

# Improving the quality of the rehabilitation pathway for high risk patients discharged from critical care to the ward.

## 1. Background.

As medical advances continue, more people are surviving a critical care admission. But for many patients, **discharge from critical care is the start of an uncertain journey to recovery characterised by weakness, energy loss, anxiety & depression**<sup>[1]</sup>. 1318 patients were admitted to Portsmouth critical care in 2018. Approximately 15% of these would be considered to be at high risk of developing physical and non-physical morbidity. 10 years ago NICE Guidelines were produced which outlined the evidence based recommendations for rehabilitation following critical illness. PHT is compliant with these guidelines in relation to the 'critical care admission' and the 'follow-up from hospital' periods. However, there is a drop in the quality of the pathway during the ward stay where we are unable to demonstrate this same level of compliance.

## 2. Primary Aim.

To improve the rehabilitation pathway for high risk patients discharged from critical care to the wards:

- achieve compliance with ward based NICE CG83 guidelines, and Quality standard 158 statements 2 & 3 <sup>[2]</sup>
- Improve patient experience of the rehabilitation pathway.

Following the initial phase 1 (see below) it became clear that there were no established ways to measure a range of outcomes relevant to quality (e.g. Length of stay, level of recovery by hospital discharge) therefore a secondary aim was required.

## Secondary Aim.

To develop an effective method of measuring outcomes related to rehabilitation after critical illness

## 3. Project Design.

This can be divided into 3 phases:

- 1) Understanding the problem & developing the case for change:** Stakeholder analysis & engagement/networking, Patient focus group, retrospective data analysis, literature reviews, liaising with hospitals who demonstrate good practice, attempts to collect baseline outcome data [16 weeks]
- 2) Development of methods for measuring rehabilitation outcomes:** PDSA cycles trialling validated tools then developing own tool: Self-Evaluation & Experience Questionnaires (SEEQ1&2). Collaboration with IT & audit teams to redesign IT systems in order to collect quantitative data in a sustainable way [12 weeks]
- 3) Implementation of change:** based on themes identified in the first stage; change ideas were considered & implemented based on ease of implementation vs potential impact. A variety of change specific outcomes were measured.

## 4. Themes Identified & Changes Implemented.

- Communication/Transfer of Information → Enhanced transfer summary: addition of rehabilitation needs, plans and goals to the paperwork sent to the ward when the patient is discharged from critical care.
- Staff knowledge, Communication: Information to patients → Pilot of Rehabilitation Co-ordinator role to visit patients & clinicians on the ward & provide support & information about rehabilitation following critical illness
- Staff availability/knowledge → Trial of Group Exercise classes to free up clinician time & provide patients with more In depth rehabilitation sessions.
- Equipment availability/ Staff knowledge → Set up of a Rehabilitation Station with easy access to exercise sheets/rehab equipment.
- + Outcome measure tool development & data collection process



Figure 1. Enhanced Transfer Summary communication email.



Figure 2. Rehabilitation Station.

## 5. Outcomes / Results.

- 100% compliance with NICE CG83 ward based guideline, Quality Standard 158, Statements 2&3.
- Enhanced Transfer Summary: Positive responses from staff re: quality of information received when the patient is transferred to their care.[Fig. 3]
- Positive feedback from staff re: rehabilitation co-ordinator input.
- X2 Group Exercise classes held with general ward patients due to insufficient suitable critical care ward patients - Positive patient feedback & potential of 6hours clinical time could be saved per class.
- Rehabilitation Station not utilised by ward staff – further PDSA cycles required to address this area.
- Outcome measure & data collection is now set up to ensure data collection is sustained beyond the fellowship year. This will help support future QI work in this area.

These result demonstrate that it is possible to achieve adherence to national guidelines which should ultimately improve the consistency & quality of the rehabilitation pathway. Innovative ideas such as a group exercise class could be used to optimise clinical time.

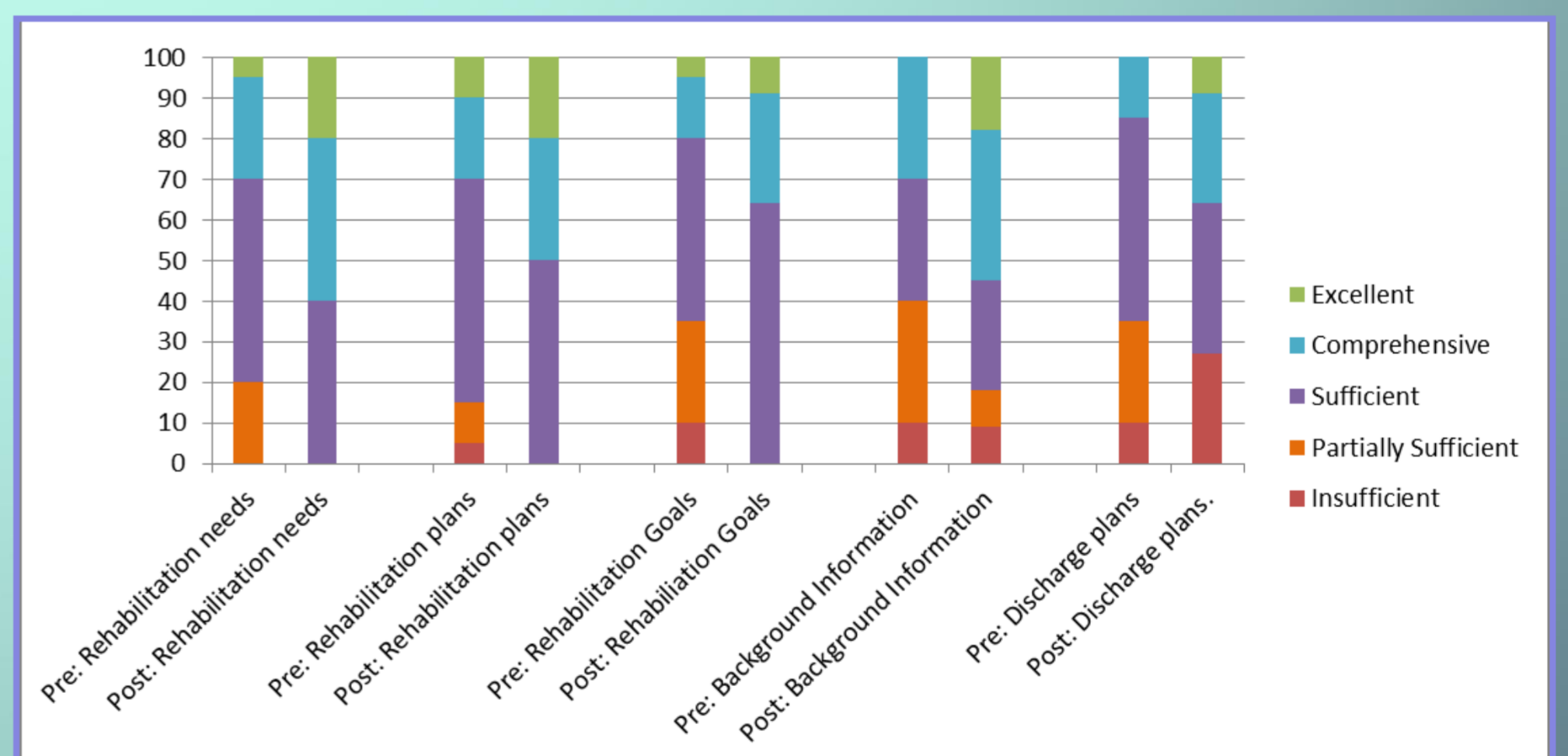


Figure 3. Questionnaire feedback from staff about the enhanced transfer summary

## 6. Key Learning Point.

The importance of measuring outcome, process & balancing measures in order to demonstrate that change has been an improvement. Personally, I learnt to be flexible in my time management & benefited most from using 'in the next 30days...' approach.

## Next Steps.

The change ideas which were not fully implemented & measured in a QI format as initially planned could be continued by band 6 rotational physiotherapists. To utilise skills & knowledge learnt through participation in the QI fellowship, I will act as a mentor for these sub-projects.