

# Using patient-reported outcome measures (PROMs) to measure health-related quality of life after major trauma, 2018–2021

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## Introduction

Patient-reported outcome measures (PROMs) were agreed by the Scottish Trauma Audit Group (STAG) and the Scottish Trauma Network (STN) as necessary to guide where improvement was required and demonstrate the 'Giving life back' aim of the STN.

## Method

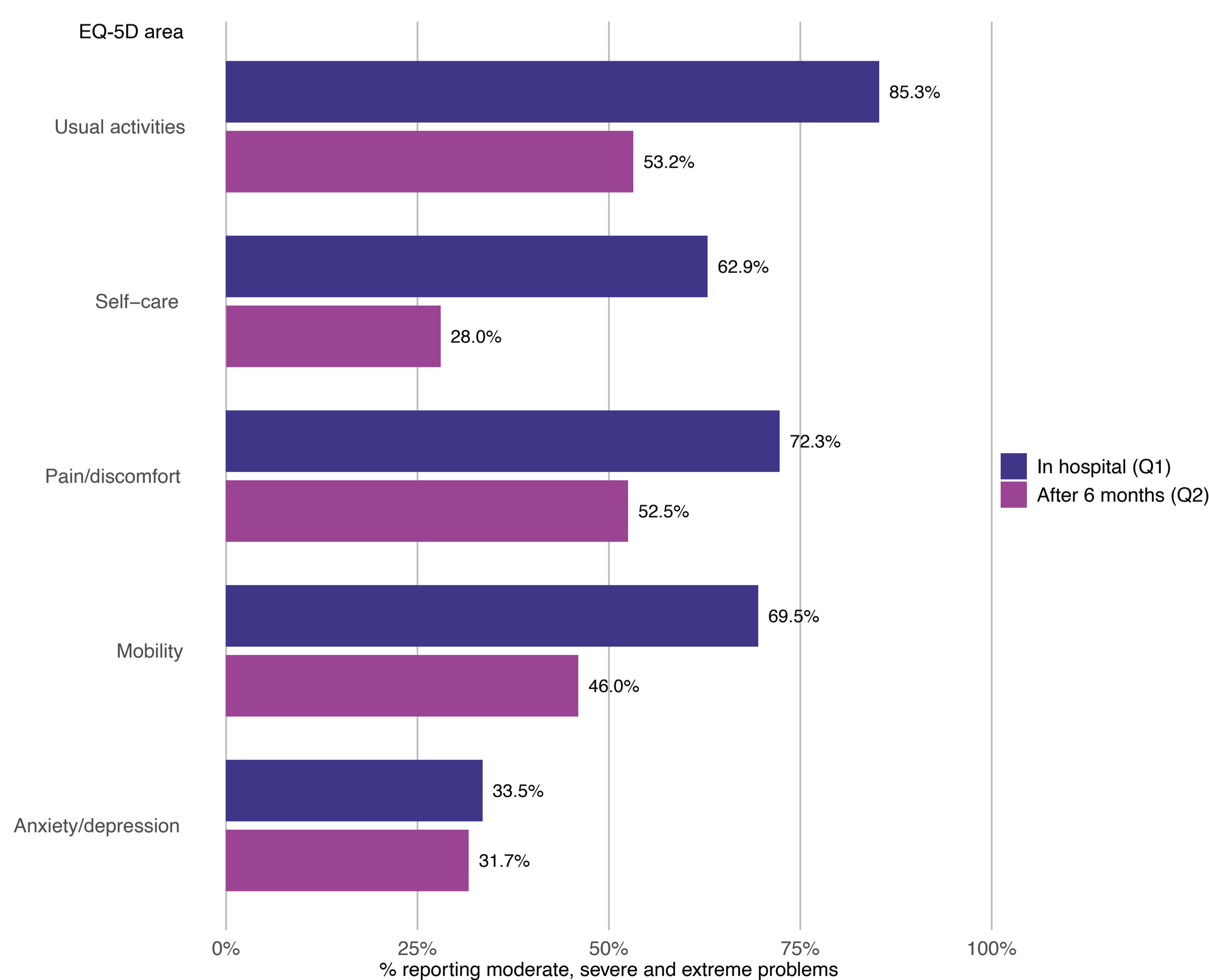
STAG uses EQ-5D which is a tool to measure health and quality of life. Developed by the EuroQol group, an international network of researchers, it is used worldwide. Being short and simple, it has become one of the world's most popular health outcome measures.<sup>1</sup>

Each of the three PROMs questionnaires (completed before hospital discharge and at 6 and 12-month follow-up) include five questions relating to the five dimensions of EQ-5D: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. For each question, responses are classed as one of: no problems; slight problems; moderate problems; severe problems; extreme problems; and no response.

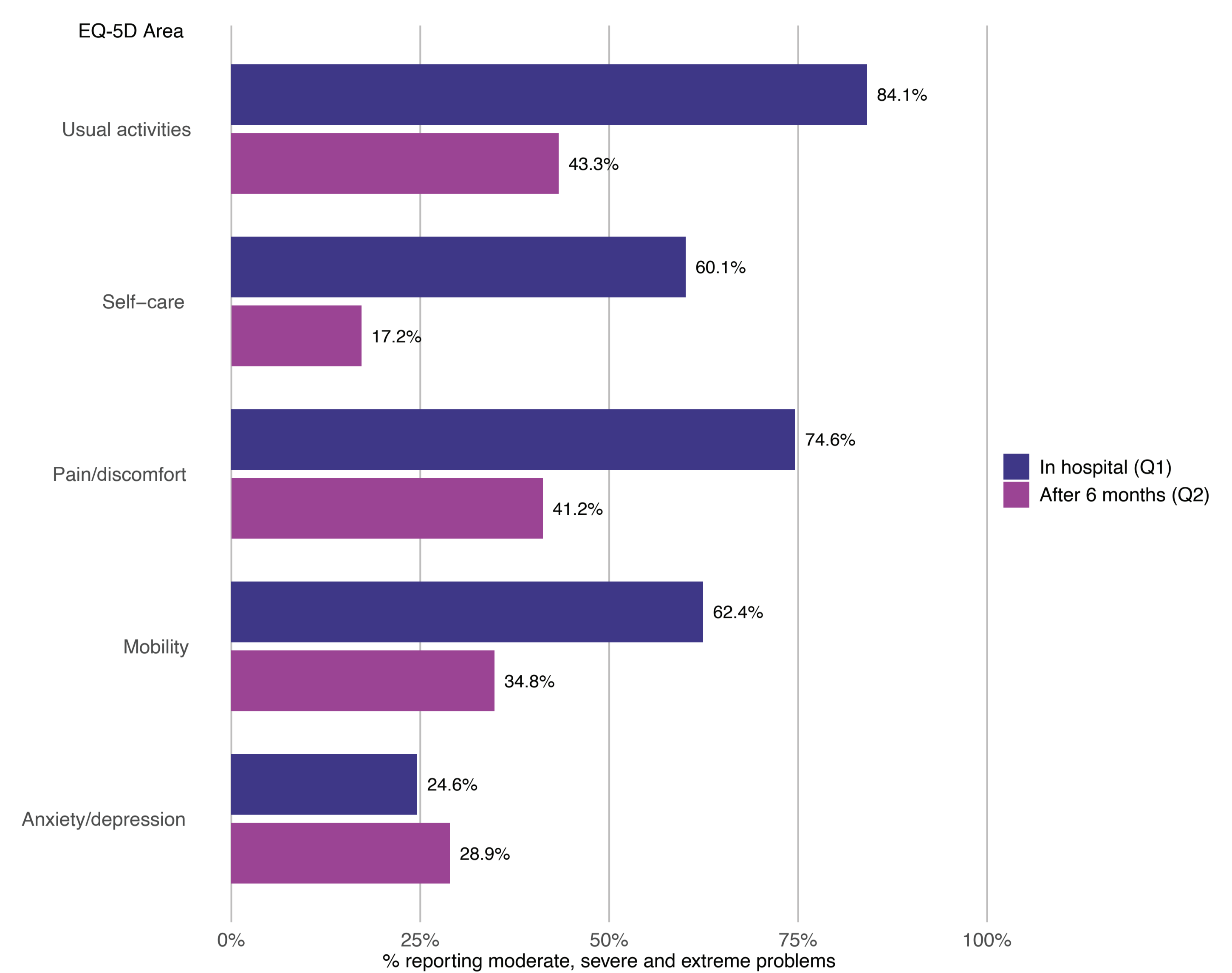
When analysing the EQ-5D questions, responses are grouped in a chart presenting the percentage of respondents reporting moderate, severe or extreme problems to each questionnaire. This shows the change in quality of life experienced from time in hospital to 6 and 12 months later.

## Results

**Figure 1: Percentage of moderate to extreme problems reported while the patient is in hospital and at 6 months post injury during 2018–19**



**Figure 2: Percentage of moderate to extreme problems reported while the patient is in hospital and at 6 months post injury during 2020–21**



There has been a reduction in moderate to extreme problems reported by patients in all categories when comparing 2018–19 responses to 2020–21 at 6 months post hospital stay. There has been a significant reduction of problems with pain, mobility and self-care. However, anxiety and/or depression remain a factor in 28.9% of patients at 6 months. This is the only category to show an increase from in-hospital outcomes.

## Summary

The collection and analysis of PROMs data using EQ-5D allows insight into aspects of treatment and care that only the patient can assess, such as quality of life. Information gathered in this way can drive service development<sup>2</sup> by highlighting positive patient outcomes as well as areas for improvement. PROMs data are being used to review service need and the STN has made investments in clinical psychology services across Scotland.

## References

- 1 EuroQol. EQ-5D. [www.euroqol.org/eq-5d-instruments](http://www.euroqol.org/eq-5d-instruments) (accessed 2 August 2022)
- 2 Black N. Patient reported outcome measures could help transform healthcare. *British Medical Journal* 2013;346:167

## Acknowledgements

Data contained in this poster have been extracted from the 'Audit of trauma management in Scotland – Reporting on 2021' report available at [www.publichealthscotland.scot/publications/audit-of-trauma-management-in-scotland/audit-of-trauma-management-in-scotland-reporting-on-2021/](http://www.publichealthscotland.scot/publications/audit-of-trauma-management-in-scotland/audit-of-trauma-management-in-scotland-reporting-on-2021/)

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