What factors affect access to stroke rehabilitation?: A systematic review

Dr Verity Longley *verity.longley@manchester.ac.uk*
PhD supervised by Professor Audrey Bowen, Dr Sarah Peters, Dr Caroline Swarbrick

Division of Neuroscience and Experimental Psychology, Faculty of Biology, Medicine and Health
University of Manchester

Background

- Rehabilitation is recommended for all patients after stroke but there is variation in who does or does not receive it.
- Exclusions to services vary across international guidelines but no guidelines define who ***should*** receive rehabilitation.
- Clinicians are often left to decide which patients should access rehabilitation.
- Most literature on factors influencing access to rehabilitation focusses on patient factors and prognostic indicators.
- This review synthesises **clinician's perspectives** in order to inform the clinical decision-making process.

Aim
To identify factors that affect clinical decision-making about who should receive stroke rehabilitation.

Methods

- Searches completed on 4 databases (from inception to August 2018): CINAHL, PsycINFO, MEDLINE, AMED.
- No restrictions on study design or publication date, English language only restriction.
- Search terms: Stroke OR cerebrovascular accident OR CVA AND rehabilitation OR therapy AND decision making OR clinical reasoning OR clinical judgement.

Inclusion criteria:
- Full text primary research published in peer-reviewed journal.
- Participants providing any type of stroke service.
- Focussed on clinical decision-making for referral/admission to stroke rehabilitation, prioritisation criteria, or decision-making about rehabilitation potential.

Exclusion criteria:
- Studies focussed on decision-making between specific interventions or treatments.
- Studies that included a mixed diagnosis case-load excluded unless separate results for stroke reported.
- Studies with patient participants.

Quality of studies appraised using the Mixed Methods Appraisal Tool.

Results

- 1915 papers identified.
- **13** met the inclusion criteria.
- Mix of methods: 8 qualitative, 4 quantitative, 1 mixed methods.
- Mix of countries: Australia (n=5), Canada (n=2), UK (n=2), Germany (n=1), USA (n=1), multiple European countries (n=2).
- 292 clinicians in total were included in the studies.
- Study size varied, from a study of one multi-disciplinary team to 77 discharge planners.

Patient-related factors

- **Age** (n=5 studies): older age barrier for referral to rehab
- **Pre- and post-stroke function** (n=6): higher level of pre-stroke disability reduces likelihood of referral/acceptance
- **Type/severity of stroke** (n=3): more severe stroke reduces referral/acceptance
- **Presence of dementia** (n=6): perceived as reducing rehab potential
- **Social/family support** (n=6): less support, less likely to be admitted
- **Motivation** (n=5): 'unmotivated' patients less likely to be referred
- **Demonstration of progress** (n=5): observed improvement required for referrals
- **Predictions about recovery/discharge** (n=5): patients for residential care lower priority for rehab

Organisational factors

- **Service pressures** (n=7): bed/staff shortages result in pressure to discharge
- **Insurance** (n=2): barrier for referral to appropriate care

Characteristics of individual clinicians

- **Clinical discipline** (n=4): used to focus decisions/advocate for rehab
- **Experience** (n=3): lack of experience challenged decision-making
- **Knowledge** (n=5): lack of knowledge is a barrier for referrals e.g. perceiving certain patients cannot benefit from rehab, lack of awareness of services
- **Emotions** (n=5): 'gut instinct' informs decisions

Conclusions

- Decisions about referring/accepting patients into stroke rehabilitation are not only influenced by patient factors, but also organisational factors and characteristics of the clinician.
- Clinical decisions appear to take a subjective approach due to lack of clinical guidance about which patients should receive stroke rehabilitation.
- This review reveals the complexity of decision-making, and the balance of factors that may lead to a patient receiving, or not receiving post-stroke rehabilitation.

Article: Longley, V., Peters, S., Swarbrick, C., Bowen, A. (2018) What factors affect clinical decision-making about access to stroke rehabilitation?: A systematic review. ***Clinical Rehabilitation*** [online]

The National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care (NIHR CLAHRC) Greater Manchester is a partnership between providers and commissioners from the NHS, industry, the third sector and the University of Manchester. We aim to improve the health of people in Greater Manchester and beyond through carrying out research and putting it into practice. This work forms part of the NIHR CLAHRC Greater Manchester's Stroke Programme and is supported by the Stroke Association.
http://clahrc-gm.nihr.ac.uk