Oral Communication

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Service Evaluation of Spinal Injury Patients Managed in a Level 2 Neurorehab Setting

Topic: Biostatistics

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BACKGROUND

Spinal cord injury (SCI) causes significant impairments in mobility, bladder and bowel function, self-care, and psychological well-being, with disability levels influenced by injury severity. Immediate medical care and rehabilitation are essential for improving long-term outcomes. The National Institute for Health and Care Excellence provides SCI rehabilitation guidelines. While most SCI patients are admitted to specialist centers, some receive care in alternative facilities like Kings Lodge, Level 2 neurorehabilitation ward.

An audit analyzed SCI patients admitted to Kings Lodge from April 2018 to October 2023, aiming to identify patient types and evaluate alignment with NICE guidelines. A subsequent quality improvement project (QIP) from January to September 2024 focused on the changes made. This report presents QIP outcomes, using Functional Independence Measure (FIM) and Functional Assessment Measure (FAM) data to assess service performance and identify areas for improvement.

METHODS

The audit included 24 SCI patients admitted from January to August 2024. Data were collected on demographics, injury levels, length of stay, ASIA score completion, renal investigations, and rehabilitation interruptions. Functional outcomes were assessed using the Barthel Index, FIM, and FIM+FAM scores. The QIP introduced improvements in documentation and discharge processes to enhance adherence to NICE guidelines.

RESULTS

Of the 24 patients (12 male, 12 female), the average stay was 43 days. Cervical injuries had the longest stays (50 days), while sacral injuries had the shortest (12 days). Mixed-level injuries resulted in the longest stays (61 days). ASIA scores were completed for 100% of patients on admission and 50% on discharge, a 45% improvement from the previous audit. Renal investigations were conducted in 16 patients, while 8 did not undergo assessments.

Rehabilitation was interrupted for six patients due to infections or deterioration, resulting in an average of 11 days off therapy. Functional outcomes showed significant improvements: the Barthel Index improved from 7 to 13, FIM motor scores increased from 34 to 61, and FIM+FAM motor scores rose from 44 to 76.

Domain-specific improvements were notable in locomotion (1.62), mobility (1.17), and extended activities of daily living (1.63). Bladder and bowel management also showed significant gains (1.7 and 1.5, respectively).

CONCLUSION

The audit and QIP at Kings Lodge identified strengths and gaps in SCI care. With enhanced supervision and following of NICE guidance and regular contact with regional spinal specialist centers, it is possible to manage spinal injury patients in a Level 2 facility as well.

Statement of Disclosures

None

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