

Improving the clinical handover of patients discharged from the intensive care unit to inpatient wards at a district general hospital: a quality improvement project

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Introduction

The discharging of a patient from the intensive care unit (ICU) to an inpatient ward for ongoing care is a crucial juncture in a patient's hospital journey. This transfer of care requires clear communication and documentation regarding the patient's care to date, as well as ongoing care needs. A written discharge summary forms the backbone of this process, but verbal handover is also essential to ensure that the immediate care needs of the patient are conveyed, thus maintaining patient safety.¹ We aimed to assess and improve the quality of the ICU discharge and handover process at a district general hospital.

Materials and methods

A quality improvement plan was designed using a plan, do, study, act (PDSA) cycle technique. Electronic ICU discharge summaries were reviewed retrospectively over a 2-month period; data collected included patient age and gender, discharge destination and evidence of a documented verbal handover to the accepting ward team. The results were then analysed and presented to the ICU medical team as part of an educational session on the importance of clinical handover (first intervention). The PDSA cycle was then repeated, and a second round of data collection took place after a further 2-month period. A third PDSA cycle is currently in process.

Results and discussion

In the first PDSA cycle, 53 patients were included (mean age 63 years; 55% male). Forty-seven of these patients were discharged to hospital inpatient wards for further care, while two were discharged directly home and four died. Only 17 of the 47 (36%) patients discharged to inpatient wards had a documented verbal handover to the appropriate ward doctors. The second PDSA cycle included 30 patients (mean age 53 years; 64% male), 28 of whom were discharged to inpatient wards; 36% of these patients had a documented verbal handover.

The verbal clinical handover of patients discharged from ICU to their new ward teams has previously been shown to improve patient outcomes and reduce ICU re-admission.² This process is essential in maintaining patient safety, as well as improving

ICU capacity by reducing avoidable readmission.³ We found that verbal handovers were only occurring in 36% of ICU discharges. After presenting these findings to the responsible team and giving an educational session on the topic, the rate of verbal handover remained unchanged at 36%.

The lack of improvement in this metric, despite education, highlighted the need for systemic change. The clinical team understood the importance of handover but felt the communication systems in place were an obstacle, particularly out of hours when resources are stretched. As part of a third PDSA cycle, we have now integrated a new hospital-wide clinician-to-clinician digital messaging application into the ICU discharge process as a method of verbal handover.

Conclusion

Verbal handover is a critical aspect of the ICU discharge process. However, rates of successful handover are persistently low (36%) and limited by a variety of factors, one of which is routes of communication between teams. A new digital communication platform has now been introduced, which we hope will improve communication between teams and subsequently improve the handover process. ■

References

- 1 van Sluisveld N, Hesselink G, van der Hoeven JG, Westert G, Wollersheim H, Zegers M. Improving clinical handover between intensive care unit and general ward professionals at intensive care unit discharge. *Intensive Care Med* 2015;41:589–604.
- 2 Coon EA, Kramer NM, Fabris RR *et al*. Structured handoff checklists improve clinical measures in patients discharged from the neurointensive care unit. *Neurol Clin Pract* 2015;5:42–9.
- 3 Stelfox HT, Lane D, Boyd JM *et al*. A scoping review of patient discharge from intensive care: opportunities and tools to improve care. *Chest* 2015;147:317–27.

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