

Establishment of an Infective Endocarditis Multidisciplinary Team at the Gold Coast University Hospital, Queensland, Australia

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Introduction: A multidisciplinary approach to the management of infective endocarditis (IE) has been shown to reduce mortality by up to 50%. The European Society of Cardiology (ESC) recommends the establishment of an IE team-based approach in major centres.

Background: The Gold Coast is one of the fastest growing regions in Australia, as the 6th largest city in the nation. The Gold Coast Hospital and Health Service (GCHHS), provides state-of-the-art tertiary-level health services to a population of approximately 990 000 serviced by the Gold Coast University and Robina Hospitals. The GCHHS is a major teaching and research hospital, affiliated with Bond and Griffith Universities. Gold Coast University Hospital is the 3rd largest health service provider in Queensland and has the busiest emergency department in Australia. The health service manages approximately 40 cases of IE annually (based on 2018-2021 volumes), with an annual average of 34% requiring surgery. In line with international best practice; along with the level of subspecialty expertise available at the GCHHS, it was agreed amongst key stakeholders that an IE multidisciplinary service be established.

Aims and Progress: The aim of the multidisciplinary team is to meet regularly for discussion of diagnostic and treatment options across key subspecialties; facilitating timely decision-making and optimal management for complex patients. The establishment of a multidisciplinary IE team within GCHHS is the 3rd of its type in Queensland (pop. 5.26million), and 2nd after The Prince Charles Hospital (TPCH) with onsite Cardiothoracic surgery. The TPCH service, known as infective endocarditis Queensland, offers a state-wide telehealth advisory service, of particular value to smaller sites, without onsite specialty services, seeking input on complex cases. There will be close collaboration between the two centres of IE excellence, with the intention to encourage other units to participate and have a common forum for discussion across the state. The core team at Gold Coast Health currently consists of representatives from Cardiology, Cardiac Imaging, Infectious Diseases, and Cardiothoracic Surgery, with Neurology input as required. The strategic aims of the IE team in addition to the guideline-based clinical advisory service include: i) establishment of a data registry for research, auditing and quality control, ii) interdisciplinary collaboration within the health service and key external stakeholders, and iii) education to improve early access to services, diagnosis, management and the prevention of IE. The timeline for implementation of the IE initiative prioritised the establishment of the clinical advisory team, which is now in service. The next step is the creation of a data registry.

Future: Evaluation of the service will be important to refine and guide its future direction. Comparing outcomes with data prior to the IE team implementation will provide valuable information on optimising service delivery. Ultimately the service must adapt to meet regional demands including institutional requirements and the epidemiology of IE within the health service.



Image 1: Gold Coast University Hospital, Queensland, Australia



Image 2: The Infective Endocarditis Multi Disciplinary team was started by a cardiologist with expertise in echocardiography and endocarditis. Meeting weekly for 30 minutes, the team includes representatives from cardiology, cardiothoracic surgery, infectious diseases, intensive care and neurology.