

# IMPROVING THE CLINICAL HANDOVER OF PATIENTS DISCHARGED FROM THE INTENSIVE CARE UNIT TO INPATIENT WARDS AT A DISTRICT GENERAL HOSPITAL: A QUALITY IMPROVEMENT PROJECT



## 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 and the ongoing care needs of the patient.

A written discharge summary forms the backbone of this process,<sup>1</sup> but verbal handover is also essential (Figure 1) to ensure the immediate care needs and clinical status of the patient are conveyed, thus maintaining patient safety. We aimed to assess and improve the quality of the ICU discharge and handover process at a district general hospital.

## MATERIALS & METHODS

A quality improvement plan was designed using a plan-do-study-act (PDSA) cycle technique (Figure 2). 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 (Figure 2), and a second round of data collection took place after a further 2-month period. A planning phase for cycle 3 has also been completed.



Figure 1: Flow diagram showing the ICU discharge process

## RESULTS & DISCUSSION

In the first PDSA cycle (Figure 2), 53 patients were included (mean age 63, 55% male). 47 of these patients were discharged to hospital inpatient wards for further care, whilst 2 were discharged directly home and 4 died. Only 17 of the 47 patients (36%) discharged to inpatient wards had a documented verbal handover to the appropriate ward doctors. The second PDSA cycle (Figure 2) included 30 patients (mean age 53, 64% male), 28 of which 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 been shown to improve patient outcomes and reduce ICU re-admission.<sup>2</sup> This process is essential in maintaining patient safety, as well as improving ICU capacity by reducing avoidable re-admission.<sup>3</sup> We found that verbal handovers were only occurring in 36% of ICU discharges from a busy DGH ICU. 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 intervention, highlighted the need for systemic change. The clinical team were understanding of 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 second and third PDSA cycle, a new hospital-wide clinician-to-clinician digital messaging application has been integrated into the ICU discharge process as a method of verbal handover. We aim to repeat data collection and hope to see improvement with the advent of this new communication tool.

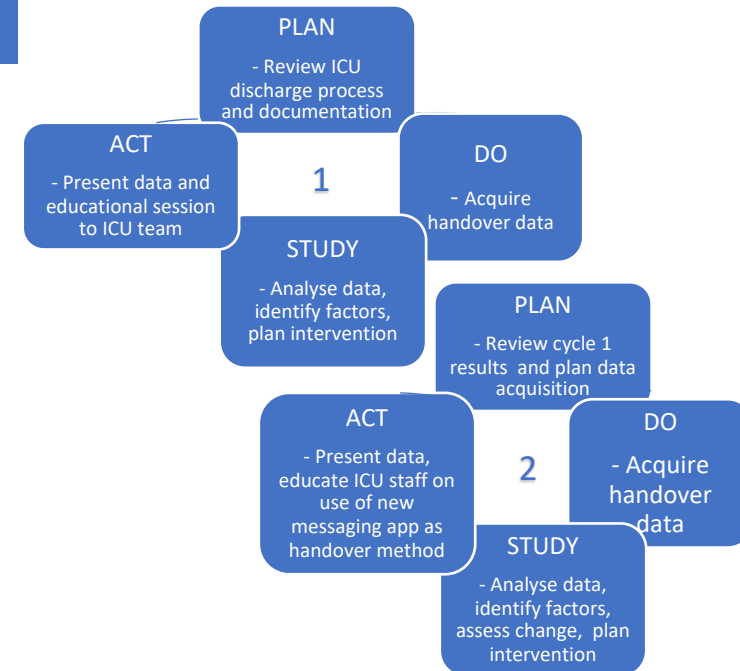


Figure 2: Flow diagrams showing PDSA Cycle plans for cycle 1 (above) and cycle 2 (below), which were both used during this QIP to date.

## CONCLUSION

Verbal handover is a critical aspect of the ICU discharge process. However, rates of successful documented verbal handover are limited by a variety of factors, one of which is ease of communication. We demonstrated that systemic changes to communication methods were needed to improve handover rates. A new digital messaging application has been integrated into the process and we aim to assess its impact in a third PDSA cycle soon.

## REFERENCES:

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