

Project Title

“Pop and Squeeze” pathway for elective surgical drainage of abscesses

Project Lead and Members

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Project Members: Dr Teo Li-Ming, Dr Chau Keen Chong, Dr Ong Gek Kim Sharon, Dr Dennis Chia, Dr Kam Juinn Huar, A/Prof Benita Tan, Ms Ng Siok Peng, Ms Wong Wan Chi

Organisation(s) Involved

Sengkang General Hospital

Healthcare Family Group(s) Involved in this Project

Medical, Healthcare Administration, Nursing

Applicable Specialty or Discipline

Anaesthesiology, Surgery, Otolaryngology, Orthopaedics

Project Period

Start date: Nov 2019

Completed date: Sep 2021

Aims

- To create a fast track to surgery workflow for healthy patients with abscesses requiring drainage to avoid long wait times and obviate the need for inpatient beds.
- To identify these patients early and they can be discharged from the ED and return the next morning for surgery. In this way, the wait for a hospital bed is eliminated, as is the uncertain wait time for an operating slot.

Background

See poster appended/ below.

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Continued education for all staff is essential for new workflows, as well as to solicit feedback. Change is always challenging when staff feel the status quo is entrenched. However, if the journey is mapped out, with each problematic area identified, we can endeavour to innovate. In this instance, it was essential to obtain early buy in from the various stakeholders (Emergency department, Nursing, Operations) to ensure that new ideas are feasible, amenable and acceptable to all.

Conclusion

See poster appended/ below

Additional Information

This project is very scalable, and we have expanded the programme to orthopedic surgery within Sengkang General Hospital. The project also included other disciplines for instance otolaryngology for simple external ear infections and plastic surgery for facial abscesses.

We have also extended the programme to other SingHealth institutions and SGH has the adoption of this workflow in September 2021.

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Productivity, Time Saving, Cost Saving, Clinical Practice Improvement, Patient Satisfaction, Access to Care, Waiting Time, Bed Occupancy Rate

Keywords

Abscesses, Drainage, Surgery, Anaesthesiology, General Anesthesia, Emergency Department

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“POP AND SQUEEZE” PATHWAY FOR ELECTIVE SURGICAL DRAINAGE OF ABSCESES

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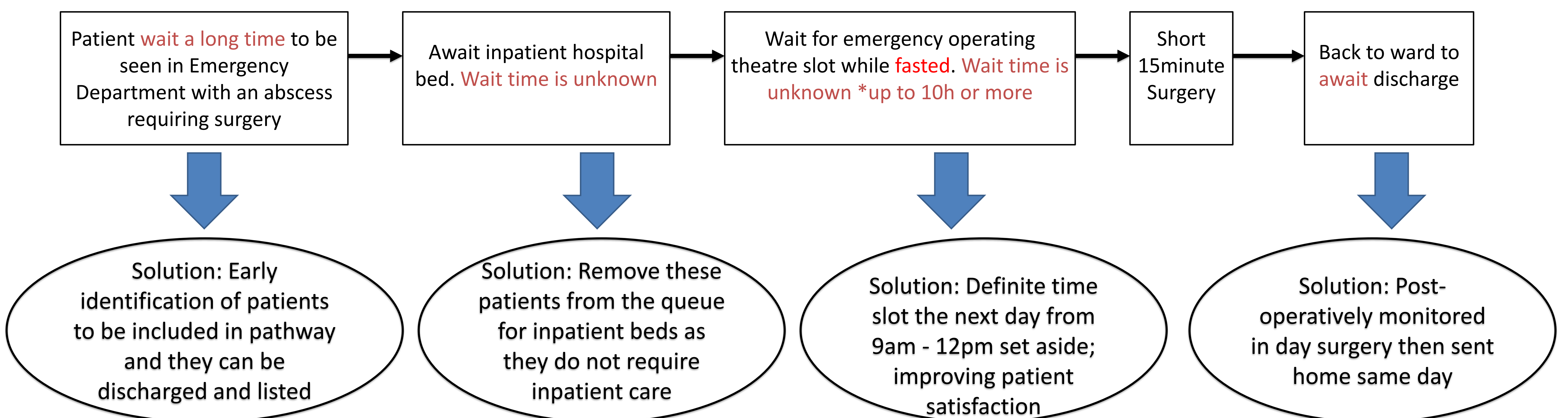
Background Hospital crowding is a perennial problem. Sengkang General Hospital serves close to a million residents with large numbers of patients passing through Emergency Department (ED). Our surgery department sees an average of 3-5 cases of emergency abscesses daily. The wait time for ED consult, inpatient bed and operating theatre is long, all this while the patients remain fasted, increasing patient dissatisfaction. In all, patients spend 2-3 days in the hospital for what is a simple 10-15 minute procedure and occupy beds which could be better used for those who require requisite inpatient care. This problem is transformed into a full-blown crisis during the ongoing COVID-19 pandemic, with its multiple variants and surges in admissions.

Aim We created a fast track to surgery workflow for healthy patients with abscesses requiring drainage to avoid long wait times and obviate the need for inpatient beds. We identify these patients early and they can be discharged from the ED and return the next morning for surgery. In this way, the wait for a hospital bed is eliminated, as is the uncertain wait time for an operating slot.

How Consultation with anesthesiology department to identify patients who could be safely operated on under general anesthesia without routine anesthesia review prior, and emergency department on identifying appropriate patients for this workflow as the first port of call for patients. Discussion with our nursing staff and financial counselling and operations department about the feasibility and logistics of the pathway.

We started with a pilot study in Nov 2019 and extended it to orthopedics from 1st October 2020 because of the positive results. Next we expanded the inclusion criteria to more patients from 1st Jan 2021. It is now still on-going.

Status Quo Patient Journey



INTERVENTION & RESULTS

Date	Intervention	Results
Nov 2019	Pilot Study in Department of General Surgery with 19 patients Emergency department doctors were educated about the workflow and would identify suitable patients, followed by a review by the on-call General Surgery team. Patients were attended to expeditiously by a specialist and discharged, then slotted into surgery the following day, between 9am to 12pm. Obtained immediate feedback from the team on the ground after each patient to fine-tune the pathway. Patients and staff were also polled to find out about feedback.	19 patients were recruited. Those who were under the pathway waited only an average of 1h 48min to surgery, while the others had to wait 6h 30min. Improved patient satisfaction. All patients under the workflow were discharged same day after surgery, resulting in a reduction in healthcare costs. 50% of subsidized patients paid \$290 for day surgery, a significant reduction from \$975 for who had to be admitted to the wards for surgical drainage.
October 2020	Expansion into Orthopedic Surgery Extension of inclusion criteria to include more patients with fairly well controlled medical conditions	Smooth-sailing with no adverse events
Sept 2021	Expansion into other surgical specialties Adoption by Singapore General Hospital after sharing of initiative	150 patients who underwent the pathway, with improved patient satisfaction. Significant healthcare cost reduction with annual cost savings coming to \$33 976 per year.

CONCLUSION & LESSONS LEARNT

Continued education for all staff is essential for new workflows, as well as to solicit feedback.

Change is always challenging when staff feel the status quo is entrenched. However, if the journey is mapped out, with each problematic area identified, we can endeavour to innovate. In this instance, it was essential to obtain early buy-in from the various stakeholders (Anesthesiology, Emergency department, Nursing, Operations) to ensure that new ideas are feasible, amenable and acceptable to all.