Reducing hospital LOS and costs with Community Neurological Rehabilitation Services

Date: 23.2.17

Sources searched:
Internet search using: Google
Databases: PubMed, Social Care Online
Healthcare Databases: HMIC, HBE, EMBASE,

Article abstracts - If these links do not give you the full text or refuse to open please contact the Library office library.winchester@hhft.nhs.uk who will be able to help you.

Summary
Limited research with costings was found to support the theory that community rehab schemes for neurological conditions reduces hospital stay, admissions or emergency attendances.

2 key documents appear to give the best picture. In 2015 Monitor produced a series of reports *Moving healthcare closer to home* but recognised that there is a lack of “good quality data and well-thought-out pricing incentives”. An earlier document from NHS Scotland identifies evidence of reducing health costs and LOS.

An RCT from the BMJ in 1997 by Anthony Rudd was unique in demonstrating a reduction in bed use with a community based rehabilitation team.

Conversely, Early Supported Discharge (ESD) is widely adopted in hospitals and can reduce LOS and benefit patients. A Cochrane Review (2012) on (ESD) reducing hospital stay for stroke patients also identifies cost savings.

There is a lot of evidence for ESD in neurology, mainly stroke, whereby patients are supported in the hospital *before* leaving. Some examples which demonstrate cost savings are presented below.

Key Documents

Report from Monitor looks at potential savings from moving care into the community
NHS Confederation 22 / 09 / 2015
- *Moving healthcare closer to home - case studies: Admission avoidance and length of stay reduction* Monitor, 2015

Short-Term Assessment, Rehabilitation and Reablement Service in London North West Healthcare NHS Trust

Studies of early supported discharge and rehabilitation and reablement services have demonstrated a reduction in the ongoing social care needs of those patients (Glendinning et al, 2010; Shepperd et al, 2009b; Lewin et al, 2013).
| **Overview of Evidence Relating to Shifting the Balance of Care: A Contribution to the Knowledge Base.** | Scottish Government Social Research, 2008  
Lucy Johnston, Clare Lardner and Ruth Jepson  
Chapter 4 - Shifting the focus of care. Rehabilitation: Section 4.24 |
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<td>Evidence on reducing health costs and LOS</td>
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| **Randomised controlled trial to evaluate early discharge scheme for patients with stroke** | Author(s): Rudd, Anthony G.  
Source: British Medical Journal; 1997; vol. 315 (no. 7115)  
Publication Type(s): Article  
Available in full text at The BMJ - from Highwire Press  
Available in full text at BMJ, The - from National Library of Medicine  
Abstract: The authors' objective was to assess the clinical effectiveness of an early discharge policy for patients with stroke by using a community based rehabilitation team. A randomised controlled trial was used to compare conventional care with an early discharge policy. Set in two teaching hospitals in inner London, there were 331 medically stable patients with stroke (mean age 71) who lived alone and were able to transfer independently or who lived with a resident carer and were able to transfer with help. One hundred and sixty seven patients received specialist community rehabilitation for up to three months after randomisation. One hundred and sixty four patients continued with conventional hospital and community care. The authors concluded that early discharge with specialist community rehabilitation after stroke is feasible, as clinically effective as conventional care, and acceptable to patients. Considerable reductions in use of hospital beds are achievable. Cites 23 references. [Journal abstract].  
Database: HMIC |

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<th><strong>Length of stay/admission reduction</strong></th>
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| Designing and implementing an ‘Acute Hospital @ Home’ service. 2016  
http://fabnhsstuff.net/2016/03/01/designing-and-implementing-an-acute-hospital-home-service/ |
| This Future Hospital Programme case study describes how a multidisciplinary team at Dorset County Hospital, including Dr James Richards and Patricia McCormack, created an ‘Acute Hospital @ Home’ service.  
Includes some facts and figures on bed days/costs saved. |

Trappes-Lomax Tessa, et al  
The main outcome measure was prevention of institutionalisation assessed by the number of days from baseline interview to admission to residential/nursing care or death ('survival-at-home time'). Secondary outcome measures were time to hospital re-admission over 12 months, quality of life and coping ability. |
Interventions to reduce unplanned hospital admission: a series of systematic reviews. NHS Bristol, 2012

Includes some studies on rehab eg p 23 and p53 (Ctrl+F)

Early supported discharge of patients with acute stroke: a randomized controlled trial.
Disabil Rehabil. 2002 May 10;24(7):348-55

RESULTS: Median length of stay was reduced from 31 days in the conventional hospital rehabilitation group to 22 days in the early supported discharge group (p = 0.09).

Author(s): Hails, Charlotte; Steadman, Jayne; Walls, Joanna

The PACE journey started in July 2009 when NHS Bromley’s Community Provider Unit, in partnership with primary, acute and social care partners, responded to NHS London’s request for expressions of interest to pilot a new service to enable patients to leave hospital earlier than existing services allowed. The success of Bromley’s response is attributable to the clear partnership approach, supported by a strong service model owned and led by clinicians and social care professionals. The initial ten week PACE pilot was incredibly successful and the benefits quickly recognised along with the impact that could be delivered over the challenging winter period ahead. On this basis the multi-agency Winter Planning group supported the continuation of the PACE service. The positive impact of the service over this period is detailed within this report and the service has been widely recognised as contributing to the health and social care economy’s management of winter pressures during 2009-10. The end result in simple terms is that PACE patients spend an average of 3 fewer days in hospital and consistently report an 85% level of satisfaction with the care they receive from the PACE Team.

Early Supported Discharge: Costs
Services for reducing duration of hospital care for acute stroke patients.
Fearon P, Langhorne P. Early Supported Discharge Trialists.
Aim: To establish the effects and costs of ESD services compared with conventional services.

Ctrl+F for “cost” to locate relevant sections and refs.

“Findings: The hospital stay was 8 days shorter for patients assigned ESD services than for those assigned conventional care (p<0.0001).”

Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial.
Fjaertoft H, Indredavik B, Magnussen J and Johnsen R
Cerebrovascular diseases (Basel, Switzerland), 2005, 19(6), 376

Cost-effectiveness of stroke unit care followed by early supported discharge (Structured abstract)
Centre for Reviews and Dissemination
Original Author(s): Saka O, Serra V, Samyshkin Y, McGuire A and Wolfe C C
Stroke, 2009, 40(1), 24-29
### Early home-supported discharge of stroke patients: a health technology assessment (Structured abstract)
Centre for Reviews and Dissemination
Original Author(s): Larsen T, Olsen T S and Sorensen J
International Journal of Technology Assessment in Health Care, 2006, 22(3), 313-320
Assesses costs and LOS as well as health benefits

### A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost
Widen Holmqvist L, vonKoch L and dePedro-Cuesta J
Consensus Conference on Stroke Treatment and Service Delivery, 2000, 45

### Early Supported Discharge

**Early supported discharge after stroke in Bergen (ESD Stroke Bergen): Three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual.**
BMC neurology, 2014, 14(1)
Hofstad H, Gjelsvik BEB, Naess H, Eide GE and Skouen JS

**Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment.**
International journal of stroke: official journal of the International Stroke Society, 2013, 8(7), 582
Hofstad H, Naess H, Moe-Nilssen R and Skouen JS

**Patients' expectations of coming home with Very Early Supported Discharge and home rehabilitation after stroke - an interview study.**
BMC neurology, 2015, 15, 235
Nordin Å, Sunnerhagen KS and Axelsson ÅB

### Stroke rehab

**A systematic review of economic studies in stroke rehabilitation.**
Craig LE, Wu O, Bernhardt J and Langhorne P
Cerebrovascular diseases (Basel, Switzerland), 2012, 33, 20

**Enhancing community-based rehabilitation for stroke survivors: creating a discharge link.**

**Early supported discharge services for stroke patients: a meta-analysis of individual patients' data.**

**Implementing evidence-based stroke Early Supported Discharge services: a qualitative study of challenges, facilitators and impact**
Chouliara N, Fisher RJ, Kerr M, Walker MF.
Examples from other Trusts

Trust wins Stroke Service contract worth £1.5m
24 Jan 2017

The Trust has been awarded a new £1.5m contract for Stroke Early Supported Discharge and Community Rehabilitation Services by NHS Nottingham North and East, NHS Nottingham West and NHS Rushcliffe Clinical Commissioning Groups (CCGs).

The Healthy Futures Rehabilitation, Enablement and Reablement Review: What can we learn from elsewhere? A review of innovative practice across the UK
Martin Howard, Healthy Futures Team, February 2013

Ctrl+F rehab, esp section 6.

Other useful documents?

Comprehensive Review of Current Stroke Rehabilitation Services in South London South London Cardiac and Stroke Networks, 2009

See p.6-7-Impact of Community Rehabilitation Standards/Benefits offsetting cost

2 What is Early Supported Discharge? (ESD), Modernisation Initiative

Guidance for commissioners of acute care: inpatient and crisis home treatment
Joint Commissioning Panel for Mental Health, 2013


This discussion paper is for commissioners and providers developing new care models in response to NHS England’s Five Year Forward View. It offers early thinking on how community health services can add value to emerging new models, aiming to stimulate further debate about their role at the heart of integrated, community-based care.

Some refs.

(qquicker) Hospital Discharge http://fabnhsstuff.net/2015/10/25/hospital-discharge/

Neuro rehab services
(May be worth contacting directly)

Brain Injury Rehabilitation Centre