

CONFERENCE ABSTRACT

Early Supported Discharge after stroke: a feasible and effective service model for a rural population

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Background: Early Supported Discharge (ESD) services after stroke aim to accelerate discharge home, by providing intensive rehabilitation input as an alternative to a prolonged in-patient stay (Fisher et al, 2011). These services have demonstrated their efficacy in reducing length of stay, reducing the likelihood of being admitted to institutional care, and in improving long term functional outcome (Fearon & Langhorne, 2012)

Although recommended in the majority of international clinical guidelines, the evidence to date primarily supports domiciliary-based rehabilitation in urban areas. The only RCT carried out among a rural population did not find a significant benefit for ESD when compared with in-patient rehabilitation. This gap in evidence may have hampered service provision within areas which have a predominantly rural, or mixed urban/rural population.

In response to the high numbers of rural dwellers within our catchment area in the west of Ireland, an alternative ESD service model was developed, which combines domiciliary and out-patient rehabilitation. This model is now provided to approximately one-third of the ESD cohort.

Methods: A total of 51 patients participated in ESD during 2014 and 2015. A retrospective audit was completed comparing urban and rural participants for the following variables: demographic profile, length of hospital stay, length of time on ESD, bed day savings and functional outcome.

Results: Thirty-six patients lived in an urban setting, while 15 lived in a rural area. There were 32 males and 19 females. Six patients in the urban group lived alone, while none in the rural group did. Thirty-seven patients were discharged directly from the acute hospital, while 14 were discharged from the rehabilitation unit.

The number of bed days saved was calculated based on the predicted length of stay were ESD not available. Using this method, the average number of bed days saved was 12.6 days per participant. The urban and rural groups did not differ in number of bed days saved or length of stay on the ESD programme.

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The Functional Independence Measure (FIM) was used to measure functional status and outcome, and was available for 37 patients. The average improvement in FIM score was 8.7 points between patients pre-ESD and post-ESD ($p < 0.001$) which was statistically significant. We found no statistically significant difference between the urban and rural groups at baseline, at discharge or for overall gains.

Conclusion: Rural dwellers in our ESD service had equivalent functional outcomes to those within the traditional ESD population demonstrating that this unique Irish model is both effective and feasible to deliver. Our findings suggest that further exploration of this service model should be considered in other centres with a similar catchment profile.

References:

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