

Student: Lucy Watt

Project: The impact of cognitive impairment on engagement and outcomes with a community rehabilitation and support service

Supervisor: Dr Claire Heppenstall

Sponsor: Psychiatric Service of the Elderly Research Fund

Introduction:

The CDHB Community Rehabilitation, Enablement and Support Team (CREST) service was introduced in 2011 with the goal of keeping frail older people as independent as possible in their own homes. Older people undergo multidisciplinary assessment and rehabilitation in their own homes using an individualised goal-directed ladder. The CREST service is currently undergoing evaluation, which this project forms a part of. Cognitive impairment, or problems with memory and thinking, is an important issue in the older population and has been shown to be a predictor of poor outcomes during rehabilitation. Patients who were included in the current CREST had baseline cognitive assessment and high levels of previously undiagnosed impairment were found to present. It was unknown how this could impact on the delivery of service through CREST.

Aim:

1. To evaluate the impact of cognitive impairment on engagement with the CREST service.
2. To evaluate the impact of cognitive impairment on the achievement of goals with the CREST service.

Method:

Patients involved in the CREST evaluation were recruited at discharge and underwent baseline cognitive and functional assessments. Cognition was evaluated using the Montreal Cognitive Assessment Tool (MoCA) which produced a score out of 30 to reflect the level of cognition of the patient. Using these results, a sample population of 60 patients was randomly selected, stratified into 3 groupings of cognition: Normal cognition (MoCA>22), mildly impaired cognition (MoCA 18-22), and moderately-severely impaired cognition (MoCA<18). Retrospective data from hospital and community health records was then gathered on these patients' demographics, health conditions, CREST goals and outcomes while on CREST.

Descriptive and comparative statistical analyses were carried out on this data. Alongside the quantitative portion of this research, qualitative interviews were carried out with patients who recently finished with CREST to assess engagement with the service. The patients' main carer or support person was also interviewed where possible.

We conducted 20 interviews in total; 4 with the patient and carer both present together, 8 with only a patient present and 8 with only the carer or support person. These were done in person where possible and over the phone in some cases. With interviewee consent these were recorded to be later analysed for themes in light of cognitive function of the patients.

Results:

The demographics of the 3 groups of patients were very similar, with a trend of increasing age in those who were more cognitively impaired. The functional status of patients with moderate-severe impairment as measured by the Nottingham Extended Activities of Daily Living scale was lower at both beginning and end of CREST, showing us that cognitive impairment and everyday function are associated in this population.

As cognitive impairment increased the number of goals set with patients on the CREST programme increased, however the average proportion of goals which a patient achieved on the programme remained similar across the 3 cognitive categories with an overall average of 79% of goals achieved. Patients with moderate-severe impairment had more goals that needed to be excluded from our research due to being too subjective for achievement to be measured, potentially changing the rate at which these patients appear to be achieving goals while on CREST.

From interviews with carers and patients a main theme which emerged was that the CREST service is valuable. Patient's described it as helpful and expressed that the service allowed them to stay in their own homes rather than be admitted to rest home care or readmitted to hospital. "He was a little concerned about going home... He considered a rest home...CREST made the difference. "Carers also expressed that they felt decreased stress in their support role due to the assistance received from CREST, as well as acknowledging that the service was able to provide expertise that they lacked. "We would have never got through without them...it often falls to me... I can only do so much. "The main complaint of the service was that it could be inconsistent, with many different people involved coming at different times each day. We did not find any major difference in engagement with CREST between patients of different cognitive levels. Those with normal cognition were more likely to express that some aspect of the service was unnecessary, however all interviewees claimed that they found the service beneficial in their recovery.

Conclusion:

From this research we have found that CREST is effectively helping older patients of different cognitive and functional levels, with a degree of individualised care evidenced by more goals being set with those patients with higher needs. We have also identified some areas in which the service could be improved, through knowing the desire of patients for a more consistent care and the potential for a redistribution of care in light of some patients with normal cognition potentially requiring less support.