



Transforming Perioperative Efficiency with Responder Nurse Call & Workflow

Operational efficiency, staff and patient satisfaction and better care through automated workflows and smart communication



Whitepaper



Abstract

Hospitals are continuously seeking ways to enhance operational efficiency, improve staff and patient satisfaction and deliver greater care. This whitepaper presents the case study of a major teaching hospital in Sydney that modernised its perioperative services with the Responder nurse call and workflow system. By replacing outdated communication systems and methods with automated workflows and smart communication tools, the hospital significantly improved efficiency, reduced staff burden and enhanced patient outcomes.

Introduction

In perioperative settings, seamless communication and workflow efficiency are critical for ensuring optimal patient outcomes.

A leading tertiary referral centre faced challenges with an outdated nurse call and communication system that hindered response times and staff efficiency due to limited communication capabilities. According to the NSW Agency for Clinical Innovation⁽¹⁾, perioperative efficiency is focused on time. In operating theatres, the efficient flow of surgical cases requires maximising the use of productive time while minimising non-productive time.

Recognising the need for a transformative solution, the hospital partnered with Rauland to implement the Responder nurse call and workflow solution.

Case for Change

With 19 operating theatres, each supported by specialist Operating Theatre Assistants (OTAs), the hospital previously relied on outdated call bell lights.

When multiple OTA requests came in simultaneously, they were signalled only by call bell lights outside the theatre, providing no way to triage, prioritise, or assess urgency. Due to the lack of granularity, OTAs had to open closed theatre doors to determine needs, causing delay and disruption to workflows.

Key Challenges

Inefficient staff utilisation

OTAs spent excessive time moving between locations retrieving equipment, reducing overall care minutes and contributing to lost revenue.

Disruptions to sterile environments

Frequent door openings risked temperature and humidity fluctuations, impacting operating room stability. ACORN Guidelines recommend minimising staff movements with allocated personnel remaining in the operating room to maintain optimal conditions⁽²⁾.

Limited communication capabilities

Existing call systems failed to provide tiered or multi-level communication, creating inefficiencies in care coordination.

To address these challenges, our customer needed a solution that would:

- Improve perioperative workflow efficiency by reducing sneaker time for staff
- Enable detailed, multi-levelled communication between care teams



Solution



The Responder Nurse Call & Workflow System

Deployed in over 400+ facilities across Australia and New Zealand, the Responder system was implemented to address these operational inefficiencies.

By reducing the need for multiple phone calls and repeated paging, the system enables seamless, automated clinical workflows that enhance efficiency across perioperative care.

Further supporting this transformation, silent visual annunciator TVs are strategically located throughout the facility, displaying tiered, color-coded messages that are tailored to specific tasks. This approach not only improves workflow visibility and coordination but also helps reduce alarm noise. Additionally, any delayed or escalated calls, requests, tasks and actions that remain unanswered are promptly sent to the mobile device of a supervisor for timely resolution.



Key Features & Benefits

Automated digital workflows

Reduces reliance on phone calls and manual paging, streamlining perioperative communication, putting clinicians back at the bedside.

Silent visual annunciator screens

Display tiered task and role-specific messaging for improved workflow visibility while minimising alarm noise.

Escalated communication pathways

Unanswered calls are automatically escalated to supervisors via mobile devices, ensuring senior decisionmakers are kept informed of risky delays.

Optimised staff allocation

Reduction in 'sneaker time' through targeted task message delivery, ensuring staff are in the right place, at the right time with the right equipment.

Measurable Impact

Within six months of implementation, the hospital achieved significant improvements in response times and workflow efficiency:

) Faster emergency response time

100% of emergency calls responded within 25 seconds

Rapid staff assistance

100% of staff assist calls responded within 25 seconds, with a median response time of 6 seconds

Reduction in theatre downtime

19,000 operating assistant calls initiated, with 81% answered within 10 minutes

Minimised disruptions

19,000 less times operating doors were opened in a sterile environment

By replacing its outdated communication system with the advanced Responder nurse call and workflow solution, the hospital successfully enhanced staff efficiency and patient care through improved communication between clinicians.

Ongoing Optimisation

As the hospital continues its transition to the Responder system, ongoing refinements are being implemented to further enhance the user experience for both patients and care teams.

Interested in transforming your operating theatre efficiency? <u>Get in touch today</u>.

References:

NSW Agency for Clinical Innovation. Operating theatre efficiency: Clinical practice guide. Sydney: ACI; 2024.
ACORN. Standards for Perioperative Nursing in Australia. 16th ed. Australian College of Perioperative Nurses (ACORN); 2023.