by hand to see whether AD’s were prescribed and why. Cost is based on £1 per month – 50% 2 years, 50% 5 years

• Length of community visit – based on data given and analysed by SEPT. 10 mins difference was found between 6 month of psychology service and previous 6 months. Costed at 10 mins of mid point band 6 (inc all clinical contacts from consultant to support worker)
Are the right people being referred?

1st 6 months

- Those being referred for psychological support based on self rated measures are those with more complex needs:
  - More anxious, more depressed, less well recovered
  - Demonstrating less adjustment to the outcomes of their stroke
  - Less adjustment = increased likelihood of long term dependence & poorer rehabilitation/recovery

As the correct people are being referred it also means staff understand the measures being used - positive effect of training
Clinical Outcomes - 1st 6 months

- Significant positive change (RCI & statistical significance) in:
  - Anxiety
  - Depression
  - Patient Perceived Recovery
  - Goals set by patient – often related to confidence & management of cognitive/mood problems

<table>
<thead>
<tr>
<th>What is measures</th>
<th>% improved</th>
<th>T-Test outcome</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>53.8</td>
<td>p= &lt;.05</td>
<td>0.61 - 3.3</td>
</tr>
<tr>
<td>Depression</td>
<td>64.3</td>
<td>p= &lt;.005</td>
<td>2.5 - 8.8</td>
</tr>
<tr>
<td>Patient's view of their recovery</td>
<td>45.9</td>
<td>p= &lt;.05</td>
<td>27.6 – 4.1</td>
</tr>
<tr>
<td>Goal 1 set by patient</td>
<td>93.3</td>
<td>p= &lt;.005</td>
<td>1.7 – 3.5</td>
</tr>
<tr>
<td>Goal 2 set by patient</td>
<td>89.5</td>
<td>p= &lt;.005</td>
<td>1.8 – 3.2</td>
</tr>
</tbody>
</table>
What do patients and family members think?

• Patients

“I think it’s such a fantastic thing to offer because people are misunderstood about people who have strokes. The emotions hold you back more than the physical”

“I was finding it extremely difficult to manage my life after my stroke. These sessions have given me my old life back.”

“Given the strength of mind to come to terms with my ill health. Be proactive. There is life after stroke(s)”

• Family Members

“Apart from the obvious benefit to Mum (and hopefully the avoidance of further hospital admission for her if things were left untreated), for me, the weight lifted has been tremendous and allowed me to deal with my own “recovery”.”

“This type of support translates so very well to stroke victims and their families – as opposed to medication. We were lucky enough to be referred ... to begin to resolve the root cause of my mum anxiety, rather than just mask it"
How does working with the team help patients?

- Training and consultation with the MDT to work with level 1 cognition and mood difficulties.
- The graph shows all the depression screens completed in the community including those not seen directly by psychology.
- Since psychology started with the team these have steadily gone down.
What do staff members think?

- Staff survey (n=30)
  - **100%** of respondents felt that the psychologist had:
    - supported them in managing patients distress
    - been helpful with clinical decision making for patients
    - been useful in supporting family members
    - Provided joint sessions/training which has enhanced clinician’s understanding of patients needs/behaviour
    - been supportive of their needs
  - **97%** of respondents felt that the psychologist had:
    - improved their knowledge of cognition and mood
What do staff members think?

Q – What do you think the psychologist had added to the service?

“The Psychologist has been a very cohesive influence on the team, helping to develop services in a more patient focussed manner and working to improve the overall outcome that the patient receives.”

“Increased communication in difficult situations. Enhanced the multidisciplinary teams skills in knowing how the patient and family feel and understanding ways of working with them to maximise the patients outcomes following stroke.”

“Providing support to patients and their relatives and a deeper understanding of cognitive issues surrounding stroke which can help patient recovery whilst in hospital and the community”

“No other staff member is trained to assess and manage mood, which has a huge impact on the patients' overall recovery and progress in rehabilitation.”

‘strongertogether’
Why commission?

<table>
<thead>
<tr>
<th>QIPP Project Challenge</th>
<th>Met?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating Financial Benefit</td>
<td>Yes</td>
</tr>
<tr>
<td>Adhering to NICE Stroke Quality Standards</td>
<td>Yes</td>
</tr>
<tr>
<td>Meeting Provision Targets out in National Service User Data</td>
<td>Yes</td>
</tr>
<tr>
<td>(Feeling Overwhelmed – Stroke Assoc.)</td>
<td></td>
</tr>
<tr>
<td>Producing Positive Clinical Outcomes in Local Service User Data</td>
<td>Yes</td>
</tr>
</tbody>
</table>
What next?

- More groups & psychoeducation booklets:
  - Cognitive Rehabilitation
  - Mood
  - Identity and Self Esteem

- Increase training for staff in acute and community – mood and cognition champions

- Leading on improvement of the stroke rehabilitation pathway

- Involvement in National Research Project – enhanced stroke specific cognitive screening
• Please see pack for main references and additional supporting information

• Any questions please contact:
  
  Dr Greg Wood (Head of Clinical Health Psychology)
  • Greg.wood@sept.nhs.uk
  • 07876101775
  
  Dr Amy Bartlett (Principal Clinical Psychologist – Stroke Project)
  • Amy.bartlett@southend.nhs.uk/@sept.nhs.uk
  • 07507773397

Thank you for your interest