

VBC in Practice:

## Shorter Stays, Stronger Outcomes: Delivering Surgical Value

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### OVERVIEW

In 2019, Alexandra Hospital introduced two initiatives to improve surgical care for patients undergoing laparoscopic cholecystectomy and groin hernia repair. The first, under the Research, Innovation and Enterprise (RIE) programme, aimed to reduce post-operative hospital stay length. The second initiative applied a Value-Driven Outcomes (VDO) framework to streamline care, improve outcomes and optimise resource use.

These efforts addressed specific challenges in surgical workflows, including inconsistent listing of surgeries, limited pre-operative communication with patients and variable discharge practices.

Value-based care shifts the focus from the quantity of services to the quality of outcomes. By prioritising patient-centred care, coordinated services and preventive measures, it enables better recovery, fewer complications and reduced readmissions — while supporting cost control by reducing unnecessary procedures and promoting care efficiency.

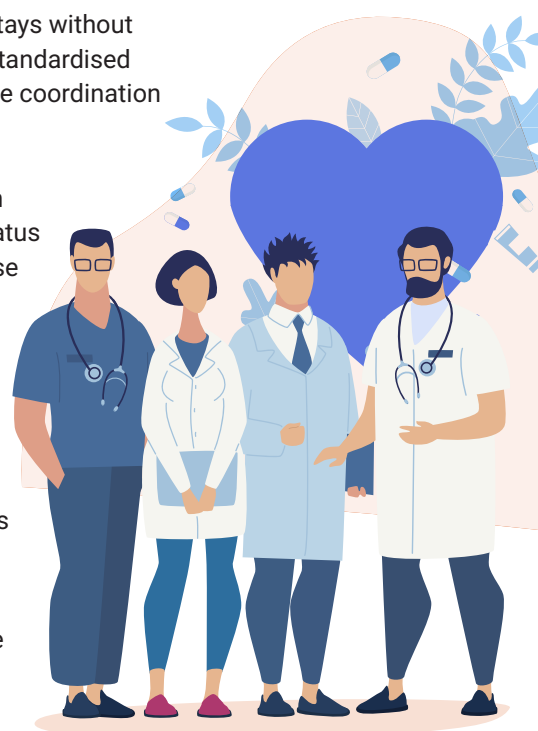
### OBJECTIVES & STRATEGY

Both initiatives shared a common objective: to shorten post-operative hospital stays without compromising care quality. To achieve this, Alexandra Hospital implemented a standardised framework across four domains: patient selection, pre-operative preparation, care coordination and discharge planning.

Key strategies included:

- Standardising criteria for selecting day surgery cases, based on factors such as ASA scores (from the American Society of Anesthesiologists Physical Status Classification System, which assesses surgical fitness), body mass index, use of anticoagulants or anti-platelet agents, and the complexity of the hernia
- Streamlining pre-operative investigations and anaesthesia reviews, with the introduction of telemedicine for selected patients
- Providing structured patient counselling, including surgery expectations, pain management plans and discharge planning
- Coordinating multidisciplinary input between surgeons, anaesthetists, nurses and hospital administrators to ensure protocol adherence

Outcome data was collected throughout implementation. Metrics such as length of hospital stay, readmission rates and post-operative complications were tracked against baseline figures, which allowed for regular refinement of care pathways and continuous performance review.



## OUTCOMES

Between 2019 and 2021, Alexandra Hospital implemented value-based protocols for laparoscopic groin hernia repair. Internal tracking showed significant improvements in care consistency, patient recovery and hospital bed utilisation. Key achievements include:

Same-day  
discharge rate

**Increased**  
compared to  
baseline

30-day  
readmission rate

**0%**  
(over 3 years)

30-day  
complication rate

**Minimal;**  
mostly minor  
(for example,  
urinary  
retention)

Inpatient  
mortality

**0%**

These results demonstrate the initiatives' effectiveness in enhancing surgical recovery, optimising bed utilisation and maintaining a high standard of care — even for more complex cases. Improved protocols and data-driven workflows enabled safe discharge for a broader patient population, including those with recurrent or inguinoscrotal hernias, or patients requiring anti-platelet medication.

## IMPLEMENTATION CHALLENGES

Challenges during implementation included securing buy-in from clinical teams, harmonising existing practices with new protocols and managing patient expectations around shorter hospital stays. Building patient trust and confidence in same-day discharge required time and effort, particularly through education and counselling.

These barriers were addressed through clear and consistent communication, strong multidisciplinary collaboration, and the use of structured care pathways. As the initiative gained traction, staff reported smoother workflows and more predictable recoveries.

Looking ahead, wider implementation across healthcare institutions may face challenges, such as adapting protocols to different surgical settings, standardising data systems and overcoming cultural resistance to change. Success will depend on enablers such as staff training, the use of predictive analytics and the introduction of outcome-based funding models to facilitate widespread adoption.

## ALIGNMENT WITH NATIONAL GOALS

This initiative complements the National Value Driven Care (VDC) programme, which aims to advance quality and cost-effective healthcare across Singapore. By leveraging data analytics to track patient outcomes and refine care protocols, it supports national efforts to deliver better value for patients while optimising system resources.

In accordance with broader national frameworks, Alexandra Hospital implemented standardised discharge protocols, emphasised patient-centred care models and prioritised outcome tracking. These measures reflect the programme's wider goal of achieving long-term sustainability through quality-focused reform.

## CONCLUSION

Achieving quality and sustainable healthcare in Singapore requires integrated care models, preventive strategies, data-driven decision-making and financial sustainability through value-based reimbursement. Alexandra Hospital's experience demonstrates that standardised, outcome-focused surgical protocols can improve patient experience, shorten hospital stays and drive greater efficiency across the healthcare system.

With continued refinement and support, this value-based approach holds strong potential for broader application across high-volume surgical procedures within the public healthcare system.

