
Yong S Wee1,4,5, John F Sedgwick1,4, Joseph C Lee1,4,5, David B Godbolt2,5, Anne Cameron1,4,5 and Robert Horvath1,4,5 on behalf of the ieQ Collaborative.

1. Internal Medicine, The Prince Charles Hospital, Brisbane, Queensland, Australia; 2. Pathology Queensland, Brisbane, Australia; 3. Medical Imaging Department, The Prince Charles Hospital, Brisbane, Queensland, Australia; 4. Faculty of Medicine, University of Queensland, Australia; 5. Infective endocarditis Queensland, The Prince Charles Hospital, Queensland, Australia. Supported by the TPCH Foundation ‘The Common Good’

Introduction

Infective Endocarditis Queensland [ieQ] was established in 2017 and is based at The Prince Charles Hospital [TPCH], a multidisciplinary collaborative of health professionals and academics established to support research, clinical care and outcomes of people with infective endocarditis. Its structure has five core streams to leverage the stated aims: infective endocarditis research projects, a clinical advisory group, patient support, translation and education and capacity building (figure 1).

Methods

Establishment of the initiative was facilitated by a Queensland Health Metro North SEED Innovation grant (2017-18), and was further awarded a TPCH Foundation Grant “The Common Good” in May 2018. Funding specifically advanced the research program inclusive of a Bio.Bank for long-term storage of blood, tissue and microbes referenced to a Registry of patient demographics, outcomes, treatment and discipline-specific data of interest such as echocardiography, cardiac surgery and health service utilisation. This Registry and Bio.Bank have received institutional ethics approval (HREC/15/QPCH/60). Patients will be offered inclusion via informed consent, with consent also encompassing future genetic research protocols.

The Registry Database design is unique, and developed in partnership with Queensland Health Metro North Information Technology. This database includes clinical, pathology and imaging features, and is enabled to collate data from affiliated platforms [admission data] in addition to direct data entry. Future planning includes ‘linking’ the database with additional data cohorts via iEMR capabilities.

Results

The first 18 months have seen the consolidation of an administrative framework; development of a collaborative structure and key guidelines; purchase, installation and custodianship of Bio.Bank freezer within Pathology Queensland auspices; and the development and deployment of the Registry IT platform. The collaborative is positioned to commence Registry and Bio.Bank patient recruitment in late 2018.

In addition, ieQ has:

- Supported collaborative and interdisciplinary engagement with regular IE Working Group meetings, inclusive of all of Metro North HHS, public and private pathology services, and academic institutions.
- Formulated a multi-disciplinary Endocarditis Advisory Team “EAT”, initially TPCH-centric though with a long-term aim to provide support statewide.
- Developed a University of Queensland sponsored Website with planned patient and practitioner information and a portal for national and international links.
- Supported collaboration and translation of research outcomes:
  - International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections; June 2017 [Dublin] (6)
  - Cardiac Society of Australia and New Zealand; Aug 2017 [Perth]. (1)
  - The Prince Charles Symposium; Oct 2017. (2).
  - Infectious Diseases Society of America; Oct 2017 [San Diego]. (1)
  - Australasian Society for Infectious Diseases; May 2018 [Gold Coast] (3)
  - International Symposium on Staphylococci and Staphylococcal Infections; August 2018 [Denmark] (1)
- Has progressed the development of organism-specific IE Research Projects:
  - HREC/16/QPCH/351: The Queensland Staphylococcus lugdunensis Bacteremia Audit
  - HREC/17/QPCH/469: The Queensland Staphylococcus lugdunensis statewide molecular study.
  - HREC/16/QPCH/351: Invasive Candidiasis – Experience over the Last Decade
  - In development (3): Candida Endocarditis 2.0; The Australian Q Fever Endocarditis Profile; HACEK Endocarditis.

Conclusion: Infective endocarditis Queensland has established a framework and infrastructure to support collaborative Infective Endocarditis research, within an Australian context, with the long-term goal of improving patient care and outcomes. Enquiries are welcome.

Figure 1.

WEB SITE: https://medicine-program.uq.edu.au/school-clinical-research/infective-endocarditis-ieq

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Enquiries c/o ieQ Chairpersons:
Dr John Sedgwick MBBS FRACP FCSANZ FASE Cardiologist and Senior Staff Specialist TPCH e: John.Sedgwick@health.qld.gov.au
Dr Robert Horvath MBBS FRACP FRCPA Infectious Diseases Physician & Clinical Microbiologist; TPCH Manager e: robert.horvath@health.qld.gov.au