Singapore, Singapore General Hospital Contributor/s: Dr Ho Le Onn Best Practices Under GPSAP Strategy Objectives 2, 3 and 5:

Strategy 3.3	Infection prevention and control & antimicrobial resistance	
Strategy 2.2	Good governance for the health care system	
Strategy 5.1	Incorporate patient safety within health professional undergraduate and postgraduate education curricula and continuing professional development, with an emphasis on interprofessional learning	

In 2015, Singapore General Hospital (SGH) experienced an unusual epidemiological incident where 26 patients contracted the blood borne disease Hepatitis C. It was a great investigative challenge understanding how and why this occurred. The incident proved a call-to-arms for SGH to pick up as many learning points and translate them into strong patient safety strategies, which included consolidation of the hospital's infection prevention and epidemiological resources. This proved beneficial, and in 2022, resources within SGH were further consolidated through the establishment of the Office of Patient Safety & Quality (OPSQ), where Clinical Governance and Quality (CGQ), Clinical Risk Management (CRM) & Clinical Events Management (CEM) came under one setup to take on the following roles:

•	Oversee and drive independent investigation into clinical incidents including RCAs	•	Evaluate the effectiveness of recommendations, and ensure that they are appropriately followed up	
•	Conduct reviews to identify themes, successes and trends for improvement	•	Review hospital policies and procedures	
•	Oversee professional issues and responses to whistle blowing, patient feedback and reports	•	Ensure effective systems in audit and governance to monitor compliance	
•	Oversee the corporate drive to raise awareness, education and training in patient safety matters			

Strategy 3.3) The Infection Prevention & Control (IPC) programme is implemented by the Workgroup on Prevention and Control of Infection (WoPACI) (Figure 1) and enforced by the Infection Prevention and Epidemiology (IPE) department. Surveillance allows for identifying, investigating, monitoring and addressing outcomes and evaluating efficacy of control measures. For example, one risk identified was that of SGH's aging water supply. As one of the oldest public hospitals in Singapore, SGH realized that renovation of old facilities, installing new pipelines and new approaches in remodeling of aging infrastructure was necessary to ensure the quality of air and water. This was crucial in achieving good standards in patient care and safety. Dehumidifiers were placed in different departments of SGH as a preventative measure of enhancing quality of air within the hospital. Water quality in bathrooms and drinking fountains were frequently audited to ensure safety. Infection prevention litigation officers (IPLOs) were given important responsibilities to ensure systemic resistance against future potential communicable disease outbreaks, and were often recognized for their vigilance. Infection prevention orientation and training for nurses and clinical staff were strengthened and harmonized within SGH.

Strategy 2.2) The quick scale-up of patient safety measures and agendas was well handled as a result of good governance for the healthcare system at SGH. The leadership of SGH was active and played a key role in forming a committee that responds to every single patient safety crisis. For example, the consolidation of all patient safety matters discussed at SGH Patient Safety Council (PSC) to reduce fragmented approach to patient safety. Platforms like the PSC was created, where domains leaderships come together to discuss and share patient safety agenda on a regular basis (Figure 2).

Strategy 5.1) SGH focused on bringing expertise together to create common centers that deal with agile team formations for efficient response to emergent circumstances. Much focus was also devoted in the education of patient safety core competencies through training such as Root Cause Analysis and programme like TeamSPEAK[™], which promoted the culture of speaking up. To-date 94% of SGH staff were trained in speaking up for safety. On top of core training, departments were encouraged to develop structured training and communicate learnings through shared outreach platforms. Such cultural shift provided more opportunities for collaborative joint sessions and frequent hybrid workshops to stay informed on patient safety related

matters. SGH's increasing emphasis on people and patient safety culture-building from the ground up helps enhance their patient safety standards.

Figure 1: Workgroup on Prevention and Control of Infection (WoPACI) & Infection Prevention Goals

The SGH Workgroup on Prevention and Control of Infection (WoPACI) is co-chaired by Chief Quality Officer and Director of Infection Prevention & Epidemiology. They are supported by members and representatives of different departments and services (as listed) in Singapore General Hospital and National Heart Centre Singapore.

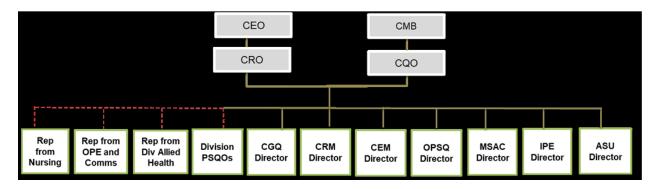
- Infectious Diseases
- Clinical Divisions
- Nursing
- Clinical Laboratory Services
- Environmental Services (Housekeeping)
- Occupational & Environmental Medicine
- Operations
- Admitting Services
- Infection Prevention and Epidemiology



Infection Prevention Goals for FY 2022:

- 1. Enhanced education program
- 2. Enhanced environment and equipment hygiene programme
- 3. Excellent appropriate placement of isolation cases

Figure 2: Composition of SGH Patient Safety Council (PSC)



Glossary:

- 1. CEO: Chief Executive Officer
- 2. CMB: Chief Medical Board
- 3. CRO: Chief Risk Officer
- 4. CQO: Chief Quality Officer
- 5. PSQOs: Patient Safety Quality Operations
- 6. CGQ: Clinical Governance & Quality (e.g. value-driven care, clinical care plan, policies and consent, quality assurance committee, clinical audit, insights and analytics)
- 7. CRM: Clinical Risk Management (e.g. audit and compliance, risk evaluation, awareness and education)
- 8. CEM: Clinical Events Management (e.g. clinical incident management, clinical events data management and clinical reviews)
- 9. OPSQ: Office of Patient Safety & Quality

- 10. MSAC: Medication Safety Advisory Committee
- 11. IPE: Infection Prevention and epidemiology
- 12. ASU: Antibiotic Stewardship Unit