

# Gosford Hospital improves patient safety and quality of care with quiet environment

The Responder Nurse Call and Clinical Workflow solution has reduced alarm noise to effectively address risk associated with alarm fatigue.



The introduction of a quiet environment achieved reduction of 388 hours in alarm noise.

↓ 388

Hours reduction in alarm noise<sup>1</sup>

## Gosford Hospital

Gosford Hospital is a 484-bed state owned public hospital in Gosford, New South Wales, Australia and is part of the Central Coast Local Health District. Gosford Hospital implemented the Rauland Responder integrated communications and clinical workflow solution in its Theatres as part of an initiative to improve patient workflows and safety, and the overall quality of care.

## The Challenge

Gosford Hospital was seeking to improve patient safety and quality of care by minimising audible alarms within its Theatres. Healthcare staff are typically exposed to hundreds of alarms during each shift; researchers believe that the number of alarms may be in excess of 1000 alarms per shift. This may lead to staff becoming desensitised to the alarm, which in turn may lead to a delayed or inadequate response to the alarm. This is known as alarm fatigue. In 2015, the US Food and Drug Administration reported more than 500 alarm-related patient deaths across a period of five years<sup>1</sup>.

## The Solution

Gosford Hospital has implemented the Rauland Responder integrated communications and clinical workflow solution in each of its Theatres to more effectively manage audible alarms and to minimise alarm noise. Workflow Terminals installed in each Theatre allow staff to simply push a button to action an Operating Assistant request. Integrated communications systems utilising lighting and automated messaging and alerts streamline the patient workflow from the time of the initial request by Theatre staff, to completion of the request by the Operating Assistant.

## Clinical Outcomes

By implementing silent notifications without alarms, Gosford Theatre and Recovery staff achieved a reduction of 388 hours of alarm noise<sup>2</sup> between 1st January 2019 and 31st October 2019. This is a significant step towards reducing alarm fatigue amongst staff and improving patient safety outcomes.



Improved Staff Experience



Reduction in Alarm Fatigue



Operational Efficiency



The introduction of the quiet environment reduced alarm noise by 388 hours<sup>2</sup>. This is a significant step towards reducing alarm fatigue amongst staff and improving patient safety outcomes.



Workflow Terminals installed in each Theatre allow staff to simply push a button to action an Operating Assistant request.



Integrated communications systems streamline the patient workflow from the time of the initial request by Theatre staff, to completion of the request by the Operating Assistant.

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### References:

1. Ruskin, Keith J. and Hueske-Kraus, Dirk. Alarm fatigue: impacts on patient safety. *Current Opinion in Anaesthesiology*. 28(6):685-690, December 2015.
2. Gosford Theatre and Recovery staff activated 5,185 operating assistance calls between 1st January 2019 and 31st October 2019. The average time taken by the Operating Assistant to cancel the call was 4.49 minutes, which equates to 388 hours of eliminated alarm time.
3. Kerle T, Hoad T & Knight V. Use of workflow terminals in theatres demonstrating resource efficiencies and reducing alarms. Digital Health Institute Summit. Sydney Australia 5-6th November 2020. Available at [https://digitalhealth.org.au/institute-summit/wp-content/uploads/sites/11/2020/10/SUMMIT2020\\_PROGRAMS.pdf](https://digitalhealth.org.au/institute-summit/wp-content/uploads/sites/11/2020/10/SUMMIT2020_PROGRAMS.pdf) Last accessed 19/3/2021.