**Introduction**

In accordance with National policy stroke services are in the process of implementing Early Supported Discharge (ESD) services, designed to accelerate the discharge of stroke patients admitted to hospital by providing rehabilitation in their own home. The benefits of ESD reported in clinical trials including a reduction in long term dependency and length of hospital stay, have yet to be demonstrated in clinical practice.

**Aims**

The aim of this ongoing study is to quantitatively measure the effectiveness of an ESD service in practice in two areas of Nottinghamshire, Mansfield and Nottingham City. We are investigating what effect ESD has on dependency and length of hospital stay. The impact of ESD on the mood and well-being of patients and their carers is also being assessed.

- Over 18 years of age
- Confirmed diagnosis of stroke
- Medically stable
- Able to transfer independently/with assistance of one
- Identified rehabilitation goals
- Less than 14 days post onset of stroke
- Able to provide informed consent

**Figure 1: Eligibility criteria for ESD**

| BASELINE | Demographics; Barthel Index; GHQ; EuroQol; SF-36 |
| 6 WEEKS  | Barthel Index, GHQ, EuroQol, SF36, NEADL, Patient Satisfaction, Service Use Questionnaire |
| 6 MONTHS | Barthel Index, GHQ, EuroQol, SF36, NEADL, Patient Satisfaction, Service Use Questionnaire |
| 12 MONTHS| Barthel Index, GHQ, EuroQol, SF36, NEADL, Patient Satisfaction, Questionnaire |

**Methods**

Patients are recruited from the stroke unit at Kings Mill Hospital, Ashfield Stroke Rehabilitation Unit and Nottingham University Hospital Trust. The evaluation follows two naturally occurring groups of stroke patients: those fitting the ESD criteria and who receive ESD (figure 1) and those fitting the same criteria but who do not access the service. Patients are assessed in their own homes using a battery of standardised outcome measures (figure 2) that examine activities of daily living, mood and well being at baseline, 6 weeks, 6 months and 12 months. Routine data on the stroke care pathway are also collected as length of stay and service use.

We will use within group, repeated measure analysis to examine and compare patients functional ability between the four different data collection points (baseline, 6 weeks, 6 months and 12 months). Given that patients are not randomised, the groups may vary demographically and between groups analysis would not be appropriate. However we will be able to compare the demographics of patients in both groups and produce a descriptive report of the changes occurring in both groups over time.

**Results**

The evaluation is ongoing with follow up continuing until February 2013. As of November 2011, 460 patients had been identified as fitting the eligibility criteria for ESD. These patients were approached and given information about the study. Of those approached 226 agreed to take part. At the six week follow up, 87 patients had received ESD and 76 had not received the service (figure 3).

**Conclusion**

This study will allow us to observe two services implementing ESD services in Nottinghamshire. It will help us to understand if the benefits in reducing length of hospital stay and dependency, found in the Cochrane Systematic review of ESD services, are realised in practice. Our work will also help us understand the issues faced by services that endeavour to put the evidence for ESD into everyday practice. The evaluation is part of a programme of implementation research being carried out by the Collaboration for Leadership in Applied Health Research and Care - Nottinghamshire, Derbyshire and Lincolnshire (CLAHRC-NDL).

**References**

1. Langhorne P. For the ESD trialists. Services for reducing duration of hospital care for acute patients (review). Cochrane database of systematic reviews 2005, issue 2