

METHODS OF DATA COLLECTION

Study advisory group

A multidisciplinary group of clinicians was convened to steer the study from design to completion, define the objectives of the study and advise on the key questions. The group comprised lay and parent/carer representatives along with charity partners ([ICUsteps](#)) and healthcare professionals in critical care nursing, intensive care medicine, dietetics, occupational therapy, speech and language therapy, physiotherapy, psychology, pharmacy, anaesthetics, older age medicine, and rehabilitation medicine.

Study aims and objectives

The objectives of the study were to explore the clinical and organisational structures in place for the provision of rehabilitation care for patients who had a stay on an intensive care unit (ICU) with a focus on:

- Governance arrangements, policies, and protocols: assessment/provision
- Organisational structures in place to deliver continuous rehabilitation care between the ICU, the ward, and the community
- Areas for improvement in the assessment and delivery of rehabilitation throughout the pathway

Hospital participation

Data were included from NHS hospitals in England, Wales, and Northern Ireland.

Study population and case ascertainment

Inclusion criteria

All patients aged 18 and over who were admitted as an emergency to an ICU for four or more days between 1st October 2022 and 31st December 2022 and who survived to hospital discharge.

Exclusion criteria

Neurology/trauma patients who received care as part of a defined care pathway.

Information governance

All data received and handled by NCEPOD complied with all relevant national requirements, including the General Data Protection Regulation 2016 (Z5442652), Section 251 of the NHS Act 2006 14 (PIAG 4-08(b)/2003, App No 007), and the Code of Practice on Confidential Information. Each patient was given a unique NCEPOD number.

Identification of a sample population

A pre-set spreadsheet was provided to every local reporter to identify all patients meeting the study criteria during the defined time period. From this initial cohort, up to eight patients were randomly selected from each hospital for inclusion in the study.

Data collection

Clinician questionnaire

A clinician questionnaire was sent to the named intensive care consultant for each patient in the sample, to be completed with input from the multidisciplinary team providing rehabilitation care. This collected data on the care provided throughout the pathway, from within the ICU to beyond hospital discharge.

Primary care questionnaire

A primary care questionnaire was disseminated to the named general practitioner for each patient in the sample. This short questionnaire collected data on the organisational structures in place in the GP practice, to promote quality care for patients post-discharge from an ICU.

Organisational questionnaires

An organisational questionnaire was sent to each hospital with an ICU to collect data around the organisational structures, staffing provision and policies to deliver rehabilitation to patients in an ICU and following step-down to the ward.

An organisational questionnaire was sent to each community hospital where patients could be admitted for rehabilitation care following an admission to an ICU, to collect information on the organisational structures in place to care for this group patients.

Case notes

Copies of the case notes were requested from primary care, secondary care and community providers for peer review. These encompassed case notes from the ICU admission and subsequent hospital stay. GP and community service notes for up to 12 months post-discharge were also requested where applicable.

Peer review of the case notes and questionnaire data

A multidisciplinary group of case reviewers comprising consultants and trainees from intensive care medicine, anaesthetics, clinical nurse specialists, physiotherapists, occupational therapists, dietitians, practitioner psychologists, rehabilitation specialists and speech and language therapists were recruited to peer review the case notes and associated clinician questionnaires.

Using a semi-structured electronic questionnaire, each set of case notes was reviewed by at least one reviewer within a multidisciplinary meeting. A discussion, chaired by an NCEPOD clinical co-ordinator took place at regular intervals, allowing each reviewer to summarise their cases and ask for opinions from other specialties or raise aspects of the case for further discussion.

Data collection – surveys

An online anonymous clinician survey collected information on the training, experience and opinions of clinicians from each stage of the rehabilitation pathway.

An online anonymous patient survey, aimed at patients who had been in an ICU to collect data on their individual experiences of rehabilitation care throughout the rehabilitation pathway.

Data analysis

Following cleaning of the quantitative data, descriptive data summaries were produced. Qualitative data collected from the case reviewers' opinions and free-text answers in the clinician questionnaires were coded, where applicable, according to content to allow quantitative analysis. As the methodology provides a snapshot of care over a set point in time, with data collected from several sources to build a national picture, denominators will change depending on the data source, but each source is referenced throughout the document. This deep dive uses a qualitative method of peer review, and anonymised case studies have been used throughout this report to illustrate themes. The sampling method of this enquiry, unlike an audit, means that data cannot be displayed at a hospital/trust/health board/regional level.

Data analysis rules

- Small numbers have been suppressed if they risk identifying an individual
- Any percentage under 1% has been presented in the report as <1%
- Percentages were not calculated if the denominator was less than 100 so as not to inflate the findings, unless to compare groups within the same analysis
- There is variation in the denominator for different data sources and for each individual question as it is based on the number of answers given.

The findings of the report were reviewed prior to publication by the SAG, case reviewers and the NCEPOD Steering Group, which included clinical co-ordinators, trustees, and lay representatives.

Data returns

Clinical data

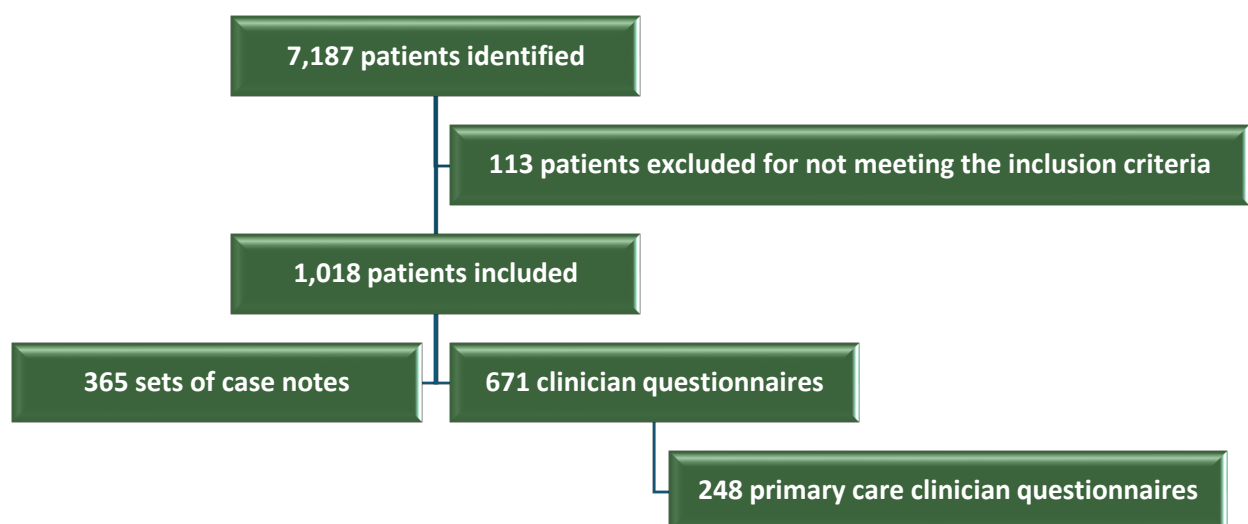


Figure 1.1 shows the data returned and the sampling for inclusion in the study

Organisational data

- Organisational questionnaire: 166 questionnaires returned.
- Community trust organisational questionnaire: 67 questionnaires returned.

Survey data

- Healthcare professional survey: 420 surveys returned.
- Patient survey: 102 surveys returned.