Research and Quality Symposium 2018

Compassion, accountability, Integrity and respect in healthcare

A Showcase of research and quality projects for Medicine, Nursing and Allied Health

Cairns Hospital Auditorium

Wednesday 22nd August
Developing a research question and designing a research study

**Date and Time:** Tuesday, 21 August  5 - 7 pm

**Location:** Education Room 1, 3rd Floor (west), A Block, Cairns Hospital

**RSVP:** By 5pm 17 August to  ResearchandQualityCHHHS@health.qld.gov.au

**Presenter:** Associate Professor, Kerrianne Watt

This workshop is aimed at novice researchers and is designed to demystify the research process. The workshop will cover the basics of the research cycle, and will include topics such as: designing research questions, study design, data collection/measurement, sources of error, and the very basics of statistics.

**Associate Professor Kerrianne Watt**
Kerrianne is Associate Professor, Research Methods within the College of Public Health, Medical and Veterinary Sciences at James Cook University, where she is the Team Leader of the Research Methods group in the Discipline of Public Health and Tropical Medicine, and the Associate Dean, Research Education, for the College.

Her background is in epidemiology, biostatistics, research methods, evidence-based practice, and experience in data collection in various environments. She has experience working in government and academic institutions, and has managed research projects that have impacted significantly on health across a variety of areas.

Kerrianne is passionate about translating research into practice, and about research being informed by practice. She has a keen focus on increasing research capacity of clinicians. She recently won a teaching and learning citation for “taking the agggh out of research: *Increasing capacity of health professionals to conduct, engage with and interpret high quality research to improve clinical practice, through accessible, authentic, supported learning*”. 
## Research and Quality Symposium
### Compassion, accountability, integrity and respect in healthcare

## PROGRAM

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<th>Paediatric Care</th>
<th>Chair: Desley Harvey</th>
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<td><strong>8.00</strong></td>
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<td><strong>08:20</strong></td>
<td>Welcome to Country</td>
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<td><strong>08:30</strong></td>
<td>Symposium Opening</td>
<td>Dr Nicki Murdock</td>
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<td><strong>08.40</strong></td>
<td><strong>Keynote Presentation</strong></td>
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<td><strong>09.20</strong></td>
<td>Implementation of the early diagnosis of cerebral palsy guidelines in the Australian context: findings from a Knowledge Translation Fellowship</td>
<td>Lynda McNamara</td>
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<td><strong>09.35</strong></td>
<td>The development and implementation of QEDIN- The Queensland Early Detection and Intervention Network – Cerebral Palsy</td>
<td>Joanne George</td>
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<td><strong>09.50</strong></td>
<td>Barriers and enablers to service delivery within a Child Development Service: perspectives of parents and carers of children with developmental delay</td>
<td>Gisele Rossini</td>
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<td><strong>10.05</strong></td>
<td>Delivering family-centred care for Indigenous children aged &lt; 5 years: A systematic scoping review</td>
<td>Janya McCalman</td>
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**Morning tea break: 10.20am-10.35am (15 mins)**

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<tr>
<th>Session 2 10.35am-12.45pm</th>
<th>Aboriginal and Torres Strait Islander health and wellbeing</th>
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<td><strong>10.35</strong></td>
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<td>Prevalence of anxiety in older Torres Strait adults: A pilot study</td>
<td>Sarah Russell</td>
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<td><strong>11.45</strong></td>
<td>Improving community access to influenza vaccination: outreach from Wuchopperen</td>
<td>Marion Norrie</td>
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<td><strong>12.00</strong></td>
<td>Challenges in reporting health promotion outcomes</td>
<td>Kathryn McFarlane</td>
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<td><strong>12.15</strong></td>
<td>A sugary drinks and smoking initiative in Cape York shows how community-led action can create supportive environments for health and wellbeing.</td>
<td>Melinda Hammond</td>
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<td><strong>12.30</strong></td>
<td>Childhood antibiotic exposure and subsequent metabolic risk in adolescent and young adult Aboriginal Australians</td>
<td>Sandra Campbell</td>
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**Catered Lunch Break: 12:45pm - 01:25pm (40 mins)**
### Session 3
**1.25pm – 03.10 pm**

**Enhancing service delivery**

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<tr>
<td>1.25</td>
<td>Dentistry partners with Social Work and Community to train dental undergraduates to recognise, respond and refer in cases of domestic violence</td>
<td>Ann Carrington</td>
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<td>1.40</td>
<td>What does an inclusive and respectful model of care look like to chosen families of older gays and lesbians</td>
<td>Bernadette Dimla</td>
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<td>1.55</td>
<td>Implementation and Evaluation of a Pharmacist-Led Post Discharge and High-Risk Medication Management Service in a Rural Setting</td>
<td>Sarah Tinney</td>
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<td>2.10</td>
<td>Student-assisted tele-audiology: Evaluation of a new service model in Cairns and Hinterland Hospital and Health Service</td>
<td>Katie McMillian</td>
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<td>2.25</td>
<td>Case managing to hear the stories, teach resilience and work towards long term change</td>
<td>Leonie Shawcross</td>
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<td>2.40</td>
<td>Minimizing Medication Misadventure in Rural Communities: Bridging the Gap between General Practitioners and Medication Reviews</td>
<td>Eunice Fu</td>
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<td>2.55</td>
<td>The OPEN ARCH Project: From research to practice and return – a practical example of accountability in health service research</td>
<td>Jennifer Mann</td>
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**Afternoon Tea Break: 03.10pm – 03.25 pm (15 mins)**

### Session 4
**03.25pm - 05.00pm**

**Improving clinical practice**

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<td>The high incidence of Diabetic Myonecrosis in Far North Queensland: The Differential Diagnosis We Might be Missing in Patients with Chronic Kidney Disease</td>
<td>Robert Johnston</td>
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<td>3.40</td>
<td>Calculating the healthcare cost savings resulting from adequate dietary intake of seafood in the prevention of dementia in the Torres Strait: A pilot economic evaluation</td>
<td>Lea Starck</td>
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<td>3.55</td>
<td>Accountability in the ICU: Predicting sepsis mortality on admission and its implications</td>
<td>Satyen Hargovan</td>
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<td>4.10</td>
<td>Does an Orthopaedic Workshop Improve the Confidence of Nurses Transitioning to the Specialty of Orthopaedics?</td>
<td>Susan Hull</td>
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<td>4.25</td>
<td>Food waste, not in good taste</td>
<td>Cara Johnstone</td>
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<td>4.40</td>
<td>Do health professionals understand enduring documents? The case for education</td>
<td>Denise Craig</td>
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<td>4.55</td>
<td><strong>Presentation of Awards</strong></td>
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QSUPER Best poster presentation
QSUPER Best podium presentation
QSUPER Best first-time symposium presenter
CQ University Early career researcher
FNQ Hospital Foundation People’s Choice award
**Poster Session: posters will be displayed in the auditorium foyer**

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<th></th>
<th>Title</th>
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<tr>
<td>1</td>
<td>Are we screening for Malnutrition effectively at Cairns Hospital? Local accuracy of the Malnutrition Screening Tool (MST)</td>
<td>Amanda Keating</td>
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<td>2</td>
<td>A clinical audit of combined first trimester screening and non-invasive prenatal testing offered to pregnant women in a regional Australian hospital</td>
<td>Orit Abdalla</td>
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<td>Physiotherapy prescribing trial</td>
<td>Mark Cruikshank</td>
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<td>A local Tackling Indigenous Smoking Social Marketing Campaign in Cape York</td>
<td>Rita Francis</td>
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<td>5</td>
<td>Preparing for Rural Practice: Exploring JCU (James Cook University) dental students’ perceived preparedness following dental simulated emergency medical training (DSEMT)</td>
<td>Hanin Musbah</td>
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<td>6</td>
<td>The OPEN ARCH Project: Protocol for a stepped wedge randomised controlled trial with repeated cross-sectional samples</td>
<td>Jennifer Mann</td>
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<td>7</td>
<td>Too Deadly - Cultural Capability in action in the Cairns and Hinterland Hospital and Health Service</td>
<td>Dallas McKeown</td>
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<td>8</td>
<td>What factors support implementation of a best practice model of gestational diabetes mellitus care in dietetics?</td>
<td>Shelley Wilkinson</td>
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<td>9</td>
<td>From Little Things Big Things Grow: How our research in the Torres Strait has expanded into international collaborations</td>
<td>Rachel Quigley</td>
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<td>10</td>
<td>The Lighthouse Hospital Project: Addressing the burden of cardiac disease of Aboriginal and Torres Strait Islander peoples in the Cairns region</td>
<td>Allana Jackson</td>
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<td>Structural heart interventions in Far North Queensland; Feasibility and safety in a regional centre</td>
<td>Alexis Dermedgoglou</td>
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<td>12</td>
<td>The development and implementation of a centralised online auditing system undertaken by the TCHHS Quality, Safety and Risk Unit that was piloted through the TCHHS SharePoint intranet</td>
<td>Cathleen Lockwood</td>
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<td>13</td>
<td>Community-based parent delivered early detection &amp; intervention program for infants at high risk of cerebral palsy in Indigenous Queensland (Learning through Everyday Activities with Parents: LEAP-CP)</td>
<td>Kath Benfer</td>
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*Morning tea, lunch and afternoon tea will be provided on the outdoor terrace adjacent to the auditorium foyer*
Session one: Paediatric Care

Keynote Speaker

Professor Roslyn Boyd
Scientific Director of the Queensland Cerebral Palsy and Rehabilitation Research Centre (QCPRRC), School of Medicine, University of Queensland

Implementing early detection and intervention for infants at risk for cerebral palsy: a state wide and national approach

The average age of cerebral palsy diagnosis in Australia has traditionally been by a median of 19 months of age, with the Australian CP Register indicating only 26% of the population get a diagnosis before 6-months of age. High quality evidence, in the form of a Clinical Practice Guideline (CPG) by Novak et al. 2017 indicates that cerebral palsy can and should be diagnosed early before 6-months of age. Advances in neuroscience have identified strategies for accelerating early detection of “high-risk infants” to enable timely access to neuroprotectants, neuroregenerative agents and diagnostic-specific early intervention when the greatest neuroplasticity gains are possible. This keynote will describe the implementation of the CPG in Australasia as part of a national Centre of Research Excellence the Australasian CP clinical trials network which has a vision to reduce the age of diagnosis to < 6 months and fast track at risk of CP infants to a network of early intervention clinical trials. The focus of this presentation will be to highlight the opportunities for training, targeted screening of at risk infants in the Queensland Early Detection and Early Intervention network including a new clinical trial of early intervention for indigenous infants and their families (the Community based LEAP-CP Program).

Implementation of the early diagnosis of cerebral palsy guidelines in the Australian context: findings from a Knowledge Translation Fellowship

Lynda McNamara, Advanced Physiotherapist, Cerebral Palsy Health Service, Senior Physiotherapist, Cairns Child Development Service

Background and rationale

Early and accurate detection of high risk of cerebral palsy (CP) is possible as early as 12 weeks of age, as published in a clinical practice guideline. The gap between research and practice and variable uptake of guidelines in clinical practice is complex and challenging. The average age of CP diagnosis in Australia is currently 19 months. Early diagnosis under 6 months of age enables early intervention which can improve physical and cognitive outcomes for infants.

Methods

The Murdoch Children’s Research Institute NHMRC funded Centre of Research Excellence in CP (CRE-CP) has supported a two-year Knowledge Translation Fellowship on the early detection and diagnosis of CP. Extensive barrier analysis throughout the fellowship has identified knowledge and behavior implementation gaps to address in the Australian context.
Results
A Knowledge Translation strategy for clinical practice guideline implementation has been developed, tailored for the Australian context. This includes a communication strategy and the development of online continuing medical education resources, supported by systematic review evidence, barrier analysis, expert advisory and end-user engagement. Clinical practice guideline implementation enabling resources have been developed, tailored for health professional stakeholders: patient mediated interventions - fact sheets, infographics and videos; workflow alterations - fact sheets and infographics; opinion leader podcasts, videos and lecture series to convey key messages and social media endorsement of evidence; case base learning patient video resources; and web page development.

Implications for practice
Effectiveness of this KT strategy has significance for health professional behaviour change to optimise adherence with the CPG and impact on patient outcomes in the Australian context. The fellowship has relevance for multiple research fields of Knowledge Translation, implementation science, continuing medical education and for replication in all areas of medicine.

Key message
The Knowledge Translation Fellowship aims to close an identified research-practice gap for the early diagnosis of cerebral palsy, the most common physical disability in childhood. A multifaceted Knowledge Translation strategy for clinical practice guideline implementation has been developed, including tailored online educational interventions informed by barrier analysis, systematic review evidence and end user engagement.

The development and implementation of QEDIN- The Queensland Early Detection and Intervention Network – Cerebral Palsy
Dr Joanne George, Senior Research Physiotherapist, Qld Early Detection and Intervention Network (QEDIN).

Background and rationale
Cerebral palsy is the most common physical disability in childhood. Early and accurate detection of high risk of cerebral is possible as early as 12 weeks of age, as published in a clinical practice guideline. The average age of cerebral palsy diagnosis in Australia is currently 19 months. Early diagnosis under 6 months of age enables early intervention which can improve physical and cognitive outcomes for infants.

The clinical practice guideline makes recommendations for the clinical use of standardised assessment tools with the best predictive validity for cerebral palsy. The most predictive tools are Neonatal Magnetic Resonance Imaging, Prechtl's Qualitative Assessment of General Movements (GMs), and the Hammersmith Infant Neurological Examination (HINE). Across Queensland, there is currently no formal state-wide screening for risk of cerebral palsy and use of these ‘gold standard’ assessments is variable. Clinical practice guideline implementation barriers are identifiable across Queensland to optimise adherence with the clinical practice guideline and patient outcomes.

Methods
QEDIN-CP is a new state-wide clinical network supporting interested parties and health professionals to implement the clinical practice guideline for the early diagnosis of cerebral palsy. It provides education and support for families of infants identified as high risk of cerebral palsy and education and support for health professionals involved in the identification and diagnosis of cerebral palsy.

Results
Health professionals will have access to inter-professional educational opportunities to update and maintain skills in standardised assessments and support with the scoring and interpretation of standardised tests (GMs and HINE). Membership will enable access to the Baby Moves smartphone application for GMs and secure REDCap database storage system which overcomes known data management barriers.
Implications for practice
QEDIN aims to improve the health and wellbeing of children with cerebral palsy and their families through early detection, providing the earliest possible diagnosis, enabling best practice early intervention and fast tracking into clinical trials.

Key message
QEDIN is a novel state-wide clinical network aiming to close an identified research-practice gap in the early diagnosis of cerebral palsy by addressing state-wide barriers to clinical practice guideline implementation.

Barriers and enablers to service delivery within a Child Development Service: perspectives of parents and carers of children with developmental delay
Gisele Rossini, Social Work Clinical Educator, Social Work and Aboriginal and Torres Strait Islander Liaison Service, Cairns and Hinterland Hospital and health Service

Background and rationale
A collaborative parent/health professional relationship is paramount to ensure effective outcomes for children with complex developmental delay. When parents and carers are actively involved in their child’s treatment they assume more responsibility which can be linked directly to a child’s developmental outcomes. There is limited information about the challenges faced by parents and carers of children with developmental delay in accessing services in rural areas. No previous research has explored parent and carer perspectives of health care delivery for their children with developmental delay in north Queensland.

The objective of this study is to investigate the enablers and barriers experienced by parents and carers of children with developmental delay, when accessing child development services in north Queensland.

Methods
Semi-structured interviews were conducted with eight parents and carers of children with a developmental delay. Data were analysed using a thematic phenomenological approach, which involved extracting formulations and describing participants’ statements that link directly with the research question.

Results
The themes generated incorporated four factors that were of particular importance to parents and carers: health professionals who work at the pace of parents and carers, being in limbo, feeling lost, and working it out for themselves when the support they sought was not forthcoming.

Implications for practice
Services need to focus more on how parents and carers experience their care-giving journey and their individual need for education and support. Developing strategies to address health service access and long waiting times should be a priority. More targeted interventions that address individual needs of the child may improve outcomes for the child and their family.

Key message
Parents and carers can feel frustrated, confused and lost when trying to access support for their child. Health services need to partner with parents and carers to provide effective care for their child.

Delivering family-centred care for Indigenous children aged <5 years: A systematic scoping review
Associate Professor Janya McCalman, Research Fellow, Centre for Indigenous Health Equity Research, Central Queensland University
Dr Sandra Campbell, Research Fellow, Centre for Indigenous Health Equity Research, Central Queensland University
Background and rationale
Primary health care services are uniquely placed to deliver interventions to improve growth, development and learning outcomes for Indigenous children in the critical first five years of life. Family-centred care entails planning healthcare around the all family members, not just the individual child. Interventions are flexible and can involve collaborative care pathways, health promotion, brief interventions, home visiting and referrals to community services for children and their families. This scoping review assessed the evidence on family-centred interventions for Indigenous early childhood wellbeing.

Methods
Peer-reviewed and grey literature sources were searched for studies (2000-2015) that: 1) focused on Indigenous children (<five years) from Canada, Australia, NZ and USA; 2) led by a primary healthcare service; 3) described or evaluated; and 4) scored greater than 50% against a validated scale for family-centredness.

Results
Eighteen studies (25 publications) were included; most were qualitative or exploratory in design. The overarching aim of interventions was to promote healthy families. Six key strategies were to: support family behaviours and self-care, increase maternal knowledge, strengthen links with the clinic, build the Indigenous workforce, promote cultural/community connectedness and advocate for social determinants of health. Four enablers were: competent and compassionate program deliverers, flexibility of access, continuity and integration of healthcare, and culturally supportive care. Health outcomes were reported for Indigenous children (nutritional status; emotional/behavioural; and prevention of injury and illness); parents/caregivers (depression and substance abuse; and parenting knowledge, confidence and skills); health services (satisfaction; access, utilisation and cost) and community/cultural revitalisation.

Implications for practice
The evidence is in the early stages of development, but suggests promise for generating diverse healthcare outcomes for Indigenous children and their parents/caregivers, as well as satisfaction with and utilisation of healthcare, and community/cultural revitalisation. Further research pertaining to the role of fathers in family-centred care, and the effects and costs of interventions is needed.

Key message
Family-centred care can improve the quality of care provided to children and families, and provide broader advocacy to impact the social determinants of health, thereby, improving the way in which primary health care services are provided.

Session two: Aboriginal and Torres Strait Islander health and wellbeing

Keynote Speaker

Joy Savage
Executive Director of Aboriginal and Torres Strait Islander Health, Cairns and Hinterland Hospital and Health Service

Research Leadership and Capacity within CHHHS: Aboriginal and Torres Strait Islander Considerations
Prevalence of anxiety in older Torres Strait adults: A pilot study

Dr Sarah Russell, Clinical Neuropsychologist, Cairns and Hinterland Hospital and Health Service
Rachel Quigley, Physiotherapist, Older Persons Liaison Service, Cairns and Hinterland Hospital and Health Service
Betty Sagigi, Aged Care Assessment Team Coordinator Torres and Cape Hospital and Health Service
Dr Edward Strivens, Regional Geriatrician, Clinical Director Older Persons, Sub acute and Rehabilitation Care

Background and rationale
The prevalence of anxiety disorders in community dwelling older adults varies between studies, at 1.2%-15%. Elevated rates of anxiety have been identified in people with mild cognitive impairment or dementia, although the nature of this relationship remains unclear. Older Aboriginal and Torres Strait Australians are at increased risk of cognitive impairment including a fivefold increased risk of dementia, however the prevalence of anxiety in this population has not been examined. The Geriatric Anxiety Inventory (GAI) and GAI short form (GAI-SF) were developed in Australia as measures of anxiety in older adults. The aim of this pilot study was to investigate the prevalence and nature of anxiety using the GAI or GAI-SF in older adults living in Torres Strait communities of Far North Queensland.

Methods
A total of 179 Torres Strait residents (mean age 64.7, SD11.3, range 41-93) were recruited as part of a large dementia prevalence study in the Torres Strait. Participants underwent a comprehensive Geriatric assessment and were classified as having dementia, MCI, or normal cognition. Background medical information was also collected. Symptoms of anxiety were measured using the GAI or GAI-SF, using interpreters where required.

Results
Mean scores on the GAI or GAI-SF were below the cut off scores used to screen for anxiety. Contrary to previous studies, GAI scores were lowest in the MCI group and highest in the dementia group, although scores did not differ significantly between groups (p>.05). Significant positive correlations were found between the scores on the GAI or GAI-SF and on screening tests for falls risk, pain, incontinence and depression, and in those with diabetes (p<.05), and age was negatively correlated with anxiety.

Implications for practice
This is the first study evaluating the nature of anxiety in this population. Results highlight the need to consider how language and culture determines how anxiety symptoms are experienced and reported and findings from mainstream studies may not translate cross culturally.

Key message
Further exploration of the nature and dimensions of anxiety in older Aboriginal and Torres Strait Australians is required to develop a culturally appropriate framework and measures of anxiety for this population.

Improving community access to influenza vaccination: outreach from Wuchopperen

Marion Norrie, Juliana Foxlee, Jess Proctor, Dr Jacki Mein
Manager Maternal and Child Health, Communications manager, Immunisation Nurse, and Director Medical Services, Wuchopperen Health Service

Background and rationale
Aboriginal and Torres Strait Islander people are over represented in rates influenza and more importantly in the complications and deaths from influenza. Wuchopperen’s influenza vaccination rates are reasonable for regular attenders of the service. However, there are still significant numbers of Aboriginal and Torres Strait Islander people not accessing influenza vaccination.
Methods
Internal networks were reviewed to determine where the best places to offer outreach vaccination and what internal workforce Wuchopperen could direct at the program. Regular 2-hour Thursday slots were identified for outreach. Self-identification was used to determine Indigenous status.

Results
Over a four-week period Wuchopperen staff vaccinated 103 people within 8 hours. This represents over 12 people an hour. The places visited included Kuiyyam Hostel, the Homeless Hub, Cape York Legal Service, the local shopping centre, and an Aboriginal residential hostel. Although most had received a flu shot ever before (95/103) the service was utilised well in all outreach locations. Several had not ever had a flu shot before and many were not Wuchopperen patients (21/103).

Implications for practice
Outreach is a quick way of delivering influenza vaccinations to a high-risk group. Although labour intensive (4-5 staff) it was relatively brief in duration and did not significantly impact on core service delivery. Future plans include changing the timing of visits to the shopping centre to take advantage of the lunch rush.

Key message
Influenza vaccination can be performed quickly and easily via outreach and increases accessibility to our core population outside Wuchopperen clinics.

Challenges in reporting health promotion outcomes
Dr Kath McFarlane, Advanced Public Health Officer, Cairns and Hinterland Hospital and Health Service

Background and rationale
Health promotion approaches are effective for improving long-term health outcomes. Measuring the effects of health promotion on health outcomes in the short term can be difficult to do. Aboriginal and Torres Strait Islander primary health care services in Australia are constrained by short-term accountability, but they must show evidence of health promotion’s effectiveness to receive more support and to sustain improvements in health outcomes.

Methods
A descriptive mixed-methods study assessed how health promotion practice was being captured and reported in a north Queensland Aboriginal Community Controlled Health Service. Data came from a review of organisational documents (n=36) and semi-structured interviews with staff (n=12). Documents were analysed for their individual and population focus on health promotion activities. Interview data was thematically analysed to identify how health promotion practice was captured and reported to decision-makers.

Results
This organisation focuses on population and individual health promotion approaches in their guiding documents. However, reporting requirements are focused only on individual measures. Staff recognised the constraints of accountability to justify resources, but without long-term population health measures it was difficult to communicate the breadth of health promotion activities and their contribution to health outcomes.

Implications for practice
For decision-makers (including community members, managers and external funding bodies) to be better informed of the how health promotion approaches are contributing to health outcomes, new measures must be adopted that also capture efforts to improve population, along with individual health outcomes.

Key message
Health promotion approaches are a core component of primary health care. Further work needs to be done to ensure that decision-makers are provided with the information they need, in the short-term, to understand how their health promotion approaches are contributing to improve long-term health outcomes.
A sugary drinks and smoking initiative in Cape York shows how community-led action can create supportive environments for health and wellbeing


Background and rationale
Sugar-sweetened beverage consumption and tobacco smoking are known to be more prevalent among Aboriginal and Torres Strait Islander people than other Australians and are associated with a range of chronic conditions. The environments in which people live, work and socialise influence health. Evidence for a supportive environments approach in mainstream contexts is well-documented, however literature about creating supportive environments in remote Aboriginal and Torres Strait Islander contexts is limited. The Healthy Communities Project aimed to work alongside Aboriginal Shire Councils to increase availability of water, decrease availability of sugar-sweetened beverages and increase smoke-free spaces.

Methods
The pilot project was implemented in three Cape York communities over a 12-month period (Apr 2017 to Mar 2018). Two key components of the project were social marketing to raise awareness and community-led actions to create supportive environments. Tools used to measure project outcomes included community readiness assessment, a store audit tool, geographical information systems (GIS) community mapping and store sales data.

Results
Community readiness to address sugar-sweetened beverage consumption and/or tobacco smoking increased in all pilot communities. Changes to supportive environments infrastructure were observed, e.g. installation of water bubblers and smoking signage. Local store sales data showed a significant increase in water sales and a decrease in both soft drink sales and overall sugar-sweetened beverage sales between baseline and intervention. These findings demonstrate that partnering with Aboriginal Shire Councils can be effective in increasing community readiness for action and facilitating positive outcomes for communities. This indicates a need for continued investment in supportive environments initiatives for Cape York.

Implications for practice
This pilot project shows that it is possible to do preventative health work in partnership with Aboriginal and Torres Strait Islander communities. It requires adequate time and resourcing, and must be underpinned by strong respect for and engagement with local leadership.

Key message
Taking a broader community environment approach to reduce risk factors for chronic disease prevention through locally driven decision making is a promising strategy worthy of further investigation in remote Aboriginal and Torres Strait Islander contexts.

Childhood antibiotic exposure and subsequent metabolic risk in adolescent and young adult Aboriginal Australians

Dr Sandra Campbell, Research Fellow at the Centre for Indigenous Health Equity Research at CQUniversity
Ella Tracey, Ruth Fagan, Kingsley Pearson, Robyn McDermott, Malcolm McDonald

Background and rationale
Changes to gut flora occur with diet, weight loss and illness. Antibiotics, in particular, have a powerful effect and, in babies, have been shown to affect both establishment and make-up of the gut microbiota. Antibiotic use in babies <6mths has been associated with obesity at 7 years of age. There is a likely domino-effect from antibiotic-driven changes. When coupled with a “cafeteria-style diet” there may be increased adipogenesis and risk of early-life obesity and metabolic abnormalities. We aimed to assess the metabolic health of a cohort of adolescent and young adult Aboriginal Australians and retrospectively examine their antibiotic burden to identify a possible link between the two.
Methods
Metabolic health data were extracted from electronic files of a Young Persons Healthcheck of participants aged 15-25yrs between 2013-2016. This was followed by a medical chart review focusing on participants' childhood infections and antibiotic burden from 0-15yrs. Data were de-identified, combined and analysed for a possible link between early childhood antibiotic burden and subsequent metabolic consequences.

Results
Healthcheck data from 433 people were extracted. The prevalence of tobacco smoking was >60%. More than a third were overweight or obese and <10% had a normal lipid profile. Hyperglycaemia was found in 2.4%; half had glucose levels \( \geq 11.1 \text{mmol} \). Males had more metabolic syndrome than females (20.6% versus 10%; p-value 0.03). Metabolic syndrome was twice as common in the 20-25yr group compared to the 15-19yr group (19.8% versus 9.7%; p-value 0.005). Nearly 75% were prescribed antibiotics during their first 2 years of life and approximately 30% were exposed 4 or more times. Childhood antibiotic burden decreased with age. No statistically significant link was found between early childhood antibiotic burden and subsequent metabolic health.

Implications for practice
Emerging evidence suggests, in addition to bacterial resistance associated with antibiotic use, there may also be concerns about long-term metabolic risk due to disruption of the gut microbiome.

Key message
This population of Aboriginal adolescents and young adults has high rates of antibiotic exposure in childhood and metabolic abnormalities. We did not find a clear correlation between the two within the cohort, potentially demonstrating a ceiling effect.

Session three: Enhancing service delivery
Dentistry partners with Social Work and Community to train dental undergraduates to recognise, respond and refer in cases of domestic violence: Students perceptions of the training.
Dr Ann Carrington, Lecturer, School of Social Work, James Cook University, Cairns
Dr Felicity Croker, Senior Lecturer, School of Dentistry, James Cook University, Cairns
Casey Burmeister, Winson Chan, William Shield, Sandi Baker

Background and rationale
The role of student dental practitioners in recognising and responding to domestic violence (DV) within a clinical setting has not been investigated previously in Australia. JCU students report feeling ill-prepared for responding appropriately to women who experience DV. An innovative partnership between Dentistry, Social Work and the Cairns Regional Domestic Violence Service collaboratively addressed this problem through an educational intervention and evaluation.

Methods
The aim was to explore dental students’ perceptions of the effectiveness and value of the ‘DV – Recognise, respond and refer’ (DV-RRR) educational intervention and to inform dental curriculum design. A participatory action research design was employed utilising pre- and post intervention surveys and focus groups to identify and document undergraduate dental students’ understanding, perceptions and preparedness for responding appropriately to DV. The intervention involved the ‘DV-RRR’ workshops delivered by expert facilitators to dental students in clinical years 3 – 5. Perception on the value of training in this area and knowledge of DV before and after the workshops was compared and contrasted. Focus groups allowed rich descriptive data to be collected to enhance the analysis and develop a broader picture of the intervention and help guide the future development of the program.

Results
Students’ knowledge regarding DV increased significantly. Focus group data confirmed the value of workshops and provided information that guided future develop of the program. Students reported feeling enabled to embed awareness of DV into their clinical practice.
Implications for Aboriginal and Torres Strait Islander health
Although the findings cannot be generalised, they suggest that this socially accountable, educational initiative should not only be embedded into the undergraduate curriculum but would also be valuable for other dental programs. In 2018 we are surveying graduates to assess implementation and impact and extending delivery of the DV-RRR to a range of practising dental professionals.

Key message
Further strengthening of dental students’ capacity to respond to DV should be developed across the clinical years through authentic learning experiences that provide opportunities to practice techniques and employ strategies introduced in the workshops.

What does an inclusive and respectful model of care look like to chosen families of older gays and lesbians?
Bernadette Dimla, Senior Social Worker, Adult Community Health, Cairns and Hinterland Hospital and Health Service

Background and rationale
Older gay and lesbian individuals are reluctant to access aged and health care services due to fear of discrimination and marginalisation. Whilst the Federal Government implemented LGBTI strategy to raise awareness and educate service providers, there is limited focus on how to engage with families of these individuals. The families’ experiences need to be heard and validated. The study aims to explore their experiences of stigma, discrimination and marginalisation as families of older gays and lesbians.

Methods
Qualitative interviews were conducted with three participants who identified themselves as chosen families: a same-sex partner, a long-time friend and a peer support person. The participants were from North Queensland regional and remote areas. The qualitative data were transcribed, analysed and grouped into recurring themes.

Results
The chosen families’ experiences with health/aged care providers varied from pleasant, uncomfortable to hurtful. From their perspective, the nuanced behaviours and discursive language of care providers can either acknowledge or undermine their roles as caregivers of older gays and lesbians. Chosen families also suffered discrimination directly and indirectly and were emotionally affected by these experiences.

Implications for practice
For an organisation to be truly inclusive and respectful, care service providers should recognise the important status and valuable contributions of chosen families as carers of older gays and lesbians. A review of organisational attitudes, procedures and documentation can enhance cultural safety and gain the trust and confidence of older gay and lesbian consumers and their chosen families.

Key message
Understanding and addressing areas of concerns will improve engagement with chosen families and optimise the health outcomes of older gay and lesbian individuals.

Implementation and Evaluation of a Pharmacist-Led Post Discharge and High-Risk Medication Management Service in a Rural Setting
Sarah Tinney, Pharmacist, Atherton Hospital

Background and rationale
Medication misadventure contributes to increased healthcare costs and poor quality of life. The aim of this study is to determine the impact on medication misadventure and acute service use of a pharmacist-led post discharge and high-risk medication management service delivered in an outpatient setting and via telehealth into patient’s homes.
Methods
This is a descriptive study utilising quantitative methodology to collect data prospectively as well as pre- and post-intervention. Primary outcomes are the measured change in medication adherence and quality of life (QOL) scores compared to baseline at three and six months post intervention. Secondary outcomes include the number of identified medication-related problems (MRPs), the number of resolved MRPs and the grading of clinical significance of the MRPs.

Results
To date 150 referrals have been received with 50 (33%) patients seen; of these 40 (80%) consented for research. Patients are currently at varying stages of follow-up with a complete data set for 14 patients. The preliminary medication adherence questionnaire data demonstrates an increase in self-reported medication adherence at three months continued through to six months. Preliminary quality of life (QOL) data indicates the mental component summary is considerably lower for patients at discharge compared to the high-risk medication patients seen in outpatients and to baseline. So far 223 MRPs have been identified by the pharmacist, an average of 4.46 MRPs per patient.

Implications for practice
Preliminary data demonstrates that pharmacist medication management consultations in both post-discharge and high-risk medication outpatient clinics identify many MRPs and also increase self-reported medication adherence which is sustained at six months. The preliminary QOL mental component summary data may contribute to evidence that patients in the immediate post discharge period are at most risk of medication misadventure. Further work on this study will complete evaluation data and measure the impact on acute service use.

Key message
Pharmacist medication management consultations are an essential mechanism to decrease medication misadventure and increase patient adherence. Patients will benefit most from pharmacist intervention in the immediate post discharge period.

Student-assisted tele-audiology: Evaluation of a new service model in Cairns and Hinterland Hospital and Health Service
Katie McMillan1, Natalie Winter1, Desley Harvey1, Liza-Jane McBride2, Jennifer Finch2, David da Silva3, Trevor Russell3, Deborah Theodoros3, Andrea Whitehead3, Amy Fagan3 and Louise Hickson3
1. Cairns and Hinterland Hospital and Health Service
2. Allied Health Professions’ Office of Queensland, Clinical Excellence Division, Department of Health
3. School of Health and Rehabilitation Sciences, University of Queensland

Background and rationale
An outsourced, student-assisted tele-audiology service has been implemented and evaluated in response to a significant unmet need for on-site audiology services to support Ear, Nose and Throat (ENT) specialists in the Cairns and Hinterland Hospital and Health Service. Prior to the introduction of tele-audiology there was no Queensland Health audiology service available in the health service and audiology was outsourced to a private provider. Patients were offered audiology appointments conducted via telehealth at the hospital, on the same day as their face-to-face ENT consultation. The aim of the study was to assess the acceptability of the new model to patients and other stakeholders (e.g. ENTs), and to investigate its effectiveness.

Methods
The study design was a prospective mixed method evaluation study with data collection being undertaken between May 2017 and March 2018. Data was mined from existing data sources, and additional data including clinical referral, clinical outcome, and clinical pathway was collected for the purposes of the study. Patients and CHHHS multidisciplinary team members completed surveys assessing satisfaction and experience.
Results
The outcomes of the service will be presented, including patient waiting times, attendance rates, success or otherwise of remote testing, length of audiology appointments, and outcomes of the consecutive audiology/ENT appointments. The satisfaction of patients, staff, specialists and students with the new service will also be described. Preliminary findings indicate that the majority of patients are able to access a co-located tele-audiology assessment on the same day as their ENT appointment (95%). The assessment was successfully completed in 95% of cases with results immediately available to the specialists. To date, 99% of participants have indicated positive satisfaction with the service. Staff, student, and specialist satisfaction data collection is ongoing and will be presented.

Implications for practice
The findings of this project will have direct application to service planning not only for Cairns Hospital, but also to similar services operating across the Cairns and Hinterland Hospital and Health Service, in Queensland and other states, and internationally.

Key message
Using telehealth, partnerships and students is an effective way to address gaps in services.

Case managing to hear the stories, teach resilience and work towards long term change
Leonie Shawcross, Manager, Family Wellbeing Service, Wuchopperen Health Service

Background and rationale
The over-representation of Aboriginal and Torres Strait Islander children and young people in care is well documented. Case managers focused on housing, substance abuse, and domestic violence have attempted many forms of intervention with limited success. Wuchopperen’s Family Wellbeing Service takes a new approach to helping families with diverse needs, at the earliest possible opportunity to prevent concerns from escalating, as well as providing intensive support for families already in contact with the child protection system.

Methods
In developing the service, a needs analysis was undertaken by reviewing key information from the Department of Child Safety, Education Queensland, Wuchopperen staff, the local Aboriginal and Torres Strait Islander community and other key stakeholders. Evidence based models that recognise community and family strengths and place families at the centre of decision making were reviewed.

Results
It was identified that existing models of support required improvement. Wuchopperen, in partnership with stakeholders, developed a service that is evidence based and draws on the cultural knowledge and experience of Aboriginal and Torres Strait Islander practitioners from the local community in order to deliver an empowering model of family led decision making.

Implications for practice
By hearing the stories, assessing the Determinants of Health that underpin the issues, and by looking into the theory of change, we identified that families need to be supported informed and in control, to develop resilience.

Key message
The identification of the skills and knowledge required to effectively support and strengthen Aboriginal and Torres Strait Islander families is key to effective practice.

Minimizing Medication Misadventure in Rural Communities: Bridging the Gap between General Practitioners and Medication Reviews
Eunice Fu, Pharmacist, Allied Health Rural Generalist Trainee, Atherton Hospital

Background and rationale
Medication misadventure is a significant public health burden and patients are at particular risk when transitioning between care settings. Home Medication Reviews (HMRs) have been shown to reduce
medication misadventure for patients transitioning between hospital and the community. Collaboration between General Practitioners (GPs) and pharmacists is imperative in order to utilise the HMR service more effectively.

The aim is to identify the enablers and barriers of HMRs in a cluster of rural communities, with the intention of improving HMR utilisation for patients when discharging from hospital.

**Methods**
This phenomenological qualitative study explored GP and Community Pharmacist (CP) awareness, experiences and perceptions of enablers and barriers to using HMRs. Semi-structured interviews were conducted with ten CPs and nine GPs identified through clinical and community networks. The rationale for inclusion of two participant groups was to derive variant perspectives of HMR utilisation. Transcribing and thematic data analysis were undertaken to recognize issues and possible improvement strategies.

**Results**
Four themes were identified: Benefits and value of HMRs, barriers limiting uptake, strategies for improving HMR process and a hospital-initiated HMR referral pathway model. Perspectives were categorised into GP-related, Pharmacist-related and patient-related. All participants acknowledged the main beneficial roles of HMRs were medication rationalisation and patient education. The current HMR system itself was noted as a major barrier. Improvement strategies identified included having a simplified, streamlined referral process and better promotion of accredited pharmacists in the community.

**Implications for practice**
This research provides an opportunity for GPs and pharmacists to collaboratively review present practices. The hospital-initiated pathway model developed from this study would assist GPs with recognizing high-risk patients and completing HMR referrals in a timely manner.

**Key message**
The identified enablers and barriers with the current HMR system give better understanding into the issues that need addressing to improve HMR uptake.

**The OPEN ARCH Project: From research to practice and return – a practical example of accountability in health service research**
**Jennifer Mann, Project Manager, OPEN ARCH, Cairns and Hinterland Hospital and Health Service**

**Background and rationale**
The Australian health system does not adequately meet the requirements of the older person with complex needs. A previous Cairns study – ASPIRE, uncovered disconnections in care transitions and fragmentation of care. To support older persons in the community, ASPIRE recommended a preventative, integrated solution anchored to GP care.

By delivering on those recommendations, OPEN-ARCH is evidence of a commitment to knowledge translation for the creation of high quality care. OPEN-ARCH incorporates best practice in integrated care. It is an innovative, preventative answer to an emerging health system challenge.

**Methods**
This presentation will outline the process of health service transformation, from research recommendations to an innovative model of care. OPEN-ARCH is unique in that it extends a successful inpatient model via an enhanced outreach approach that delivers specialised care close to home. The barriers and enablers to implementing a Queensland Health service within the primary practice setting will be described as will the development of the OPEN-ARCH model of care and related quality framework.

**Results**
Phase one of OPEN-ARCH, a service delivery pilot, has successfully concluded with the establishment of a consistent and comprehensive model of community based care for the older person. The GP is a key
ally in this patient centred model with OPEN-ARCH collaborating with 14 GP partners across the Cairns region.

**Implications for practice**
The ASPIRE/OPEN-ARCH transition is a practical example of the capacity of a multi-disciplinary team to apply research recommendations to the development of an evidence based, community driven health service. OPEN-ARCH disrupts a siloed health system through a model of integrated care that may be effectively applied to other populations.

**Key message**
By developing and evaluating a service driven by the recommendations of the ASPIRE study, OPEN-ARCH is evidence of health service accountability; delivering on a commitment to high quality care.

### Session four: Improving clinical practice

**The High incidence of Diabetic Myonecrosis in Far North Queensland, The Differential Diagnosis We Might be Missing in Patients with Chronic Kidney Disease**

**Dr Robert Johnston, Dr Jarrod Koppen, Resident Medical Officers, Cairns and Hinterland Hospital and Health Service**

**Background and rationale**
DMN is a painful disabling complication of diabetes with limited Australian data. FNQ has a disproportionate representation of diabetes and Chronic Kidney Disease (CKD). Delayed or misdiagnosis can prolong hospital stay and morbidity. We sought to quantify the epidemiology of the disease in FNQ.

**Methods**
The search strategy incorporated all discharge diagnoses of patients with diabetes and a musculoskeletal diagnosis-related-group (DRG), between 2008 and 2017. Files were individually assessed to confirm a diagnosis of DMN. The final cohort was limited to inpatients. The demographics, presenting features, investigations and radiology were collated. New episodes were defined as occurring greater than 6 months after a previous episode with intercurrent clinical quiescence. The final group included 11 patients with 21 distinct episodes.

**Results**
DMN was more common in females (63%) with mean age 44 years (26-62). There was a high prevalence of CKD (9/11, including 5/11 receiving dialysis). Diabetes tended to be type 2 (91%), poorly controlled (mean HbA1C 10.2%) with significant microvascular complications (72% neuropathy, 63% retinopathy). There were 20/21 episodes involving the lower limbs and 14/21 specifically involving the thigh. Profound localised tenderness (100%) and swelling (85%) were common with a raised CRP (88mg/L ±70). 63% had subsequent episodes of DMN. Mean time to MRI was 7 days (0 – 20) when performed 12/21. 30% failed to be diagnosed at first presentation.

**Implications for practice**
DMI is a poorly recognised and often misdiagnosed condition and has significant disparities in its clinical management. It affects poorly controlled T2DM with microvascular complications and CKD. There is predominant lower limb involvement. Diagnosis is often delayed and representation is high. While we have identified 11 patients with a confirmed diagnosis we are currently investigating a similar number of patients where the diagnosis may have been missed completely.

**Calculating the healthcare cost savings resulting from adequate dietary intake of seafood in the prevention of dementia in the Torres Strait: A pilot economic evaluation**

**Dr Lea Starck, Medical Registrar, Cairns Hospital**
Background and rationale
Following on from other economic appraisals of healthcare cost savings resulting from lifestyle interventions in the prevention of chronic disease, the aim of this study is to evaluate the direct health care expenditure savings that result from increased consumption of seafood as an intervention to prevent dementia in the Torres Strait in the seafood consuming population.

The benefits of a diet rich in seafood has proven benefit in the prevention of cardiovascular and cognitive diseases. The positive effects on cognition from a diet rich in seafood is thought to be due to the omega-3 fatty acid content. Primarily docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA). DHA is a chief component of cerebral membrane phospholipids, and is found extensively in metabolically active areas of the brain such as the cerebral cortex.

Methods
Available meta-analyses were used to quantify the efficacy of seafood consumption as an intervention for dementia and then applied to a Population Attributable Fraction model to cost the resultant savings in direct health expenditure for this disease.

Results
Total direct health care cost savings for dementia have been calculated as AUD $58 million if applied to the whole Australian population and AUD $55,511 as applied to the Torres Strait region

Implications for practice
In calculating the direct healthcare cost savings of increased seafood consumption as a lifestyle intervention, this study has demonstrated significant health care cost savings when applied to the Australian population as a whole. The estimated health care cost savings when applied to the Torres Strait region are modest by comparison due to the population size, but can be appreciated in the context of a possible future interventional trial.

Key message
A diet rich in seafood has proven benefit in reducing the risk of dementia, particularly of an Alzheimer’s type. Given the significant direct health care costs associated with dementia, prevention would be expected to have resultant health care cost savings. This evaluation attempts to quantify this using established methodology.

Accountability in the ICU: Predicting sepsis mortality on admission and its implications
Dr Satyen Hargovan, 6th year Medical student, James Cook University

Background and rationale
Sepsis is a common ICU presentation and cause of death. Early identification of septic adults at high risk of dying remains a challenge. We evaluated the accuracy of mortality prediction models for septic adults on ICU admission.

Methods
A systematic literature review of the SCOPUS, PubMed and Cochrane databases was performed using individualised search strategies. Eligibility criteria included:
1. Mortality prediction models used within 24 hours of ICU admission.
2. Diagnosis of sepsis/severe sepsis/SIRS/septic shock.
3. Patients ≥18 years
   Quality assessment criteria to examine bias were applied.

Results
No systematic reviews on this topic exist. 1,572 publications were screened by two authors and 20 full-text studies comprising 16,415 patients were analysed. Only one study was considered good quality. Several mortality prediction models exist for septic adults on ICU admission. Models can be classified as either generalised mortality, organ dysfunction or sepsis-specific custom-made. All models varied greatly
in accuracy and validation. Only two models had an excellent AUC, defined as >0.90. The custom-made simplified mortality score (SMS) had AUC 0.93[0.90-0.96](P=0.01) on internal validation in one study and in thirteen studies, APACHE-II ranged from no prediction ability to AUC 0.93 in external validation. Overall, generalised mortality and organ dysfunction prediction models performed modestly as they are not sepsis-specific and sepsis encompasses more than just organ dysfunction. Sepsis-specific custom-made models, such as the SMS and Predisposition/Infection/Response/Organ Failure (PIRO), appear to prognosticate better.

Implications for practice
There are no accurate or validated clinical mortality prediction models for septic adults on ICU admission. Identifying septic adults at risk of dying on ICU admission remains a challenge. Early identification may help clinicians with risk stratification, prognostication and resource allocation. Sepsis-specific custom-made models appear the most promising. The SMS warrants external validation and the PIRO model could incorporate the latest evidence-based, sepsis-specific mortality prediction variables to optimise its prediction ability.

Key message
The creation of an accurate mortality prediction model would help clinicians risk stratify, prognosticate and resource allocate with widespread, positive health and financial impacts.

Does an orthopaedic workshop improve the confidence of nurses transitioning to the specialty of Orthopaedics?
Susan Hull, Nurse Educator, Clinical Placements, Cairns Hospital

Background and rationale
Musculoskeletal injuries can dramatically impact a patient’s independence and lifestyle. Nurses transitioning into the specialty of orthopaedics develop the skills to care for patients with musculoskeletal conditions or injuries which can be challenging and lead to a lack of confidence. Nurses require confidence to make sound decisions and clinical judgements in their professional practice. This study investigated if the delivery of an orthopaedic workshop improved the confidence of advanced beginner nurses, recognised in Benner’s exploration of skill acquisition, to undertake the set of skills required to assess and manage patients with musculoskeletal injuries or conditions and assist in their decision making to achieve optimal patient outcomes.

Methods
A quasi experimental pre-test post-test study was chosen to conduct this study, to measure nurses’ confidence to undertake the scope of practice in orthopaedics at the advanced beginner level of expertise. A questionnaire was designed and administered to measure the level of confidence pre-intervention, immediately post intervention and twelve weeks following participation at an orthopaedic workshop. The workshop was designed specifically for nurses transitioning into the specialty of orthopaedics.

Results
The results indicated the intervention has had a positive impact on the confidence of advanced beginner nurses in the specialty of orthopaedics. The first measurement prior to participation at the workshop indicated confidence levels were low. Immediately post participation at the orthopaedic workshop the level of confidence had increased for all participants. When measured again at the twelve weeks’ interval the level of confidence had continued to increase in the majority of orthopaedic practice areas. The overall level of confidence from pre-intervention to twelve weeks’ measurement has demonstrated a clear indication of improvement in all areas of practice.

Implications for practice
A recommendation of supporting a pathway to transition in the specialty which includes education would be beneficial to the advanced beginner nurses, the specialty, patients and the profession.
Key message
Education has improved the confidence of nurses beginning in the specialty of orthopaedics to undertake the skills required to manage patients with musculoskeletal injuries.

Food Waste, Not in Good Taste
Cara Johnstone, Advanced Dietitian (Food Services, Cairns Hospital
Alan Seacombe, Manager Food Services, Cairns Hospital

Background and rationale
Spare meals were traditionally sent to all wards within Cairns Hospital to assist with meal provision of newly admitted patients, cancelled surgeries/procedures (previously nil by mouth) or transferred patients. It was identified that a large proportion of these meals were returning to the kitchen untouched and therefore being discarded. Unnecessary meal preparation and provision not only increases food service labour and produce costs but also creates excess food wastage in an era of environmental accountability.

Methods
Number of spare meals provided and number of uneaten meals discarded was recorded pre- and post-change. After initial data collection key stakeholders were consulted and all spare meal provision was ceased. A two-month review indicated a significant increase in late meal orders, concentrated on three high turn-over wards. These challenges were managed with the commencement of a 0.8FTE foodservice position to field telephone calls, development of training material, in-services on meal ordering procedures and the reinstatement of one-two spare meals at lunch/dinner to three identified high turn-over wards. Late meal orders are now processed upon request or if outside kitchen hours, an alternative cold option is provided.

Results
Prior to the review of spare meal provision, 43 meals were delivered per service (breakfast/lunch/dinner) to all wards totalling 3612 spare meals monthly. It was determined that 67.78% of lunch meals were discarded and 63.44% of evening meals were discarded, totalling 1181 meals wasted per month. Currently 174 spare meals are provided to wards (three wards only) monthly, a total reduction of 3438 meals per month. This is an estimated saving of $36,718/month and a reduction of approximately 2000kg in unnecessary food waste/month.

Implications for practice
Being accountable for not only a strict food service budget but the impacts of food wastage on the environment led to a review and change of traditional practice. This review has resulted in significant cost, production and food waste reductions with the final process now having nil impact on meal provision to hospital inpatients.

Key message
Being accountable to budget and environment can lead to review of traditional practice.

Do health professionals understand enduring documents? The case for education.
Denise Craig, Psychologist, co-chair of the Care at End of Life Project (Cairns) and State-wide Dementia Clinical Network

Background and rationale
End of life (EOL) law in Queensland is often not well understood by health professionals, leaving vulnerable people at risk of having their rights and preferences neglected or overruled. Enduring Power of Attorney (EPOA) and Advance Health Directive (AHD) documents are enormously powerful, however this power is futile when not understood or respected by clinicians. When ignored or overruled without acceptable rationale, consumers report feeling a sense of abuse or neglect by the health system. Thus, knowledge of EOL law should be considered requisite knowledge for all health professionals.
With the changing culture of our ageing population and an increased likelihood of informed and outspoken consumers, a lack of knowledge in this area may lead to potential conflict and clinical, ethical and legal ramifications for both the individual and organisations.

**Methods**

This mixed methods study surveyed clinicians’ understanding of medico-legal aspects of enduring documents before and after one hour of EOL law education within the CHHHS. The study measured: clinician confidence with EPOA/AHD laws; clinician understanding of a person’s right to refuse treatment; legislative hierarchical order for the provision of consent; and the role of health attorneys appointed under an enduring document.

**Results**

One percent of clinicians achieved 100 percent correct scores (on 9 scorable questions) before education, increasing to 20 percent after education. Results suggest critical gaps in clinician knowledge. Significant improvement is seen after education; however, clinicians continue to hold fixed and firm (unlawful) beliefs.

**Implications for practice**

This pilot study raises concerns that EOL law literacy is likely to be low across Queensland and suggests a case for both mandatory education for health professionals, and for tertiary teaching facilities to incorporate EOL law modules in core content.

**Key message**

Qld laws associated with EPOA and AHD are not well understood. With the changing culture of our ageing population and an increased likelihood of informed and outspoken consumers, health professionals may well benefit from further education in this area.

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**Poster session**

**Are we screening for Malnutrition effectively at Cairns Hospital?**

**Local accuracy of the Malnutrition Screening Tool (MST)**

**Amanda Keating, Surgical/Gastro Dietitian, Cairns Hospital**

**Background and rationale**

The Malnutrition Screening Tool (MST) is a simple 2 question tool validated at predicting malnutrition and malnutrition risk. At Cairns Hospital Nursing Staff complete the MST on admission allowing for early identification and management for patients at risk. The Queensland Bedside audit has shown an improvement in MST completion since Cairns’ transition to a Digital Hospital (from 62% 2015 to 72% 2016). This audit however only reports on the number of MSTs completed and does not address if MSTs are being completed accurately. This study aims to determine if the accuracy of MSTs completed and therefore the effectiveness of Malnutrition screening at Cairns Hospital.

**Methods**

Nutrition Assistants with MST competency, were recruited to assess rates and accuracy of MST completion on two wards. Screening was completed on four days in each ward over a three-week period (24th October 2017 - 14th November 2017) with all admitted patients eligible for inclusion. Patients whose MST were completed by nursing on admission were re-screened by Nutrition assistants within 5 days. Nutrition Assistants compared their responses to both questions of the MST tool: question 1 (has the patient lost weight without trying) and question 2 (has the patient been eating poorly because of a poor appetite). Differences on responses were then reported on.

**Results**

In total 140 patients were included in the study: 54% male, 46% female, with an average age of 63 years. 86% of patients included had an MST completed by nursing staff on admission. There was a difference in answers recorded for Q1 and Q2 of 68% and 65% respectively. When assessing the tool as a whole (Q1 + Q2) only 53% of the cases were found to have the same response. This would indicate that the same patients were being screened at different risks for malnutrition.
Implications for practice
It is not clear if risk of malnutrition is being appropriately identified with current screening methods used at Cairns based hospital. Further investigation is needed to explore how the MST is being completed to explain the difference between Nutrition Assistant and Nursing Staff screening results. It is proposed that further training and support is required to ensure Nursing Staff hold the same level of MST competency as Nutrition Assistants.

Key message
Improved functionality of Digital Hospitals may improve rates of MST completion however work is needed to improve accuracy and effectiveness of screening.

A clinical audit of combined first trimester screening and non-invasive prenatal testing offered to pregnant women in a regional Australian hospital
Dr Orit Abdulla, Medical Intern, Cairns Hospital

Background and rationale
It is well documented the disparity in access and opportunity to prenatal screening amongst pregnant women across Australia. This retrospective study analysed records of women receiving antenatal care at a regional Australian hospital to determine what proportion were offered first trimester prenatal screening. The study hypothesized that younger, multiparous women and women living rurally are less likely to be offered screening.

Methods
Independent variables of age, parity and geographical classification of 1114 women for a period of six months (1st July-31st December 2016) via the Queensland Health electronic pregnancy record on ieMR. Women ‘offered’ prenatal screening, including the combined first trimester screening (CFTS) or non-invasive prenatal screening (NIPT), were those who had evidence or documentation stating it was discussed. The women ‘not offered’ CFTS or NIPT were those who had no evidence or documentation to state the test was discussed. Variables were compared using chi-squared and Mann-Whitney U tests. Significant variables were included in a logistic regression model to examine predictors of prenatal screening.

Results
Of 1114 women, 609 (54%) were ‘not offered’ prenatal screening. All three variables (age, parity, geographical classification) were statistically and clinically significant. The logistic regression model was statistically significant, $\chi^2(7, N=1114)=209.65$, $p<0.001$, and found between 17.2% and 22.9% of the variance in offer of prenatal screening.

Implications for practice
This study demonstrates that in regional Australia, younger women, multiparous women and women living rurally are less likely to be offered prenatal screening. Potential barriers and solutions for these findings were identified in the hope that it will help aid the debate around future prenatal screening in Australia.

Key message
Equal access to prenatal screening is crucial to all pregnant women in Australia. As health care providers, we are accountable to ensure all pregnant women receive the opportunity to receive prenatal screening equally.

Physiotherapy Prescribing Trial
Mark Cruickshank, Director Physiotherapy, Royal Brisbane and Women’s Hospital
Joel Dunstan, Advanced Physiotherapist, Cairns Hospital Emergency Department
Tania Cavanagh, Director Physiotherapy, Cairns Hospital
Sonia Sam, Collaborative for Allied Health Research Learning and Innovation, Metro North Hospital and Health Service
Background and rationale
There are many challenges facing the Australian health care sector such as an aging population, increasing burden of chronic disease, and increasing community demands for responsiveness. These challenges are associated with an increasing requirement for timely access to medications, often in a long-term capacity, which represents a significant proportion of primary health care expenditure. Despite the increasing demand for medications, access can be restricted, particularly in rural and remote areas, primarily due to maldistribution and shortages in the traditional prescriber workforce. Non-medical prescribing is a method of increasing the number of prescribers to meet community demand for timely access to medicines. The aims of the trial are to describe the safety of physiotherapist prescribing and evaluate the patient experience and satisfaction of prescribing by physiotherapists in the emergency department.

Methods
The research methodology involves implementation of a model of autonomous physiotherapy prescribing in five public hospital emergency departments in Queensland, including Cairns Hospital. Emergency Physiotherapy Practitioners (EPPs), who are physiotherapists working in primary contact musculoskeletal roles within emergency departments, have undertaken the required training to gain approval to autonomously prescribe under the current State legislative framework and Department of Health credentialing process. Data is currently being collected for a 18-24 month period with the intention of recruiting all patients who may require prescribing to the extent necessary to enable EPP assessment and management.

Results
To date 935 participants have been recruited to the trial with 1053 medication orders written by EPPs State-wide. Specifically, in Cairns Hospital, 263 participants have been recruited and 224 medication orders written by a physiotherapist in the emergency department. To date there have been no adverse events recorded due to physiotherapy prescriber errors. Furthermore, auditing of written medication orders demonstrates an above average level of compliance with national charting guidelines. Patient experience data shows very high levels of consumer confidence and satisfaction with physiotherapy prescribing.

Implications for practice
The results to date from the trial suggest that physiotherapy prescribing can be implemented safely and with high levels of consumer confidence and satisfaction, thus improving community access to timely and appropriate medicines.

A local Tackling Indigenous Smoking Social Marketing Campaign in Cape York
Rita Francis, Health Promotion Officer, Tackling Indigenous Smoking, Apunipima Cape York Health Council

Background and rationale
Tobacco smoking is the most preventable contributor to the health gap between Aboriginal and Torres Strait Islander people and other Australians. Evidence of exposure to multi-component tobacco control interventions, including local social marketing campaigns, has shown to increase knowledge on the health effects of smoking and readiness to quit. In 2017, the Apunipima Cape York Health Council Tackling Indigenous Smoking team launched a local social marketing campaign ‘What’s Your Story, Cape York?’ that aims to influence smoking behaviours and community readiness to address smoke-free environments. The campaign aligns with the national ‘Don’t Make Smokes Your Story’ campaign.

Methods
In May 2017, Apunipima Tackling Indigenous Smoking staff engaged with community members in Coen, Napranum and Pormpuraaw to develop locally appropriate campaign messages and materials, which were distributed across 11 Cape York communities. The campaign materials were displayed and distributed at community events, community noticeboards, radio, television and on social media platforms. To evaluate the effectiveness and appropriateness of the campaign, focus group yarning sessions were conducted in six Cape York communities.
Results
A total of 63 community members participated in the focus group yarning sessions. This evaluation of the campaign found community members were proud to see local people and places feature in the campaign. Exposure to the campaign encouraged community members to think about their smoking behaviours and to contemplate quitting. The evaluation indicated that engagement with other Cape York communities to develop local campaign materials will contribute to the aim of reducing smoking rates of Aboriginal and Torres Strait Islander people in Cape York and provoke significant behaviour change (long-term smoking cessation) among community members.

Implications for practice
A social marketing campaign sharing local stories from Aboriginal and Torres Strait Islander communities is an effective and appropriate approach to promote health messages and influence behaviour change, while being accountable to Apunipima’s Model of Comprehensive Primary Health Care.

Key message
Engaging community members in the development of a local social marketing campaign proved to be an effective and appropriate approach to influence smoking behaviours and community readiness to address smoke-free environments.

Preparing for Rural Practice: Exploring JCU (James Cook University) dental students’ perceived preparedness following dental simulated emergency medical training (DSEMT)
Hanin Musbah, Bachelor of Dentistry student, James Cook University

Background and rationale
Dental professionals have a responsibility to adequately pre-empt, identify and manage patients experiencing medical emergencies. While effective management of medical emergencies’ is a requirement of the Professional Competencies for a Newly Graduated Dentist, research suggests that many dentists upon graduation do not feel adequately prepared. There is also a greater level of accountability when working in rural and remote locations due to difficulties in accessing resources, shortage of health care facilities, and reduced available professional support from other disciplines. JCU Bachelor of Dental Surgery (BDS), with a focus on rural and remote health, provides a curriculum that aims to deliver the essential skills required through DSEMT; workshops comprising of authentic scenario-based simulations in the dental setting.

This research aims to explore the perceptions of fourth and fifth year JCU dental students on their perceived level of preparedness in identifying and managing medical emergencies in clinical settings following DSEMT.

Methods
A cross-sectional, mixed methods study using a validated survey pre- and post-intervention will be used for comparative analysis of BDS year 4 and 5 students’ perceptions on preparedness in responding to a medical emergency. Statistical analysis of descriptive quantitative data using T-tests and cross tabulation across year 4 and 5 results and thematic analysis will be used for post clinical placement focus group results.

Results
This study is in progress with results pending. Preliminary findings indicate that DSEMT effectively builds a sense of competence. The final surveys that follow clinical exams and placements will provide further valuable insights into students’ perceived preparedness.

Implications for practice
This project aims to provide evidence-based research that may contribute to future dental emergency medical training for undergraduate dental curriculum, to allow for more competent dental graduates.
Key message
Medical Emergency training for dental students remains a challenge due to the nature of the subject. More evidence-based research is needed to find a method of best ensuring that students obtain the necessarily skill set by which the patients have entrusted by have.

The OPEN ARCH Project: Protocol for a stepped wedge randomised controlled trial with repeated cross-sectional samples
Jennifer Mann, Project Manager, OPEN ARCH, Cairns and Hinterland Hospital and Health Service

Background and rationale
Community dwelling older persons with complex care needs may deteriorate rapidly and require hospitalisation if they receive inadequate support for their conditions in the community. This trial aims to assess the acceptability, impact and cost-effectiveness of a comprehensive, multidimensional geriatric assessment with care coordination (the OPEN ARCH intervention) in a community setting.

Methods
This multicentre randomised controlled trial uses a stepped wedge cluster design with repeated cross-sectional samples. General Practitioners (GPs; n=12) will be randomised as 'clusters' at baseline using simple randomisation. Each GP cluster will then recruit 10-12 participants. Data will be collected on each participant at three-month interval (-3, 0, 3, 6 and 9 months). The primary clinical outcomes are Emergency Department (ED) presentations, acute hospital admissions, in-patient bed days, health service (including allied health) and community support service utilisation. Secondary outcomes include functional status, quality of life and participants' satisfaction with the OPEN ARCH service. Cost effectiveness of the intervention will be assessed as a change to cost outcomes, including the cost of implementing the intervention and subsequent use of health services.

Results
Nil results to date. The OPEN ARCH study commenced in April 2018.

Implications for practice
The results will have direct implications for the design and wider implementation of this new model of care for community dwelling older persons with complex care needs. Additionally, it will contribute to the evidence base on acceptability, efficacy, and cost-effectiveness of the intervention for this high-risk group of older people.

Key message
Innovation in service delivery is required to meet the needs of a growing number of older persons with complex health needs. OPEN ARCH is an innovative, integrated approach to health service provision for this client group.

Too Deadly - Cultural Capability in action in the Cairns and Hinterland Hospital and Health Service
Dallas McKeown, Acting Senior Cultural Capability Officer
Venessa Curnow, Stanley Savo, Donna Dewis, Esmee Tafe
Cairns and Hinterland Hospital and Health Service

Background and rationale
The scope of the Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010 - 2033 is clearly focused on the provision of culturally appropriate health services to Aboriginal and Torres Strait Islander consumers and communities. In the Framework 'cultural capabilities' refer to the 'skills, knowledge and behaviours that are required to plan, support, improve and deliver services in a culturally respectful and appropriate manner. The purpose of the Queensland Health Aboriginal and Torres Strait Islander Cultural Capability Framework 2010 - 2033 is to provide overarching principles for the governance, policy, planning, infrastructure, information systems, human resource management, quality improvement, education and training, and every aspect of culturally capable health service delivery for Aboriginal and Torres Strait Islander Queenslanders.
Methods
From 2014 onwards, the Aboriginal and Torres Strait Islander Health Management Unit delivers a full day of face-to-face foundation and intermediate training that provides opportunities for greater emphasis on the links between culture, historical events and social determinants of health, and service provision and individual practice. Since 2016, specialist cultural capability training is also being delivered in a variety of formats to enhance deepening understandings, and provide specificity to service and practice areas.

Results
In the period 2012 - 2017 across all CHHHS sites overall attendance rates are increasing with the highest staff attendance by stream is nursing, followed by administration. From baseline data to current attendance levels it would be reasonable to suggest that the Cultural Capability Training is demonstrating its applicability to learning outcomes in mandatory training.

Implications for practice
An increase in CHHHS staff participation across all occupational streams in Cultural Capability Training, and the positive feedback provided to facilitators indicates the program in its current form is an effective method of training and aligns with the National Safety and Quality Health Service Standards.

Key message
Leadership and management support for staff in all operational streams to undertake training in the Cultural Capability Program is essential and can result in our staff acquiring the knowledge and skills to deliver care in a culturally capable manner and meet accreditation compliance.

What factors support implementation of a best practice model of gestational diabetes mellitus care in dietetics?
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Background and rationale
Gestational Diabetes Mellitus (GDM) occurs in upwards of 5% of pregnancies. Poorly controlled GDM can result in significant negative pregnancy, delivery and long-term outcomes including an increased risk of type 2 diabetes mellitus. Medical Nutrition Therapy (MNT) is the primary intervention in GDM. While evidence-based MNT guidelines exist, most women with GDM do not receive MNT according to these guidelines in many Australian centres. Two regional Queensland sites participated in a facilitated implementation of evidence-based MNT care supported by a team at a metropolitan centre. The aim of this study was to describe (i) project and stakeholder experiences’ in the project, and (ii) learnings to inform implementation of the model of care across Queensland.

Methods
This was a descriptive qualitative study utilising semi-structured interviews which explored project experiences, barriers and enablers to project implementation, strategies to overcome challenges and recommendations for implementation at other sites. Interviews were recorded and transcribed for analysis to identify recurrent themes.

Results
Participants were six project staff and two stakeholders involved in guideline implementation. Four main themes were derived from the analysis: (1) catalyst for positive change, (2) managing project logistics, (3) overcoming barriers, and (4) achieving change. Participants were supportive of the model of systematic external facilitation to address local barriers to implementing evidence-based MNT. However, the balance between delivering clinical care while participating in a service change project proved
challenging to many participants. Factors supporting change included engagement with an external team, a robust project methodology, stakeholder engagement, management support and a positive attitude.

Implications for practice
In addition to methodological expertise, key elements of the facilitation should include building confidence and capacity of local implementers through regular contact, encouraging local networking, linking to higher management support and assessing and/or influencing workplace or organisational culture.

Key message
Implementation of evidence-based best practice models can be difficult to achieve in hospital settings. A model of facilitated, external implementation is an effective method of fostering health service change and ensuring accountability for high quality care.

From Little Things Big Things Grow: How our research in the Torres Strait has expanded into international collaborations
Rachel Quigley, Physiotherapist, Cairns and Hinterland Hospital and Health Service
Sarah Russell, Clinical Neuropsychologist, Cairns and Hinterland Hospital and Health Service

Background and rationale
In 2011, a small pilot dementia study comprising 20 participants was completed on Hammond Island by two CHHHS clinicians. From this pilot, funding was received to develop a wider dementia prevalence study that is now in its third and final year. The Healthy Ageing Research Team was established to implement this study in partnership with local Torres Strait health and community members and a wide range of data on the health and wellbeing of older adults has been collected. Partnerships have been formed with UQ, CQU, JCU, Menzies Institute, UWA and University of Melbourne to continue research into the health and wellbeing of older Aboriginal and Torres Strait Islander people. Collaboration is now underway with an international team looking at the health of First Nations populations globally. Data collected has provided the opportunity for several CHHHS clinicians to develop their own sub-projects from their own areas of interest.

Methods
Medical, social, cultural, functional, psychosocial and cognitive data were collected from 324 participants aged over 45 in 18 Torres Strait communities. Results are being analysed to provide data on the prevalence of dementia and problems of ageing. Sub projects looking at frailty, falls, continence, mood and anxiety, diet and exercise, are underway.

Results
Dementia prevalence was consistent with other studies in Aboriginal communities showing a 3 to 5-fold increased risk in the Torres Strait, although unique risk factors were identified. Data on this and other variables of interest from the sub-projects including falls risk and frailty will also be presented.

Implications for practice
From a small initial pilot study, close relationships have been developed with various partners in the Torres Strait as well as the wider research community. This has facilitated the generation of a larger body of research knowledge than initially was envisaged. This has demonstrated how international research and a wealth of knowledge has grown from small beginnings in Far North Queensland.

Key message
Local research can provide the momentum for many people to collaborate to address bigger issues affecting Aboriginal and Torres Strait Islander health and wellbeing.

The Lighthouse Hospital Project: Addressing the burden of cardiac disease of Aboriginal and Torres Strait Islander peoples in the Cairns region
Allana Jackson, Project Officer, Lighthouse Hospital Project
Background and rationale
The burden of cardiovascular disease amongst Aboriginal and Torres Strait Islander peoples is significant. Aboriginal and Torres Strait Islander peoples are twice as likely to die from cardiovascular disease (CVD) than non-Indigenous Australians and onset is likely to be earlier and associated with complex comorbidities. Additionally, Aboriginal and Torres Strait Islander peoples are more likely to experience frequent hospital admissions, many of these preventable, with these peoples also five times more likely to discharge from their hospital stay against medical advice.

The Lighthouse Project aims to achieve systemic change to improve outcomes for Aboriginal and Torres Strait Islander peoples experiencing acute coronary syndrome (ACS). The Lighthouse Hospital Project is focussed on improving the cultural safety for patients when receive and engage in treatment to address the rate of discharge against medical advice.

Methods
This presentation will describe the three phases and related achievements of the Lighthouse Project commencement in Cairns in May 2018. Community engagement activities will be discussed, as will the evidence of commitment to improving health outcomes for Aboriginal and Torres Strait Islander peoples.

Results
The Lighthouse Project has established a strong and active steering committee comprised of members of the Cairns Hospital cardiac team, primary health network and local Aboriginal and Torres Strait Islander health services. In the three months since commencement this steering committee has established many key objectives, most significantly the establishment of a yarning space on the Cairns Hospital campus. How this has been developed as a priority for the Lighthouse Project will be a feature of this presentation.

Implications for practice
The success of the Lighthouse Project in improving the cultural safety of the Cairns Hospital cardiac service provides evidence to the capacity of a multidisciplinary team to respond in creative ways to the needs of Aboriginal and Torres Strait Islander peoples.

Key message
An appropriate and sustained response to the burden of disease held by Aboriginal and Torres Strait Islander peoples is the responsibility of all.

Structural heart interventions in Far North Queensland; Feasibility and safety in a regional centre
Alexis Dermedgoglou, Medical Registrar, Cairns Hospital
Reza Reyaldeen, Cardiology Registrar, Cairns Hospital

Background and rationale
Structural heart intervention is becoming increasingly common with advancements in device technology and procedural techniques. This, however has been largely limited to metropolitan centres, usually with on-site surgical back up. We sought to assess the safety and outcomes of structural heart interventions at Cairns Hospital.

Methods
Retrospective analysis of all structural interventions that occurred over a 18-month period between September 2016 and February 2018 was conducted. Electronic medical records were used to assess for procedural complications and outcome data.

Results
In total there were 39 structural interventions - 10 ASD (Atrial septal defect) closures, 10 PFO (patent foramen ovale) closures, 18 balloon aortic valvuloplasties (BAV) and 1 pulmonary valvuloplasty. Mean age in the BAV group was 79.6 +/-9.3 years and 52 +/-15.3 years for PFO/ASD closures. There were no procedural complications. All of the ASD and PFO closures occurred successfully without residual inter-atrial flow on post-closure imaging. Mean reduction in invasive peak-to-peak gradients with BAV was 30
+/−11 mmHg. There was no mortality at 30 days post procedure, however 8 deaths occurred in the BAV group by 12 months, unrelated to the procedure and due to significant co-morbid disease.

Implications for practice
The structural heart intervention program at Cairns Hospital reflects a growing demand for such procedures. Distance is often an important factor for patients, particularly in regional areas, and our experience shows that this service is feasible and safe at centres without on-site cardiac surgical back-up. Of course, technical ability and patient selection play an important role in the success of these interventions.

Key message
Structural heart interventions are growing due to increased expertise and technological innovation. Traditionally, this had been performed in metropolitan tertiary referral centres with on-site cardiac surgical back-up. These procedures can be performed safely in regional centres with appropriate assessment, planning and in well-selected patients.

The development and implementation of a centralised online auditing system undertaken by the Torres and Cape Hospital and Health Service (TCHHS) Quality, Safety and Risk Unit that was piloted through the TCHHS SharePoint intranet
Cathleen Lockwood, A/Clinical Nurse Consultant
Anthony Weller, A/Clinical Nurse Consultant
Alison Mayles, A/Director Quality, Safety and Risk Unit, Torres and Cape Hospital and Health Service

Background and rationale
The Torres and Cape Hospital and Health Service (HHS) is responsible for rural and remote health services across Cape York, the Northern Peninsula Area and the Torres Strait Islands. Auditing is a quality activity that assists in collecting data and providing evidence for accreditation to meet the NSQHS standards. Auditing can enable an organisation to meet regulatory compliance and the provision and delivery of safe practice. The online audits were built in Share Point - a web-based collaborative platform that integrates with Microsoft Office program. An organisational change approach supported the shift from a paper based to an online auditing system. Service provider consultation and collaboration with a communication strategy was developed and website site access and navigational support was provided to support user involvement and strengthen participation.

Audit Protocols were developed that aligned the audit indicators with TCHHS policies, procedures and the National Safety and Quality Health Service standards.

Methods
The auditing feature within SharePoint was built quickly, could be modified easily and was cost effective. It could provide time limited access permissions for service providers. Navigational support was provided for audit users and audit data was collected from all TCHHS facilities. Audit reports were archived and stored and an issues log assisted in improving the implementation process. Motivational Interviewing principles and coaching strategies were used to strengthen health service staff involvement and performance with the online auditing process.

Results
Audit compliance was increased 10% to 100%. The audit outcome summary is available for service providers and their line managers to view Online auditing within health services provide a structured process for early identification of risk, trend data analysis and quality improvement actions.

Implications for practice
Online auditing promotes transparency and accountability and assists service providers to see the relationship to practice. An organisational change approach supports service user engagement with the online platform in SharePoint and strengthens audit compliance and assists service providers to see the relationship to practice.
Key message
Online auditing through SharePoint is a cost effective and modifiable web based system that is effective in providing safety for rural and remote health service staff.

Community-based parent delivered early detection & intervention program for infants at high risk of cerebral palsy in Indigenous Queensland (Learning through Everyday Activities with Parents: LEAP-CP)

Dr Kath Benfer, Speech Pathologist, NHMRC Early Career Fellow and member of the Centre for Research Excellence Cerebral Palsy (CP) Clinical Trials Network (CRE-CPCTN), Queensland CP and Rehabilitation Research Centre at the University of Queensland

Background and rationale
Cerebral Palsy is the most common cause of childhood physical disability. Indigenous Australians have significantly higher rates of cerebral palsy, and poorer functional outcomes associated with their diagnosis of cerebral palsy.

Early detection of cerebral palsy is possible, as early as 12 weeks of age, as published in a clinical practice guideline. The average age of cerebral palsy diagnosis in Australia is currently 19 months. Early diagnosis under 6 months of age enables early intervention which can improve physical and cognitive outcomes for infants. Early intervention targeting responsive parenting has been demonstrated to be effective for both the caregiver and children with cerebral palsy. Disability interventions currently have poor uptake by Indigenous Australians, related to cultural inaccessibility and limited availability within the community.

Indigenous caregivers of children with cerebral palsy have an elevated risk of poor mental health outcomes compared to parents of children without cerebral palsy. There is an identified need to identify and deliver culturally responsive interventions for Indigenous Australian at high-risk of cerebral palsy and their parents.

Methods
The LEAP-CP, double blind RCT, commencing 2019, will test the efficacy of a peer to parent delivered community intervention for Indigenous infants (3mths – 2 years) at high risk of cerebral palsy from rural and remote Queensland.

Infants will be recruited via Prechtl’s General Movements Assessment App and the Hammersmith Infant Neurological Examination. A multi-domain best practice intervention consisting of responsive parenting, infant goal-directed therapeutic learning games, and caregiver educational modules will be delivered, utilising a culturally sensitive train the trainer model with local Indigenous community change agents, and tele-health.

Results
The primary infant outcome is change on the Peabody Developmental Motor Scales-2, and the primary caregiver outcome is change on the Depression Anxiety and Stress Scale.

Implications for practice
LEAP-CP aims to reduce the age of diagnosis and improve long-term social-emotional, motor and cognitive development for infants with cerebral palsy, and their caregiver’s mental health.

Key message
LEAP-CP will implement the cerebral palsy early diagnosis clinical practice guideline to Indigenous Australians and provide a tailored, community-based, parent-parent in home intervention.