St Vincent's Community Rehabilitation Services: Implementation of a Quality of Life Measure to prove effective rehabilitation

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Background

St Vincent's Health Independence Program - Community Rehabilitation Services (CRS) - provides co-ordinated and integrated multidisciplinary care to patients after a change in their function due to a recent medical/health event. Patients may present to the service with a variety of neurological, geriatric, musculoskeletal or orthopaedic health conditions and may consult a variety of allied health disciplines. Broadly, the aim is to support people to improve and maintain health, independence and well-being in the community.

Effective rehabilitation has been described as "optimising a patient's self-rated quality of life and degree of social integration through optimising independence in activities, minimising pain and distress, and optimising the ability to adapt and respond to changes in circumstances" (Wade, 2020).

Measurement of health related quality of life (QOL) is considered an indicator of the overall effect of healthcare (Snowdon, 2022). Rutherford et al (2021) found that completion of a patient-reported measure is increasing in healthcare internationally, and that QOL scales can improve health outcomes and service delivery.

Objective

To implement a single health-related QOL patient reported outcome measure that will help determine the effectiveness of Community Rehabilitation.

Methods

Inclusion criteria:
- All patients admitted to SVHM CRS between Dec 23-May 24

Exclusion criteria:
- Nil

Benchmarking across CRS was undertaken with other Melbourne health networks to identify whether a universal health-related QOL measure was already in use.

Barriers and enablers to implementing a health-related QOL measure were explored within the CRS team.

Compliance for completion of the health-related QOL measure was monitored over a single month prior to analysing results.

Results from the health-related QOL measure were collected over a 6-month period and presented to the Community Rehabilitation team.

Analysis

Data analysis of the Euro-Qol 5-Dimensions 5-Levels (EQ-5D-5L) involves comparison between admission and discharge scores. Literature provides scores for Minimal Clinically Important Difference (MCID) values for the EQ-5D-5L for a variety of health conditions. There are two distinct scores to consider: the "Index" score and the Visual Analogue Scale (VAS). Coretti et al (2014) found the MCID for the Index score was an average of 0.18 across multiple disease areas. Other studies (Short et al) found the MCID for the Index and VAS scores to be 0.04 and 7, respectively.

Results

Patient demographics over this time period:
- 70% were 65 years or older
- 42% male / 58% female
- 78% have English as their preferred language
- Age range of 15-99 years

Five of the nine Melbourne health services contacted were using the EQ-5D-5L
Four were not using any QOL measures

Barriers to implementation:
- Unclear procedures regarding data collection
- Unclear procedures regarding questionnaire implementation
- Time taken to complete questionnaire

Facilitators:
- Formalised procedures
- Easy, quickly administered tool
- Available in multiple languages
- Valid, reliable tool

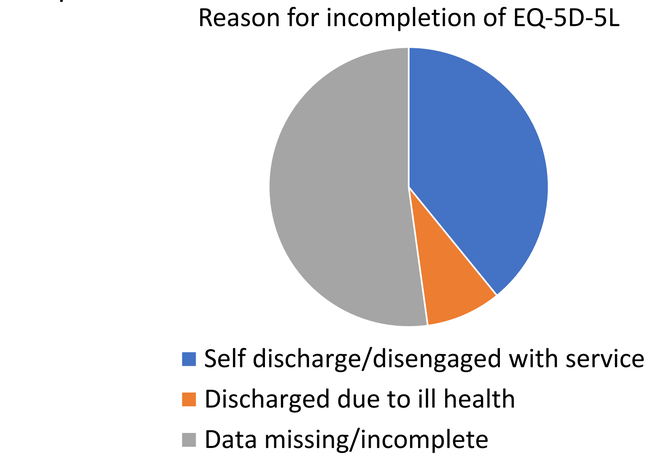
Results Continued…

Part 1 – Compliance
An audit was completed to monitor compliance with completion of the EQ-5D-5L with all patients on admission and discharge.

Table 1. Completion rates for EQ-5D-5L

	Admission	Discharge
Number of participants (n)	**80**	**58**
Completed EQ-5D-5L	**74 (92%)**	**35 (60%)**
Not completed EQ-5D-5L	**6 (8%)**	**23 (40%)**

Of the 40% (n= 23) uncompleted EQ-5D-5L on discharge, n=12 of these were due to disengagement from the service/self discharge, or ill health of the patient. These were considered to be unavoidable instances of non-completion.



When taking unavoidable instances of non-completion into consideration, the EQ-5D-5L was completed for 81% of discharges. (n=11/58 not completed)

Part 2 - data
As there is no literature on the same patient cohort and intervention method as ours, we have used the MCID of the most similar patient population for comparison.
Our data shows:

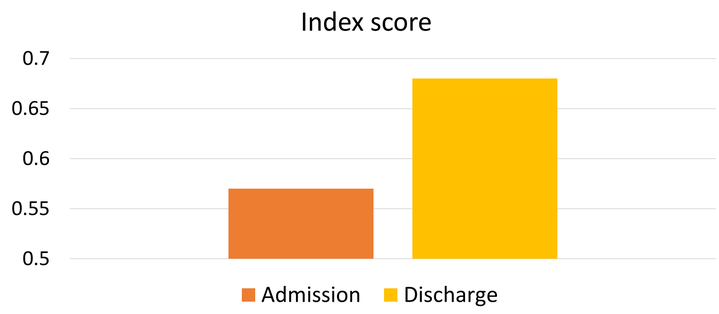


Figure 2. Index results of 6 months of SVHM CRS admission and discharge scores on EQ-5D-5L

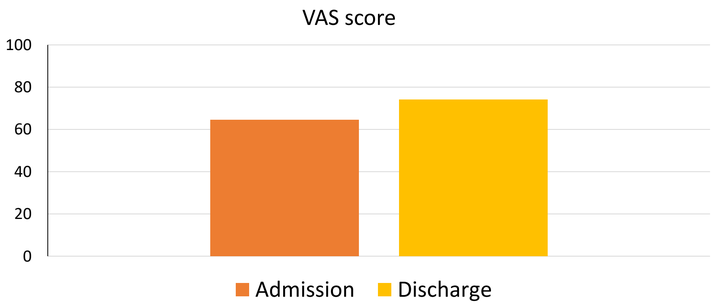


Figure 3. VAS results of 6 months of SVHM CRS admission and discharge scores on EQ-5D-5L

Analysis of six month's data (n=934) demonstrates an average improvement on the Index score of 0.11, and 9.7 for the VAS score. This exceeds the results collected from similar patient cohorts in the literature (Short et al, 2014), which found Index and VAS average MCID to be 0.04 and 7 respectively.

Discussion

Implementation of the QOL scale included:
- Procedure to administer the scale were developed and disseminated
- Resources to support administration of the scale were provided
- "Champions" were nominated at each site
- The team was presented with progress reports

Part 1 – Compliance
Rutherford et al (2021) found that "completion rates were high at baseline (69%) but sub-optimal at follow-up time points". Similarly, recent implementation of the EQ-5D-5L at a public hospital CRS in Melbourne achieved an approximate 70% completion rate using a variety of strategies to encourage compliance. This rate is slightly lower than SVHM CRS completion rates (81%).

Facilitators to achieve high compliance rates are thought to include "champions"; providing reminders at regularly scheduled case review meetings; recording of patient results in patient care plans; and reporting of results to the team.

The main avoidable reason for our completion rates being lower is due to missing or incomplete information.

Part 2- Results
Referencing the most similar patient cohorts to ours in the literature is a limitation of this study, as we are unable to compare our patient demographics directly to larger bodies of evidence with regard to MCID. However, when comparing our results to the most similar literature, we are able to see that SVHM CRS consistently performs as well as, or exceeds, results found in the literature with regard to MCID.

Clinicians routinely provide feedback to patients on discharge regarding their progress over the course of their admission to CRS, which can be motivating for both patients and clinicians.

Conclusion

A single outcome measure evaluating a patient's health-related QOL was successfully implemented into standard practice at SVHM CRS.
SVHM CRS provides an effective service which improves patient's quality of life on a measure which is recognised by the literature as being reliable and valid for various health conditions, with clear objectives for minimal clinically important difference being met and often exceeded.

Significance

Administration of a health-related QOL measure is feasible within the Community Rehabilitation setting.

Outcomes of this provide information which can be used to measure our effectiveness as a service, and can also be translated across other HIP teams.

References

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