Health Showcase 2014
An inter-professional event for Medicine Nursing and Allied Health

“Making Innovation Count: Sharing our advances in knowledge, practice and research”

BOOK OF ABSTRACTS

Cairns Hospital Auditorium
Cairns and Hinterland Hospital and Health Service
6 August 2014
Health Showcase 2014
“Making Innovation Count:
Sharing our advances in knowledge, practice and research”

Session 1  8:30am – 10.15am

Making innovation count through research and service redesign
Chair: Professor John McBride

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<td>Welcome</td>
<td>Desley Harvey</td>
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<td>08:30</td>
<td>Official Opening</td>
<td>Julie Hartley-Jones Chief Executive</td>
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<td>08.35</td>
<td>Assessing the benefits of research - some challenges and opportunities</td>
<td>Keynote Speaker Komla Tsey</td>
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<td>Patients’ Psychological And Practical Reasons For Attending The Cairns Hospital Emergency Department: A Mixed Methods Study (P3ED)</td>
<td>Associate Professor Jane Mills</td>
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<td>Lessons from Mareeba: strengthening primary maternity services in rural Queensland</td>
<td>Sandra Eales</td>
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<td>Improving patient access: Redesigning the allied health cancer care model of care</td>
<td>Lindsey Johnson</td>
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Morning Tea Break: 10.15am-10.40am (25mins)

Session 2   10:40am – 12.15pm

Improving patient care and community health through research and evaluation
Chair: Dr Colin Baskin

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<td>Economic and clinical outcomes of Vitamin B12 supplementation on haemodialysis patients</td>
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<td>11.00</td>
<td>Pericarp of mangosteen fruit as a treatment for schizophrenia</td>
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<td>Developing a program of research on electroconvulsive therapy for the CHHHS</td>
<td>Barry Stormont</td>
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<td>Sex/gender research, clinical practice and health outcomes for trans clients</td>
<td>Nyah Harwood Melissa Vick</td>
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<td>Innovative methods for the control of Aedes albopictus, a new vector of dengue and chikungunya viruses in Australia</td>
<td>Dr Odwell Muzari</td>
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<td>12.00</td>
<td>Making accountability count: How the implementation of an electronic food services system is changing resource management in the Cairns Hospital kitchen</td>
<td>Lindsey Johnson</td>
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Lunch: 12:15pm - 12:55pm (40 mins)

Session 3   12:55pm – 2:15pm

Developing and supporting our workforce through education, supervision and research
Chair: Dr Jenny Sando

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<td>Too close to home: the lived experiences of rural Queensland nurses who have cared for people with cancer who have died</td>
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<td>Supporting junior doctors – an approach using shared reflective practice to aid the development of professional responsibility</td>
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<td>Regional health workforce planning in north Queensland: starting with the end in mind</td>
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<td>Is the doctor doctoring the doctor doctoring the doctor the way the doctor wants to be doctored? (Or – Can Medical Education add value to the Clinical Practices of interns?)</td>
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<td>14:00</td>
<td>Making the Invisible Visible: An evaluation of vicarious trauma counselling for health professionals</td>
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<td>Stimulating Simulation: An exploration of participant experiences of collaborative simulation in the Emergency Department</td>
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Afternoon Tea Break: 2:30pm – 2:45pm (15 mins)

Session 4   2:45pm - 4:30 pm

Quality activities to improve services
Chair: Karen Fitzpatrick

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<td>How we discovered the ‘Pot of Gold at the End of the Rainbow’ allowing for clinical pharmacy provision in our rural and remote region</td>
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<td>Facing the times: The Young Onset Dementia Support Group Facebook initiative</td>
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<td>The use of a delegation model of care for identification of patient supportive needs in a cancer care setting</td>
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<td>16:05</td>
<td>Discharging patients from PACU in an era of the Adult Deterioration and Detection System (ADDS)</td>
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**Poster Session: posters will be displayed in the auditorium foyer**

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<td>What is the needle and syringe program and why is it so important?</td>
<td>Gulliver Welch, Mark Mills</td>
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<td>Lock, Stock and Dual Smoking Antibiotics: Successful Novel CVC Line Salvage using combination Antibiotic Lock Therapy (ALT) in Haemodialysis</td>
<td>Dr Murty Mantha, Dr John Paul Killen, Dr Richard Baer, Dr Amit Nigam, Dominic Breslin, Mary Elliott</td>
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<td>Rituximab-Induced Progressive Multifocal Leukoencephalopathy (PML): A Catch-22 in the Treatment of Haematological Patients</td>
<td>Kim Jones, Michelle Rothwell</td>
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<td>Involving consumers in research: The ASPIRE Study</td>
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<td>Audit of outcomes of radial artery puncture for coronary angiography and intervention at Cairns Hospital</td>
<td>Dr Shane Clifford</td>
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<td>Enhancing patient care and QoL: Cairns Hospital’s evidence-based Aphasia-friendly menu</td>
<td>Stephanie Terblanche</td>
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<td>Mapping what Matters: How speech pathology developed a tool for service demand comparison</td>
<td>Natalie Winter</td>
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<td>Clinicians’ experiences of implementing a shared competency, delegated practice framework in an allied health cancer care team</td>
<td>Lindsey Johnson</td>
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<td>Outcomes from a community-based rehabilitation stroke service in Cape York</td>
<td>Rukmani Rusch</td>
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<td>Feeding the hungry: creation of a demand management toolkit to support clinical dietitians</td>
<td>Lindsey Johnson</td>
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<td>11</td>
<td>How do clinicians become research leaders? Organisational and individual factors that promote research activity</td>
<td>Desley Harvey, Professor David Plummer, Robyn Adams, Ilsa Nielsen, Tilley Pain</td>
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*Morning tea, lunch and afternoon tea will be provided in the auditorium foyer*
Keynote Address

Assessing the benefits of research - some challenges and opportunities
Professor Komla Tsey, Research Professor, The Cairns Institute, James Cook University

Evidence suggests that as much as 90 per cent of academic research may not have any societal impact or benefit. Yet, as the cost of providing health care continues to grow faster than economic growth (Gross Domestic Product), decision makers are more than ever before looking up to researchers to generate the necessary evidence that can assist then to prioritise scarce resources. In the particular context of Indigenous Australia, communities and their leaders are also deeply concerned of being over researched yet not seeing any tangible benefits. But what is research? How do we determine if a particular piece of research is of benefit? What constitutes benefit and from whose point of view? The purpose of my talk is to share with you some of the challenges and opportunities involved in evaluating the impact or benefit of research. I will discuss a new Lowitja Institute Research Benefit Assessment Tool that seeks to bring together Indigenous health stakeholders (community controlled health services, policy makers and researchers) to determine what works, for whom and under what circumstances through need-driven collaborative research. The applicability of the tool more broadly across health services and public health research will be examined.

Patients' Psychological And Practical Reasons For Attending The Cairns Hospital Emergency Department: A Mixed Methods Study (P3ED)
Associate Professor Jane Mills, Director, Centre for Nursing and Midwifery Research James Cook University

Background and rationale
Non-urgent presentations to Cairns Hospital Emergency Department are rising at near triple the national average; questions are being raised about the sustainability of this acute care setting. In 2013, James Cook University, Cairns and Hinterland Hospital and Health service, and Far North Queensland Medicare Local formed an inter-sectorial team to find out why more people were choosing to come to the hospital instead of alternative health services, and to suggest ways to alleviate the burden on the ED.

Methods
This mixed methods study was conducted in two phases. Phase 1 involved a one month 24/7 survey of patients attending the ED. As well, EDIS data was analysed for this one month period. Findings from the survey informed Phase 2 of the study in which five focus groups were facilitated to further clarify and investigate key survey findings. An additional component of Phase 1 is a 5 year trend analysis of EDIS data.

Results
The study will be completed at the end of June, 2014. Preliminary findings indicate the following:
- The main reason that patients attend the ED is a belief that their health condition is ‘too complicated’ for alternative health services
- There is a perceived need for children’s services
- There are high levels of trust/confidence in the ED generally which attracts patients
- There is a perception that there is good access to general practice and after hours services
• That a number of patients attend the ED because they had no relationship with a GP, having just moved to Cairns or else their GP had left - suggesting a potential gap in service provision
• High numbers of patients referral to the ED by doctors, in particular GPs

Implications for practice
In the current climate of political change leading to changes in primary health care service provision it will be important for the CHHS to use the findings of the P3ED study in planning for future models of service provision.

Key message
The reasons patients attend the ED are complex and multi-faceted. Meeting patient demand will require new ways of thinking about models of service provision, health education and health literacy in order to ensure sustainability into the future.

The SPEED experience - implementing an Extended Scope Physiotherapy role in ED
Tania Cavanagh, Director of Physiotherapy, Cairns and Hinterland Hospital and Health Service

Background and rationale
Physiotherapists with Extended Scope of Practice (ESOPP) skills have the potential to address patient flow issues in the Emergency Department (ED). The SPEED Project evaluated the efficiency and effectiveness of an ESOPP to independently treat Category 3-5 ED patients with musculoskeletal injuries. The rationale was that it would release medical and nursing resources to care for other patients. Cairns Hospital was chosen to investigate barriers to implementation and sustainability in a large regional hospital.

Methods
Project elements included:
1. Postgraduate training and medical supervision of an advanced musculoskeletal Physiotherapist to gain eligibility for credentialing as an ESOPP;
2. Introduction of a 7 day/extended hours physiotherapy service in Cairns Hospital ED; and
3. Development of an in-house professional development pathway to progress an experienced musculoskeletal physiotherapist into the advanced ED physiotherapist role (to promote succession planning and sustainability of the ESOPP role).

The project utilised a program logic model as part of a program evaluation methodology. Mixed methods data collection included patient and staff satisfaction surveys, semi-structured interviews and data mining of EDIS statistics.

Results
Implementation of the ESOPP service in Cairns Hospital ED positively contributed to its performance against the National Emergency Access Target (NEAT). The role enhanced the patient experience for category 3-5 patients with musculoskeletal injuries, was supported by major stakeholders, and did not reduce quality or safety of patient care.

Implications for practice
ESOPP roles in EDs have the potential to improve access to care for patients with musculoskeletal injuries and improve the efficiency of EDs while maintaining high standards of patient care.
Requirements to ensure the sustainability of such roles in regional hospitals include: (i) a larger advanced and extended scope physiotherapy workforce; (ii) easier access to training; and (iii) a culture of flexibility across clinical practice areas.

Key message
ESOPP roles provide an efficient and effective model of care for Category 3 – 5 patients presenting to EDs with musculoskeletal injuries. Further research to investigate the impact on nursing and medical resources in ED is required.

Lessons from Mareeba: strengthening primary maternity services in rural Queensland
Sandra Eales, Midwifery Unit Manager, Mareeba Hospital
Background and rationale
The Mareeba midwifery service was shut down in 2005 owing to lack of medical proceduralists. The service became a pilot site for stand-alone midwifery service and has successfully functioned as primary maternity unit since changing model of care to continuity of carer with midwifery caseload model (MGP) in 2009.

Methods
Mixed-method approach to review all aspects of MGP service including consumer and staff surveys and interviews, perinatal clinical outcomes and transfer patterns for all women booked to birth over 3 year period from 1/1/2009 -31/12/2011.

Results
A successful model of care was demonstrated both in perinatal clinical outcomes and satisfaction with the service reported by women who used it and midwives working in it. Analysis of transfer data included patterns and reasons for transfer and outcomes for intrapartum transfers which included
- Induction
- Preterm birth
- Method of Delivery (Vaginal, Instrumental, LSCS)
- Apgar less than 7
- SCN Admissions
The study shows some of the complexity and context in which midwives critical decision making and essential communication occur around consultation and referral at many points along the woman's journey.

Implications for practice
Primary Maternity units with a continuity model of care can be a safe, viable solution which increases rural women's access to quality care throughout pregnancy, birth and post-natally.

Key message
Primary maternity services should be developed and supported with consideration of the risks as they relate to the women living in a rural area rather than limiting consideration to the risks within the hospital setting. The model is underpinned by the community understanding that a local maternity service with limited capability is safer that a maternity service with higher capability but located some distance away.

Improving Patient Access: Redesigning the Allied Health Cancer Care Model of Care
Lindsey Johnson, Investigator, Better Access to Radiation Oncology project

Background and rationale
Allied Health Cancer Care (AHCC) services have the challenge of continuing to provide high quality patient care despite increasing demand, an ageing population and fiscal constraints. The Cairns Hospital AHCC service has utilised funding from the Better Access to Radiation Oncology initiative to redesign their model of care, using a detailed review process which included use of a shared competency, delegated practice framework.

Methods
A service analysis was conducted and a total of 213 clinical tasks undertaken by the AHCC team were described. Of these tasks, 175 were analysed in detail with regard to their component activities, risk and potential for either sharing with another profession or delegating to an Allied Health Assistant (AHA). The results from this process were used to shape a new AHCC model of care which incorporated elements of skills sharing and delegation of tasks to AHAs. HBCIS data was captured for five months pre- and post-implementation, and T-Tests were conducted on the data in order to measure the impact of the new model on the number of occasions of service (OOS) provided to patients.

Results
There was a significant increase in the number of new Allied Health OOS provided to patients with the redesigned model of care compared to the previous model (p=0.05). Although not statistically significant, there were also increases in the number of review OOS and total OOS. Results directly
attributable to Allied Health Professionals demonstrated a strong trend towards increased number of new OOS (p=0.061) and a decrease in the number of review OOS (p=0.223).

Implications for practice
Use of a formal shared competency, delegate practice framework can translate into improvements in the new to review OOS ratio for Allied Health Professionals, indicating that clinicians are able to utilise delegation and skill sharing effectively to increase the efficiency of their work.

Key message
A structured approach to extending clinicians' scope of practice and increasing the opportunities for task delegation results in efficiency gains for clinicians as well as enhanced service delivery and access to allied health treatment for cancer patients.

Session Two: Improving patient care and community health through research and evaluation

Economic and clinical outcomes of vitamin B12 (hydroxocobalamin) supplementation on haemodialysis patients
Dr John Killen, Nephrologist, Cairns Hospital

Background and rationale
Long-term haemodialysis patients may be at risk of hydrosoluble vitamin deficiencies. This study aimed to test the hypothesis that in patients with serum B12 < 300 pmol/L, intramuscular hydroxocobalamin reduces erythropoietin requirements whilst maintaining haemoglobin concentrations (Hb).

Methods
The Study design was prospective, non-randomized, open label, with single group assignment. In 61 patients hydroxocobalamin 1000 £g was given weekly for 3 weeks and erythropoietin dose adjusted to target a Hb of 11–12 g/L. The primary outcome was the change in erythropoietin requirements at 2 years. Secondary outcomes included assessment of change in biochemical or clinical parameters.

Results
The erythropoietin dose reduced from 11 000 ± 7000 (10 000) IU to 5000 ± 6000 (3000) IU per week (P < 0.001) with no change in Hb 116 ± 16 (117) g/L before and after 114 ± 15 (113) g/L (P = 0.488) hydroxocobalamin supplementation. Serum albumin rose from 35 ± 4 (35) g/L to 36 ± 4 (36) g/L (P = 0.03). A significant rise in red cell folate (RCF) and serum vitamin B12 levels was observed. Serum ferritin rose despite a reduction in intravenous iron usage and no significant change in c-reactive protein or transferrin saturation.

Implications for practice
InHD patients with B12 < 300 pmol/L, following treatment with hydroxocobalamin there was reduced erythropoietin requirements, maintained Hb and a small but significant rise in the serum albumin. RCF may be low in haemodialysis patients with metabolic cobalamin deficiency and rises significantly after supplementation. Hydroxocobalamin supplementation may have the potential to reduce the cost of anaemia management.

Key message
B12 supplementation has the potential to significantly reduce the cost of anaemia management (average saving was AUD 4600 per patient per year) with the potential to improve clinical outcomes.

Pericarp of mangosteen fruit as a treatment for schizophrenia
Wendy Laupu, Registered Nurse, Cairns Hospital

Background and rationale
Pharmaceutical companies have largely failed to alleviate symptoms and side effects from second generation antipsychotic drugs, for persons with schizophrenia. A review of the literature reveals reduced antioxidant defences in schizophrenia. In the presence of compromised defences, chemicals, microbial, physical or psychological stressors contribute to increased oxidative stress. Oxidative stress-induced damage may lead to a chronic neuronal injury in schizophrenia. A traditional target of pharmaceuticals is the neuronal pathway; however the mangosteen fruit has unique
astringent properties for plant defence against environmental insults. This finding represents Charles Darwin’s concept of natural selection as those with adequate antioxidant defences are least likely to succumb to environmental insults.

Methods
A clinical trial was conducted (ACTRN12611000910909). 80 persons meeting DSM-TR criterion for schizophrenia provided informed consent and were asked to self-administer either 1000mg/day of encapsulated mangosteen pericarp or placebo, adjunctively for a period of 180 days. Participant interviews were conducted at baseline, 90 days, 150 days and 180 days using established measures of clinical relevance. Positive and Negative Syndrome Scale (PANSS) total score was the primary measure of outcome.

Results
Mangosteen pericarp as an adjunctive or mono-therapy has statistically significant efficacy in schizophrenia across measures of clinical relevance with regards to core symptom domains (PANSS total (p<.0001), large effect size (1.41)) and improved daily functioning. Depression, anxiety, suicidal ideations and general side effects were also significantly improved between groups at endpoint. Tardive dyskinesia was non-significant. The intervention was delivered safely.

Implications for practice
Further work involving pre-clinical studies, a clinical trial in a larger cohort, and examination of mangosteen pericarp as a prevention strategy and in relation to other neuropsychiatric processes is warranted.

Key message
Mangosteen pericarp has a positive effect in schizophrenia.

Developing a program of research on Electroconvulsive Therapy for the Cairns and Hinterland Hospital and Health Services
Barry Stormont, Research Fellow, School of Indigenous Australian Studies, James Cook University

Background and rationale
Electroconvulsive Therapy (ECT) is the most effective last resort treatment for people with severe forms of depression. It is a viable and time-limited option when anti-depressant medication has not resulted in adequate reduction of depressive symptoms. People receiving ECT display remission within a three to four week period. This approach to treating depression is not without its own risks and side-effects. Adverse cognitive and physiological effects associated with ECT are well documented. Additionally, the therapeutic effects of ECT do not last for many people, who often require further ECT treatment. There has been little investigation into ECT in the Cairns and Hinterland region. This presentation seeks to discuss the process involved in the development of a clinically driven ECT research program in this region and the benefits to staff and consumers.

Methods
A research team was established to commence discussion around research opportunities in the Cairns and Hinterland region. Local clinicians presented a strong case for ECT based research. A series of meetings were held to review current literature within the context of local clinical practice. A research program was systematically developed targeting specific areas where clinical practice could be improved or better informed. This involved the establishment of working relationships with local clinicians to drive the program of research. Research ethics applications were submitted.

Results
Three separate projects were designed. The first project was exploratory and involved a chart audit of patients receiving ECT for severe depression. The purpose of this project was to describe the characteristics of the population of people receiving ECT in the Cairns and Hinterland Region. The aim of this study was to investigate whether the delivery of brief cognitive behaviour therapy (CBT) during the maintenance phase of ECT will result in different treatment outcomes from participants receiving standard maintenance interventions. The third study sought to investigate the utility of brief cognitive screens in tracking the cognitive effects of ECT.

Implications for practice
This program of research has many implications. It seeks to better inform practitioners about the population of people receiving ECT in our region. Findings may provide alternative maintenance intervention options that lessen the need for further ECT, and highlight a useful cognitive screen that is more readily accessible to clinicians for use in day to day practice. These findings ultimately impact on consumers seeking help to overcome severe and chronic depression. Finally, the program of research will provide opportunities for local clinicians to be involved in clinically based research.

Key message
Systematically developed research programs are an effective way that clinicians can have a meaningful impact on their practice, be involved in research, and improve services.

Sex/gender research, clinical practice and health outcomes for trans clients
Nyah Harwood, Needle Syringe Program & Harm Reduction Early Intervention Service, Melissa Vick, retired Associate Professor

Background and rationale
Medical research into sex/gender has largely been premised on the assumption that all people live as the gender that correlates to the sex they were assigned at birth; that sex/gender are unchanging and fixed; and that there are only two modes of embodiment – male and female – with behaviours appropriate to each of those morphological forms. ‘Trans’ (gender/sexual) refers to the small but significant minority of people whose bodies and experiences are at odds with that set of assumptions. Extensive literature documents tensions between researchers and clinicians on the one hand and those who experience themselves in ways conceptually precluded by dominant understandings of sex/gender. Our qualitative research explores the experiences of trans women and the implications of the application of dominant binary understandings by health practitioners for their health and wellbeing.

Methods
2. Thematic analysis of qualitative empirical data, drawing on this elaborated understanding.

Results
Conceptual analysis of the methodological and empirical basis for the view that there are only two sexes and genders, that sex and gender correspond to each other, and that the are biologically fixed shows that current mainstream assumptions about both the binary nature of sex/gender, and the stability of sex/gender categories are reductionist and conceptually problematic. Analysis of the uncritical application of these assumptions in administrative and clinical practice shows how they produce conditions of violence and marginalisation for trans populations that work against good health outcomes.

Implications for practice
Understandings of sex and gender as binary and stable need to be re-worked in clinical practice to improve health outcomes for trans and queer clients.

Key message
1. Assumptions commonly made by clinicians about sexed/gendered bodies are confounded by trans bodies.
2. These assumptions are a source of violence and marginalisation rather than health and wellbeing.

Innovative methods for the control of Aedes albopictus, a new vector of dengue and chikungunya viruses in Australia
Dr Odwell Muzari, Senior Medical Entomologist, Tropical Public Health Services Cairns.

Background and rationale
Aedes albopictus (the Asian tiger mosquito) is an aggressive daytime-biting mosquito which can transmit chikungunya and dengue viruses. In Australia, this mosquito species has been detected in parts of the Torres Strait since 2005. It is highly invasive, readily adapts to diverse environmental conditions and can potentially become established in all states of Australia within a short period. Therefore, a program to prevent further spread of the new vector is being implemented in the Torres Strait by the Tropical Public Health Services (Cairns).
When the program started, control methods routinely used against the local dengue vector *Aedes aegypti* were evidently not effective enough against *Ae. albopictus* due to differences in ecology and behaviour. Consequently, new control strategies had to be developed, evaluated and implemented quickly. One of the key control methods recently adopted involves the application of residual pyrethroid insecticide to vegetation known to harbour adult *Ae. albopictus*. Evaluation of the effectiveness of this harbourage-spraying strategy was conducted on Horn Island and in Cairns.

**Methods**

Surveys for determining the distribution of *Ae. albopictus* in and around the community of Horn Island were conducted before and soon after application of the residual insecticide Lambda-cyhalothrin to some of the identified harbourage sites of the mosquito species.

Further studies to evaluate the residual efficacy of Lambda-cyhalothrin were conducted in selected areas infested with various mosquito species in Cairns. Weekly mosquito surveys were conducted to compare mosquito densities between treated and untreated sites over a 14-week period.

**Results**

Assessments on Horn Island showed 100% effectiveness of treatments soon after application. Studies of residual efficacy in Cairns demonstrated 100% control for up to six weeks, and at least 70% control for 12 weeks. The technique also resulted in successful suppression of *Aedes albopictus* populations over a three-year period on Horn Island and Thursday Island.

**Implications for practice**

Different mosquito species require different control strategies, and methods are most effective if developed in line with the specific ecological characteristics of the targeted species.

**Key message**

The harbourage-spraying strategy is an important tool to suppress mosquito populations and to control outbreaks of chikungunya and dengue in areas where *Aedes albopictus* is the dominant vector.

**Making Accountability Count: How the implementation of an electronic foodservices system is changing resource management in the Cairns Hospital kitchen**

**Lindsey Johnson, Food Services Dietitian, Cairns Hospital**

**Background and rationale**

Foodservices at Cairns Hospital feed approximately 400 in-patients daily plus an additional 250 day patients. As with other areas of healthcare, Foodservices has best practice guidelines and key performance indicators that guide service delivery and improvement. Statewide benchmarking activities have previously identified a number of target areas that Foodservices within Cairns Hospital could improve in; these areas include food waste, meal accuracy and menu design. In order to support Cairns Hospital Foodservices in improving these areas, a web-based, automated meal ordering system (*Delegate*) was purchased in April 2012 and fully implemented in November 2013.

**Methods**

Cairns Hospital Foodservices reports annually on statewide key performance indicators, such as cost per meal, patient satisfaction and wastage. In addition to the collection of financial data relating to food costs, data on meal accuracy and trolley waste were collected using specially created audit tools. These audits were carried out over a one week period in 2011 and 2012 respectively by Nutrition and Dietetics students. Using a similar methodology, data about patients’ satisfaction with Foodservices was collected in October 2013, shortly prior to the implementation of the *Delegate* patient meal ordering module. Repeat audits for all three domains are planned for completion in June, July and October of 2014.

**Results**

Results of the meal accuracy audit conducted in 2011 demonstrated that of the therapeutic or special meals sent from the kitchen, 85% contained errors. Furthermore 72% of full ward diet meals were inaccurate. These errors, in addition to large scale overproduction, were
resulting in average daily food trolley waste of $710.00. Foodservice satisfaction data identified meal quality as a major area for improvement and initiatives, such as a new patient menu, have been introduced to improve this domain. This presentation will cover the results of the follow up audits in addition to current comparisons against the state, and share some exciting new directions for improvement.

Implications for practice
By embracing new technologies and challenging traditional service delivery methods, we can achieve more than we ever expected of ourselves. But can we achieve more than ever expected in organisational improvement?

Key message
The introduction of an automated-web based meal ordering and stock management system, Delegate, has forced Foodservices at Cairns Hospital to change in a number of ways. Through reviewing the accuracy of meals, the amount of waste produced and patient satisfaction we are able to improve accountabilities and ensure a safer, more cost effective and better service.

Session Three: Developing and supporting our workforce

Too Close to Home: the lived experiences of rural Queensland nurses who have cared for people with cancer who have died
Ann Aitkin, Director of Nursing, Atherton Hospital

Background and rationale
Specialist oncology nurses accept that the loss of a patient from cancer will happen as a regular part of their working experience. These nurses also enjoy a large degree of anonymity away from their workplace, allowing them to leave their work and patients behind them at the end of their working day.

Rural nurses are not specialist oncology nurses. In contrast, they are specialist generalists. Anecdotal evidence suggests that many of these nurses would not choose to care for patients with cancer particularly as a long term career choice, but because of the nature of their work accept the task of meeting the often advanced needs of these patients and their families. In many instances rural and remote nurses are caring for patients with cancer may be caring for friends and in some cases, family.

For the past twenty-five years I have worked alongside nurses caring for patients with cancer in both metropolitan and rural and remote settings. More recently I have observed rural nursing colleagues caring for their friends and supporting them with compassion and skilled care to a good death. Many staff do this several times in a year, and many times over during their time in that rural setting. There is little opportunity to recover from the stress of providing that care or from the loss of a friend, before they are called to support another.

Health care is rapidly evolving and health research momentum has never been greater. In order to translate these developments into practice in a safe and timely manner research literacy is a key priority. This paper reports findings of our studies on how best to build research literacy and capacity.

Methods
This study has used the phenomenological methodology of van Manen to examine and understand the lived experience of rural nurses caring for people with cancer who have died. In-depth interviews were conducted with nurses from across rural Queensland, providing them with the opportunity to share their feelings and experiences of caring for people with cancer, and of the impact of the death of their patient.

Results
Common themes have been highlighted and explored, with the three main phenomenological themes being:
1. accepting the need to adopt progressive ways of delivering nursing care;
2. learning different ways of relating to patients and families
3. seeking that a life-work balance is achieved.
There are several sub-themes in each main theme.
Implications for practice
The results from my study will lead to recommendations relating to staff support in the rural setting for nurses caring for patients with cancer. I also anticipate that the findings of the research could be transferred to areas outside of the care of patients with cancer, to include the support of nursing staff in rural settings who care for patients with chronic and complex illness who also spend extended or frequent periods in hospital, and who die from their disease.

Key message
In the rural health care setting, appropriate and timely staff support enhances their ability to repeatedly care for patients with cancer and other chronic diseases.

Supporting junior doctors - an approach using shared reflective practice to aid the development of professional responsibility
Julie Napoli, Principal Education Officer, Cairns Hospital
Dr Emma Hogan, RMO, Cairns Hospital

Background and rationale
In 2013 “Beyond Blue” published “National Mental Health Survey of Doctors and Medical Students. Very high psychological distress in doctors aged 30 years and below was found. This study supported earlier literature that the transition from study to working may be a particularly difficult time for newly trained doctor and they may require additional support. “Shared experiences in professional practice” (SEPP) was introduced in 2011. Challenges in professional practice that can impact well-being are considered. Sessions support the development of professional responsibility through reflection.

Methods
Over 100 Interns have participated in sessions. Whilst not established as a research project, SEPP utilises reflection where Interns can build a knowledge base to enhance professional practice, enhance working relationships and develop best practice in professional behaviour. Interns are invited to share experiences at four sessions each year. Data is de-identified prior to the small group discussion. Sessions were evaluated using a 3 tier evaluation tool.

Results
SEPP is an integral part of Intern education and is regarded as innovative practice. A 5 point Likkert scale against the 3 measures was used: Relevance to interns/JHOs, relevance to practice of medicine and personal relevance. Average means were consistently above 4.0, indicating strong trends of explicit understanding of reflective practice. In 2014 additional data is being collected to measure both Intern self-assessment and Supervisor assessment in the domains of communication and professionalism.

Implications for practice
SEPP promotes the development of professionals who through reflection are self-aware and therefore able to engage in self-monitoring and self-regulation (Bandura 1986) and in turn improve patient care.
SEPP supports HWA “Health Leads” Framework. SEPP encourages participants to know their strengths, limitations and commit to self-reflection and improvement.
SEPP builds and consolidates professional learning partnerships. All health professions can utilise this model to contribute towards professional learning and to promote collaborative teamwork in the CHHHS SEPP is an integral part of Intern education and is regarded as innovative practice.

Key message
SEPP supports the work Mann et al in 2009 who noted the “potentially powerful learning effect (of reflection) in today’s complex and changing health care system by giving meaning to complex situations and enabling deeper learning from experience”.
SEPP utilises role models who support the development of “professionally responsible” Interns and fosters the well-being of participants.
Regional workforce planning in north Queensland: starting with the end in mind
Annette Panzera, Senior Research Officer, School of Medicine, James Cook University

Background and rationale
How to create a stable and sustainable health workforce in regional, rural and remote Australia has long been a challenge to health workforce planners, policy makers and researchers alike. Traditional health workforce planning is often reactive and assumes continuation of current patterns of health care utilisation. This demonstration project in the communities of Mareeba and Yarrabah exemplifies how participatory regional health workforce planning processes can accurately model current and projected local workforce requirements, respond to community needs and consider all stakeholders involved.

Methods
This process involved a novel participatory action research approach informed by WHO systems thinking framework and exemplars of best practice in health service planning. Close working relationships at all stages with Cairns and Hinterland Hospital and Health Services, Far North Queensland Medicare Local, and clinical reference groups of providers from public, private and community-controlled sectors, across medicine, nursing, allied health and management fields, supplemented with project team and local council representatives was essential to the conduct of the project.

Results
This project demonstrated that needs-based loco-regional health workforce planning can be successfully achieved through participatory processes with all stakeholders. Real health systems and workforce training solutions can be delivered by facilitating linkages and planning processes based on community need involving health care professionals across all disciplines and sectors. By focusing upon extending competencies and skills-sets, local health professional roles form a stable and sustainable local workforce. Concrete examples of initiatives generated from this process include developing a chronic disease inter-professional teaching clinic in a rural town and renal dialysis being delivered locally to an aboriginal community.

Implications for practice
The growing trend of policy makers to decentralise health funding, planning and accountability and rising health system costs increase the future utility of this approach.

Key message
Workforce planners and educators and training providers need to think more in terms of competencies and skills-sets required to meet population health needs rather than qualifications. Planning must address current workforce needs, but also training and support to ensure sustainability of the health workforce into the future. Partnerships with universities and other providers of tertiary training of the health workforce are an essential part of this process.

Is the doctor doctoring the doctor doctoring the doctor the way the doctor wants to be doctored? (Or – Does the Facility Education Program add value to the clinical knowledge & practice of interns?)
Dr Colin Baskin, Senior Medical Education Officer, Cairns Hospital
Dr Richard Whitaker, Emergency Medicine Consultant, Director of Clinical Training

Background and rationale
The Post-Graduate medical Education Unit at Cairns Hospital (CH) is responsible for the accreditation/governance of clinical teaching units within the district. Given this mandate, the PMEU is required to provide a year-long Facility Education Program (FEP) for registered interns. This discussion examines the FEP using evidence from 600 Intern evaluations conducted over six months to measure intern efficacy in clinical decision-making and practice. The data is structured and critically mined using Kirkpatrick’s (1996) Four Levels Model, a classification scheme for:
• Evaluating enterprise-learning (FEP);
• Determining the effectiveness of the learning;
• Capturing the learning behaviours of interns engaged in the FEP, and;
• Measuring learning impact (FEP on CH).
Methods
Kirkpatrick’s (1996) model was adopted to evaluate the FEP at CH. Questionnaires were used to measure reaction (satisfaction) of interns participating in bi-weekly FEP sessions (Level 1). Clinical decision-making regarding patient management options, patient safety knowledge and patient safety culture (Level 2) was captured in written feedback from interns. Content analysis of intern feedback was categorised/verified (using Membership Categorisation Devices), categorical frequencies tabulated. Hierarchical cluster analysis was used to chart the clinical decision-making patterns of interns. Factor analysis (also reverse factor) was applied to explicate constructs underpinning intern decision patterns. Project-specific quantitative measurements were used to capture changes in professional practice/patient management (Levels 3/4).

Results
All aspects of FEP were positively received by interns (Level 1). Data supports effective transfer of knowledge in clinical practices arising from FEP sessions (Level 2), an aggregated improvement in clinical knowledge. Project specific data indicates what was learned in the FEP was used to improve clinical practice (Level 3). Enhanced patient safety culture, more cost-efficient patient management & increased patient safety knowledge outcomes are in line with CH enterprise objectives (Level 4).

Implications for practice
Interns undertake the FEP weekly in 2 hours of protected time. A requirement for accreditation for teaching hospitals, the FEP value-adds to CH by:
- Disseminating bottom-line patient safety knowledge;
- Rolling-out cost-effective patient management options;
- Embedding patient safety culture built on local knowledge.

Key message
Clinical educators must counter the tug of teaching and avoid the urge to bring the classroom into the hospital. We need to make explicit the learning that arises from working.

Making the Invisible Visible: An evaluation of vicarious trauma counselling for health professionals
Nick Rayner, Senior Psychologist, CHHHS Forensic Mental Health

Background and rationale
Importantly, a study by Rothchild and Pearlman (2006) has clarified the need for ongoing education and peer supervision in identifying potential incidences of countertransference (an emotional entanglement with a client) within a clinical setting. Within natural disaster recovery work specifically, vicarious trauma (VT) and compassion fatigue (CF) are two hazardous pitfalls that can potentially derail the therapist and often interfere with the success of the formative healing process. Additionally, provision of suitable resources for helping professions to successfully reduce levels of clinical burnout (CB) and manage stress is paramount in the current healthcare system. We were requested to deliver education to a number of groups of recovery staff including Oncology nurses regarding these topics and assess the training impact and adaptability to staff generally.

Methods
A 2 hour interactive training session was provided on 5 occasions across the district to a total of 60 (n=60) NGO and government staff. Using a PowerPoint presentation in a group format the training was interactive in design. Training was supported by relevant easy to comprehend handouts that provided an inclusive synthesis of three topics (VT, CF and CB). Assessment was also completed using a pre-post questionnaire with a likert scale format facilitating open questions.

Results
The pre-post test showed a marked increase in mean scores across the sample indicating the training had good affect. Qualitative responses from participants surveyed also indicated an increased level of awareness and comfort when discussing the topics amongst colleagues following training.

Implications for practice
The adaptation of this training to a broader target audience may also be beneficial for staff employed in a post disaster setting or a workplace frequented by clientele experiencing high levels of complex
Trauma. Training of this type may also be used to prevent staff burnout and may have a direct impact on reducing staff absenteeism and employee retention rates.

**Key message**
Providing this method of intervention may safeguard practitioners who are at risk or susceptible to becoming overwhelmed by clinical burnout and mediating with clients and colleagues effectively.

**Stimulating Simulation: An exploration of participant experiences of collaborative simulation in the Emergency Department**

**Hilary Pearce, Nurse Educator, Emergency Department, Cairns Hospital**

**Background and rationale**
Simulation education has been an integral part of healthcare education for decades. This case study examined the experiences of Registered Nurses undertaking collaborative simulation education in a regional hospital in Far North Queensland. The main focus of this study was on how a modified scenario design impacted on participant engagement and learning. The Emergency Department (ED) at Cairns Hospital (CH) has established a pocket simulation program which is conducted weekly and is largely facilitated by ED physicians. Historically, these sessions were designed with strong medical focus which resulted in the nursing cohort feeling left out or disengaged. Additionally, some of the sessions were unplanned or decided at the last minute which caused problems in terms of cohort capability and communication/input with the nurse facilitator.

**Methods**
Using case study design, mixed methods were used to investigate the impact of simulation education on Emergency Department staff (staff survey) as well as the lived experiences of five nurses who participated in pre and post-intervention interviews. The intervention comprised of a modified scenario which encouraged engagement of all cohorts in collaborative through the consideration of adult learning principles. The researcher also contributed data through the compilation of a participant observer log. The data was viewed through a phenomenological lens to explore participants’ experiences of simulation education at the study site. Benner’s theory of professional development in nursing was used as a framework to determine if the engagement of nurses was influenced by nursing expertise.

**Results**
Seven main themes were extrapolated across all the data sets. They included:
- Simulation education is relevant to clinical practice
- There is limited access to simulation education
- The importance of critical leadership
- The engagement of all staff cohorts in collaborative simulation
- The effect of experience on engagement
- The impact of scenario fidelity on engagement.

**Implications for practice**
Simulation education at the study site is considered valuable but difficult to access. Consideration should be given to extending the program further. Expertise rather than experience is a key determinant of engagement in the collaborative simulation for the nursing cohort. The debriefing is the most effective aspect of simulation education.

**Key message**
When designing collaborative simulation education, it is important to consider the differing learning objectives of each cohort as well as the attributes of the nurses. The presence of an "expert" nurse has a positive impact on the learning experiences of other participants. Expertise is not necessarily linked to experience.

**Session Four: Quality activities to improve services**

**How we discovered the 'Pot of Gold at the End of the Rainbow' resulting in clinical pharmacy provision for our rural and remote region**

**Michelle Rothwell, Pharmacist, Atherton Hospital**
Background and rationale
Delivery of pharmacy services in the rural and remote areas of our district presents unique challenges. The vast distances with few people, high demand and minimal resourcing has resulted in underservicing for both clinicians and patients. Pharmacy service consists of supply and occasional phone information for nursing staff. Most sites have never been visited by a pharmacist and there has been no capacity for services such as staff education, clinical pharmacy services or support for visiting medical officers. This presentation will highlight the readily available processes, tools and data used to obtain funding as well as the proposed new pharmacy services for this region.

Methods
Elements described include the use of current CHHHSD processes to highlight service delivery challenges to the ‘movers and the shakers’ who can influence change. Identification of service gaps for the funding application used quality processes such as the ‘Medication Safety Self-Assessment for Australian Hospitals’ tool and the assessment of current services against the Australian Commission on Safety and Quality in Healthcare (NSQHS) Standard 4: Medication Safety. The identified gaps were then used to form the basis of the funding application and define the outcomes.

Results
The funding application to the ‘Revitalisation of Regional, Rural and Remote Health Services Programme’ was successful resulting in two FTE pharmacists and one FTE pharmacy assistant recurrent.

Implications for practice
This will allow for implementation of clinical pharmacy systems in both the rural hospitals as well the seven rural facilities in the region. A Telehealth clinical pharmacy system will be developed consisting of services such as staff medication education, patient pharmaceutical review and access to a pharmacist for visiting medical officers.

Key message
The message here is that it is possible to drive change from the coalface of service delivery. The use of data from quality processes already in place can be utilised for funding applications and save busy clinicians time; it may even result in a ‘pot of gold’!

   Accessed 18.01.2014

Facing the times: The Young Onset Dementia Support Group Facebook initiative
Denise Craig, Psychologist, Aged Care Assessment Team/Memory Clinic

Background and rationale
People diagnosed with dementia prior to age sixty-five (Young Onset Dementia) typically experience a profound sense of fear, loss, isolation, stigma, hardship and prescribed disengagement. There are few specialist services for their age group, and individuals can ‘fall between cracks’ in services. Many actively seek information and solutions but feel neglected and misunderstood when support is provided predominantly to carers or family members. Today, many people turn to the Internet for information and struggle to ascertain reliability.

Methods
The Young Onset Dementia Support Group was established on Facebook in 2012. Page likes and utilisation has steadily increased from this time. It is linked to leading dementia information service Alzheimer’s Australia, and is widely promoted through direct referrals, webinars, conferences and social network forums. Consumers can locate it via Google search for Young Onset Dementia support groups.

Results
Facebook is connecting young people with dementia globally and helping to raise awareness about the many and varied implications of dementia. The page gives access to vetted newsfeeds and encourages social inclusion. Statistics suggest posts reach a wide audience quickly, with current estimates of a potential reach of >40,000 friends of friends. Posts are selectively chosen to encourage empowerment and understanding; they are monitored for inappropriate content; and people with dementia are able to contribute in their own time, pace and style.
Implications for practice
Social media provides support which escapes temporal, geographical and spatial limitations. Conscientiously administrated, Facebook’s Young Onset Dementia Support Group provides a valuable opportunity for people with dementia to express themselves and support each other. Whilst care providers are not the target audience, their engagement with the page provides them opportunities to reflect on their practices and beliefs, and to appreciate the perspective of people with dementia, whose posts can constitute articulate and powerful communications.

Key message
People with dementia often feel stigmatised, isolated and misunderstood. They value respectful inclusion which accommodates their needs. Facebook provides one such opportunity to encourage and hear the rich voices of people with dementia. Improved service provision for consumer groups may be just a few clicks away.

Intake - The Initial Contact Consultation
Deborah Elder, Social Worker, Child Development Service (CDS)
Judith Groube, Social Worker, Aged care Assessment Service (ACAT)

Background and rationale
Waiting times for assessment at CDS & ACAT (2007) averaged 6 months. At the time of assessment, it was often found that the person referred did not meet the eligibility criteria and that another service would better meet the need. In talking to referrers it was evident that there was confusion around the different services & their criteria. This confusion was also reflected in discussion with consumers.

Methods
A review of core business was conducted & based on this, information provided to referrers & consumers. The referral form was revised & an intake role established within current capacity. At ACAT this role identified the need for an initial clinical conversation with the older person, the referrer & other relevant services. The referral was then either accepted & allocated to the multi-disciplinary team or referred on to the appropriate service, with a ‘feedback loop / documentation’ to the referrer. At CDS, an initial contact consultation (ICC) was established by social work & then extended to include a multi-disciplinary assessment. This ICC model is now run as a Clinic (3 time slots per day). It also includes a ‘feedback loop / documentation’ with a comprehensive ICC summary.

Results
For ACAT, the inappropriate referral rate dropped from 19% to under 5% for community referrals & from 42% to under 8% for inpatients. The waiting time for assessment has gone from 6 months to within 6 days for inpatients & within 3 weeks for outpatients. At CDS the key outcomes have been - accuracy of waitlist & timely referrals to services for children & their families.

Implications for practice
This model of intake has proved beneficial both across the care continuum & across the age spectrum. It has been developed within capacity & has resulted in improved service outcomes.

Key message
Service specific intake, based on a clarity of core business, strong partnerships with the service community & referrers and an initial clinical conversation/ consultation is key to timeliness of assessment & access to the appropriate service for consumers.

Investigating a perception – are the surgical patients going hungry?
Laure Baumgartner, Senior Dietitian, Clinical Educator, Cairns Hospital
Grace Simpson, Surgical Ward Dietitian, Cairns Hospital

Background and rationale
Patients with excessive periods of inadequate nutrition were anecdotally observed on the Cairns Hospital Surgical Ward. This quality improvement activity aimed to verify and quantify this. Nil By Mouth (NBM) and Clear Fluids (CF) diet codes provide no or minimal nutritional value (0kJ, 0g protein and 2092kJ, 15g protein respectively) to a population who is typically catabolic and where malnutrition can increase risk of complications. NBM and CF will be termed as ‘inadequate nutrition’.
Methods
For two months data was collected on the diet code journey of patients on the Cairns Hospital Surgical wards. Trendcare was used to identify the patients on NBM or CF for three or more consecutive days. Those patients were then tracked to identify when adequate nutrition commenced (this included free fluid diet, the commencement of total parenteral nutrition or nasogastric feeds and all solid diet codes). Gender, treating consultant, length of stay, surgical admission type/diagnosis, suspected reason for NBM or CF diet and the total days spent on inadequate nutrition were also recorded.

Results
Thirty four patients received inadequate nutrition for three days or more, with a mean of 5 days. Nineteen patients (54.2%) received inadequate nutrition for five days or more and eleven patients (32.3%) received inadequate nutrition for seven days or more. Patients receiving inadequate nutrition for five days or more were mostly admitted with small bowel obstructions (SBO) (six) or a hepatobiliary reason (five). Three patients received inadequate nutrition for nine days; they were admitted for SBO (2) and a colorectal reason (1).

Implications for practice
Although reasonable that patients with SBO or hepatobiliary disorders (e.g. acute pancreatitis) may be fasted for greater than 3 days, there is concern that this extends beyond a week in some cases. Also, importantly, the tracked colorectal patients received inadequate nutrition for an average of five days when this may not have been necessary since early feeding postoperatively in this group is now understood as best practice.

Key message
This audit has prompted further investigation such as; are colorectal patients being fed early postoperatively and should SBO and acute pancreatitis be screened more closely to facilitate nutrition support?

The use of a delegation model of care for identification of patient supportive needs in a cancer care setting
Dan Pratt, Oncology Psychologist, Cairns Hospital

Background and rationale
Patient supportive needs screening was identified as a priority area for improvement by the cancer care service review in 2013. A holistic approach to screening including nutritional, physical, social, and emotional needs has been identified as best practice in the cancer care setting. Screening at initial diagnosis provides opportunity to target Allied Health (AH) services towards the most complex patient needs and for prevention or early interventions to occur.

Methods
All new cancer care patients presenting at Cairns Hospital since July 2013 were identified for screening by an Allied Health Assistant (AHA). Upon completion, outcomes were reported to the appropriate AH professionals where delegation of further clinical tasks to the AHA could occur, or professional intervention commenced. Where appropriate criteria led delivery of tasks by the AHAs, including targeted screening or basic educations were completed at the time of initial screening. This included completion of the FROP-COM assessment and provision of preventative education for falls risk identified patients, Hospital Anxiety and Depression Screening (HADS) with distressed patients, and dry mouth, nausea, or poor appetite educations with identified non-complex patients.

Results
More than 400 patients have now been screened with an AHA since July 2013. This has allowed for the early identification of patient supportive needs and the provision of targeted preventative educations and interventions by AHAs and AH Professionals. By implementing a delegation model with trained AHAs, including selected criteria led task delivery; patients identified as requiring supportive needs through a structure screening tool were provided with an appropriate and timely AH service.

Implications for practice
Implementation of AH supportive needs screening has improved:
- Identification of patients requiring AH services
- Provision of preventative educations e.g. falls prevention
- Prioritisation and identification of complex patients requiring AH professional intervention.

However, implementing broad screening without adequate service capabilities to match identified demand is a risk. The use of a delegation model of care utilising trained AHAs has been an appropriate measure for improving patient access to AH services in the cancer care setting.

**Key message**
Completion of patient supportive needs screening by an AHA at initial presentation at service assists in identifying appropriate patients requiring access to AH services in the cancer care setting.

**Discharging patients from PACU in an era of the ADDS system**

**Darren Armstrong, Clinical Nurse, Post Anaesthetic Care Unit (PACU)**

**Background and rationale**
All across the nation, individual PACU's have devised and implemented their own discharge criteria. These criteria are idiosyncratic in nature and are based on preference of individual treating clinicians. In a number of instances the criteria set as the benchmark for discharge was lacking supporting evidence. The introduction of the ADDS chart usage postoperatively to document patient progression highlighted the disconnect between the minimum standard tolerated by the ADDS form & the PACU discharge criteria. This resulted in patients deemed fit for discharge from PACU, and subsequently required either immediate medical review or more often Medical Emergency Team (MET) assessment upon reaching the ward. The ensuing scenario caused significant stress and anxiety for both ward and PACU staff and significantly had an impact on the health and safety of post-surgical patients.

It was decided that a whole of process evaluation was required to address these issues.

**Methods**
mini heaps format was utilised to analyse the practices and extraneous variables. Data was gathered from current PACU environment & practices by observation of clinical practice, examination of discharge criteria values, research evidence within current texts and databases. Previous patient data was retrieved from medical records. A phone survey was conducted with a number of PACU's across the state who had a similar profile.

**Results**
Gaps were identified between discharge criteria, individual practice and ADDs chart. Practices across the state were inconsistent and reflected individual hospital idiosyncrasies. To close the gap, the patient discharge criteria was reviewed and modified by a multidisciplinary team to better reflect the ADDS minimum criteria. A new transfer protocol was implemented to ensure the receiving completes a patient assessment and records observations on the ADDS at the time of bedside handover. Additionally, the patient is able to return to PACU within an hour of discharge if the ADD's score requires it. This was then written into a work place protocol and staff were educated in the process.

**Implications for practice**
Continued vigilance in promoting patient safety, along with ongoing education in and around discharge of post anaesthetic patients to ward environments will improve patient outcomes, reduce the burden on the MET team to attend post surgical patients in the early postoperative period and improve communication between care providers.

**Key message**
The discharge criteria are a tool that needs by its very nature to be flexible. The advent of ADDS forced us to evaluate what was safe and what was not. In so doing we were given an opportunity to assess not just the needs of the patient but also the requirements of a busy PACU and what that would mean for its stakeholders. The outcomes have been positive in more ways than could a first have been possible envisaged.
What is the Needle and Syringe Program and why is it so important?
Gulliver Welch and Mark Mills, Needle and Syringe Program, Alcohol Tobacco and Other Drugs Service

Background and rationale
In 1985 the National Drugs Summit identified that injecting drug use posed a significant risk for the transmission of Blood Borne Viruses (BBVs) such as Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV). By supplying sterile injecting equipment, Needle and Syringe Programs (NSP) operate in Australia as part of the broader Harm Reduction approach adopted by the Australian Government’s National Drug Strategy, and work to prevent the spread of BBVs.

Methods
This presentation will combine quantitative data collected at each service occasion at the Alcohol Tobacco and Other Drug Service (ATODS) Needle and Syringe Program (NSP) in Cairns, as well as data collected at a national level, with the presenters’ extensive personal experiences working in NSP.

Results
The data shows that through the provision of sterile injecting equipment, Australian NSPs help prevent BBV transmission; reduce the risk of bacterial or other viral infection; reduce injecting related injury and/or disease; facilitate access to other health and related services; reduce the number of used needles being improperly discarded in the community. This translates to a cost saving of four dollars for every dollar invested in NSPs over a ten year period. In this way, NSPs are a vital public health resource.

Implications for practice
Queensland Health policy states that every health service district must provide at least one NSP within its area. People Who Inject Drugs (PWID) are a marginalised and invisible minority covering a broad demographic. It is thus highly likely that health care professionals will encounter clients who inject drugs. A basic understanding of NSPs service provision can ensure that health care professionals prompt conversation about access to NSPs, BBVs, and safer injecting practices.

Key message
The support of all Queensland Health employees and the community at large, as well as the recognition of the need for NSPs, are key factors in the day-to-day operation of NSPs and the subsequent prevention of the spread of BBVs.

Lock, Stock and Dual Smoking Antibiotics: Successful Novel CVC Line Salvage using combination Antibiotic Lock Therapy (ALT) in Haemodialysis
Dr Murty Mantha, Renal Specialist, Cairns Hospital
Dr John Paul Killen, Renal Specialist, Cairns Hospital
Dr Richard Baer, Renal Specialist, Cairns Hospital
Dr Amit Nigam, Renal Specialist, Cairns Hospital
Dominic Breslin, Senior Renal Pharmacist, Cairns Hospital
Mary Elliott, Chronic Kidney Disease Pharmacist, Cairns Hospital

Background and rationale
Catheter-related bacteraemia (CRB), associated with a microbial biofilm, is a serious complication in central venous catheter (CVC) use in haemodialysis patients. Despite significant morbidity, mortality and economic burden, research into use of ALT in this setting remains unsatisfactory. We describe two examples of ALT both using dual antibiotics for catheter salvage. One particular ALT’s originality prompted its selection for poster presentation at Antimicrobials 2014.

Methods
Two haemodialysis patients, both on three times a week dialysis, were receiving a gentamicin (GEN) lock as per unit protocol. However, these patients developed CRB and the decision was made to salvage the CVC’s in both cases.

Case 1: This patient developed *Citrobacter freundii* CRB and infectious disease (ID) recommended amikacin (AMK) as ALT salvage therapy. A few weeks later, he developed another CRB due to
Corynebacterium jeikeium sensitive to vancomycin (VAN) and dual (AMK+VAN) ALT was suggested. Although evidence supported compatibility of the antibiotics in lock solution, there were no studies to confirm the combination’s efficacy in ALT. Since microbial antibiotic susceptibility confirmed this as a logical ALT therapy, it was administered. The CVC remained successfully in situ for another couple of weeks, but the decision to remove the CVC was eventually made in the light of suitable native arteriovenous access.

Case 2: This patient had developed Achromobacter xylosoxidans CRB which already proved resistant to GEN but susceptible to piperacillin-tazobactam (TAZ). As per unit protocol TAZ ALT was commenced. Three months later the Achromobacter xylosoxidans CRB returned, with again, susceptibility to TAZ, but also susceptible to trimethoprim-sulfamethoxazole (TMP-SMX). Poor penetration of the biofilm by TAZ was suspected. Removal of the catheter was suggested by ID, however a switch to an innovative TMP-SMX antibiotic lock and concurrent oral TMP-SMX therapy was instituted. Ongoing treatment with this novel regime resulted in successful CRB treatment and salvage of the CVC.

Implications for practice
The development of these two ALT’s for haemodialysis patients may have potential for application in other health care scenarios (palliative and total parenteral nutrition).

Key message
This case highlights the need for more research into the antibiotic lock options for contaminated CVC’s.

Rituximab-Induced Progressive Multifocal Leukoencephalopathy (PML): A Catch-22 in the Treatment of Haematological Patients
Kim Jones, Pharmacist, Atherton Hospital
Michelle Rothwell, Pharmacist Atherton Hospital

Background and rationale
To describe a case of rituximab-induced PML, initially presenting as benign but resulted in prevention of treatment for the patient’s chronic lymphocytic leukaemia (CLL). TS, a 48 year old, self-employed, active Caucasian male had undergone 4 chemotherapy cycles over 4 months consisting of fludarabine, cyclophosphamide and rituximab. TS twice attended the emergency department; prior to and soon after his last cycle complaining of dizzy spells which responded to prochlorperazine and metoclopramide. Twelve days later he was admitted to hospital with increasing dizziness, unsteady gait and an onset of dysphasia. Neurological examination showed marked deficits in vision, speech and movement. Serological investigations were positive for the detection of John Cunningham virus (JCV) DNA in cerebral spinal fluid (CSF). A magnetic resonance image (MRI) of the brain exhibited demyelination bilaterally. A diagnosis of PML was made.

Methods
Initial treatment consisted of mirtazapine, plasmaphoresis and interferon therapy, which was ceased due to pancytopenia. Two doses of cidofovir were then administered 1 week apart. After 25 days an MRI showed evidence of progressive disease in the posterior fossa and TS self-discharged seeking non-medical alternatives. Four days later TS re-presented with respiratory distress and inability to mobilise. Pneumonia was suspected and treated with ceftriaxone and azithromycin. Stat doses of mefloquine for PML were then given thirteen days apart.

Results
It is not anticipated that treatment for CLL will be able to be resumed as treatment of PML relies on maximising immune response and treatment of CLL induces its suppression. TS is now considered palliative although he did improve enough for discharge home.

Implications for practice
Rituximab now has a black box warning in Australia to raise awareness of PML as a possible adverse effect. There is limited evidence on the use of mefloquine but it was thought worth trying.

Key message
Although the incidence of PML in patients with CLL is very rare at 0.52% this case illustrates it can happen and that when it does it presents a very real clinical dilemma.
Involving Consumers in Research: The ASPIRE Study
Rachel Quigley, Research Officer, Analysing Sub-acute and Primary Health Care Interfaces – Research in the Elderly (ASPIRE) study

Background and rationale
Leading grant organisations expect applicants to include information about consumer and community engagement in the research cycle and to report on this aspect of the research. Many clinicians are inexperienced in addressing these criteria. In 2013, The Australian Primary Health Care Research Institute (APHCRI) sought applications for research on strengthening the relationship between sub-acute and primary health care. Applicants were required to specifically address consumers and stakeholder engagement, and to include an implementation plan for study findings. The ASPIRE study was one of five successful grants awarded nationally.

The purpose of this presentation is to describe the ASPIRE study consumer and community engagement strategy and to report on its implementation.

Methods
The consumer and community engagement strategy included establishing a Project Advisory Committee (PAC) of local service providers to advise and provide professional and strategic expertise on the operation and progress of the study and a Consumer and Carer Reference Group (CCRG) to contribute consumer and carer perspectives to the operation and progress of the research. Each group will meet three times during the study. The study budget included funding for travel for consumers and carers to attend meetings and for catering. A communication strategy targeting policy makers, providers of primary care, researchers and users of primary care services was developed.

Results
The PAC and CCRG (each with seven members) met for the first time on 10 February 2014. Terms of Reference were agreed and each group provided valuable input into operationalization of the project including feedback on data collection tools, communication strategies, recruitment and participant care during data collection. Monthly PAC and CCRG newsletters have commenced and presentations provided to local hospital and other service networks.

Implications for practice
Active involvement of consumers in the research process as well as being ‘subjects’ of research can provide a better understanding of the research topic, improve research quality and increase relevance of research to service users.

Key message
Examples of successful local grant applications which have incorporated consumer and community participation strategies can strengthen research capacity by building consumer and service networks and increasing experience and expertise in this aspect of research.

Audit of outcomes of radial artery puncture for coronary angiography and intervention at Cairns Hospital
Dr Shane Clifford, Medical Registrar, Cairns Hospital

Background and rationale
Coronary angiography is an invasive procedure to investigate and manage patients with coronary artery disease. The two access points are the femoral artery (the original method) or the radial artery. The trans-radial is the preferred approach in Cairns Hospital as patients are able to immediately ambulate following the procedure, compared to a mandatory period of recumbence following the trans-femoral approach. This audit aims to determine the rates of the complications of performing coronary angiography by radial artery puncture.

Methods
This study is an audit of all patients who underwent trans-radial percutaneous coronary angiography over a period of 9 months from June 2013 to January 2014. Using a single page template results were collected by medical and nursing staff in the cardiac catheter laboratory and the coronary care ward.
The data collected from each coronary angiogram included patient age, catheter sheath size, anticoagulants used, use of vasodilator, whether or not angioplasty was performed, total radial band inflation time, complication rates of haematoma and if the radial artery was patent. The definition of complication in this audit was presence of haematoma at discharge and radial artery patency determined by pulse oximetry using the modified Allen’s test.

**Results**
A total of 398 patients had their data collected, of these 265 were had adequate information regarding the outcomes. The average patient age was 59.95 years (Range 29-85 years). The incidence of haematoma at discharge was 41, or 15.47%. The incidence of radial artery non-patency was 17, or 6.42% of patients in this audit.

**Implications for practice**
This audit has identified the rates of complications following trans-radial coronary angiography in Cairns Hospital. Trans-radial approach to percutaneous coronary angiography has rates of haematoma at 15.47% and radial artery non-patency of 6.42%.

**Key message**
These results can be used to educate patients undergoing coronary angiography during their informed consent. These figures are comparable with similar international studies of radial artery coronary angiography and intervention showing safe practice at Cairns Hospital.

**Enhancing patient care and QoL: Cairns Hospital’s evidence-based Aphasia-friendly menu**
*Stephanie Terblanche, Speech Pathologist, Cairns Hospital*

**Background and rationale**
Aphasia has an incidence of up to 38% in acute stroke patients. It is an acquired communication impairment affecting understanding, speaking, reading and writing. Hospitalised people with aphasia (pwA) are frequently unable to access healthcare services, participate in conversations or make decisions regarding their living arrangements. Reduced access, choice and control due to communication difficulties adversely affects activities and participation. Research supports the utility of presenting health information in an aphasia-friendly format to assist pwA, enhancing access and participation. There is an increased need for healthcare services to be more communicatively accessible to pwA.

This project investigated whether the use of an evidence-based aphasia-friendly menu improves the ability of pwA to participate in hospital menu selection. It aimed to improve the ability of pwA to participate in menu selection via the development and pilot trial of the menu.

**Methods**
Literature reviews were conducted examining the utility of aphasia-friendly documentation for pwA and identifying the evidence-based aphasia-friendly documentation principles to guide menu design. Speech Pathology and Food Services staff were consulted to assess the need for such a menu. Questionnaires were administered to pwA and their family members to identify current barriers, levels of support required for menu selection and factors to assist in it. The menu was trialled with 2 pwA, along with a questionnaire analysing its features and utility.

**Results**
Results indicate that the evidence-based aphasia-friendly menu has utility in improving the ability (ease of use) of pwA to participate in hospital menu selection.

**Implications for practice**
The aphasia-friendly menu has utility in increasing and improving participation, control and quality of life for pwA within the hospital setting. Future directions include updating the menu and examining practicalities for implementation such as printing costs, using soft copy menus and training of staff. Due to the diverse nature of aphasic difficulties, menu trial with a larger sample of pwA is indicated to demonstrate extended validity for an array of presentations.

**Key message**
The menu has demonstrated promising, preliminary utility in increasing the ability (ease of use) of pwA to participate in menu selection within the hospital setting.
Mapping what matters: How speech pathology developed a tool for service demand comparison
Natalie Winter, Advanced Speech pathologist, Cairns Hospital

Background and rationale
The recent CHHHS restructure resulted in a service provision shift from facility based to divisional across the HHS. This shift prompted speech pathology to review the core business of its services to ensure efficiency, and to compare workloads across services to map demand. In attempting this, it became clear that speech pathology services across the HHS prioritised their caseloads differently, making identification of overall service gaps impossible. To compare services and equitably judge service gaps, one tool for prioritisation of speech pathology clients across all services in the HHS needed to be developed.

Methods
To develop a single prioritisation tool, extensive consultation was required. All Department of Health speech pathologists provided their individual prioritisation tools. Similarities and differences between prioritisation tools were identified. At individual site visits and whole team meetings, discussion about how each service prioritised their clients and how clients should be prioritised was facilitated. A draft prioritisation document covering adult, paediatric, inpatient and outpatient settings based on severity rather than condition was compiled with guidelines for waiting times. Each service then mapped data including breaching times to assessment, number of priority 1-5 patients, percentage of each priority being seen, and breaches of waiting times.

Results
The data from every service was analysed and summarised. Key findings included:
- across the board breaches for initial assessment of outpatients
- significant breaches in waiting times for Priority 3, 4, and 5 outpatients, with the most significant clinical gaps in Cassowary and Hinterland hubs
- Inpatient and outpatient services comparable in provision of service to lower priority patients (able to manage priority 1s and 2s with reduced service delivery to 3s, 4s, and 5s)
- No service was able to see all patients to evidence based standards

Implications for practice
These results were presented to the speech pathologists and their team leaders. This prompted discussion about innovative methods to address the resourcing issues including refining of core business, caseload shift where appropriate, and roll out of student clinics. As a result of this exercise, a clear map of service gaps with solid data is available for use in escalating risk assessments and planning for the future. This process could be replicated by other services or disciplines.

Key message
Compiling one prioritisation tool for discipline use across the HHS is a valuable method of mapping service demand and reviewing the consistency, efficiency, and quality of service provision for that discipline.

Clinicians’ experience of implementing a shared competency, delegated practice framework in an allied health cancer care team
Lindsey Johnson, Food Services Dietitian, Cairns Hospital

Background and rationale
Cancer services within the Cairns & Hinterland Hospital and Health Service have experienced significant growth over the past 5 years that has resulted in a large increase in the number of referrals received by Allied Health Professionals (AHPs). The Cairns Hospital Allied Health Cancer Care (AHCC) service has redesigned their model of care through a detailed review process which includes use of the Calderdale Framework – a shared competency, delegated practice framework.

Methods
Surveys quantitatively measuring staff satisfaction were collected pre-, during and post-implementation of the redesigned model of care. Qualitative data was also collected through free text boxes contained within the surveys and through the completion of focus groups. Survey questions focused on clinicians’ satisfaction in their current role, the level of perceived support they had
received throughout the implementation, their perceptions of the efficiency of the model of care, and their confidence in sharing and delegating tasks.

Results
Throughout the project, 100% of clinicians felt well supported by the project management team, although 33% of clinicians felt overwhelmed by the additional workload required to complete the project. The qualitative results echoed that whilst clinicians believed in the change and potential to “make significant time savings and efficiencies”, it was difficult “trying to keep up with clinical duties”.

Implications for practice
Throughout this process, time was the major theme to emerge and it was described in both positive and negative ways. In a climate where time and practice efficiency are so valuable, this project shares a number of lessons that can be applied by all disciplines to assist in approving services whilst maintaining staff satisfaction.

Key message
The time required to create meaningful service change can take toll on clinicians and impact the success of projects, however in supporting clinicians through the practice change and providing key enablers such as protected time, the results can be rewarding.

Outcomes from a community-based rehabilitation stroke service in Cape York
Rukmani Rusch, Speech Pathologist, Aboriginal and Torres Strait Islander Stroke care Team

Background and rationale
The incidence of stroke for Aboriginal and Torres Strait Islander people is 1.7 times higher than that of other Australians. In Cape York, stroke survivors have no access to community-based rehabilitation services. Those who require face-to-face rehabilitation must travel hundreds of kilometres to access outpatient services. A physiotherapist and speech pathologist were employed by Cape York Hospital and Health Service to develop and deliver a multidisciplinary pilot follow up service to stroke survivors living in Cape York.

Methods
Over a 9 week period, a pilot stroke follow-up service was delivered in Aurukun and Lockhart River. Service delivery included assessment, intervention and provision of education to stroke survivors, their families and primary health care centres. Stroke survivors who identified mobility or communication difficulties (n =10) set a meaningful ‘2 week goal’ to work towards by the completion of the project visits. Pre and post therapy, participants rated their goal on a visual analogue scale that ranged from 0 (‘unable to perform activity’) to 10 (‘able to perform as well as I would like’). Stroke survivors and health service staff were interviewed about the service provided and their vision for future stroke services in each community.

Results
Prior to participation in the program the average goal rating was 3 (SD = 1.2), while after the program it was 7.6 (SD = 1.4) with an average improvement of 4.6 (SD 1.9). Qualitative findings indicate that the service was well received by stroke survivors and primary health care centre staff. All participants expressed a need for increased availability of community-based rehabilitation and post-stroke follow-up.

Implications for practice
Follow-up stroke services consistent with the core principles of community-based rehabilitation are needed in the Cape York communities of Aurukun and Lockhart River. Additional Cape York communities that were not visited during this project may also benefit from these services.

Key message
Community-based rehabilitation and post-stroke follow-up services could be used to increase accessibility of services and facilitate achievement of meaningful goals for stroke survivors living in Cape York.
FEEDing the hungry: Creation of a demand management toolkit to support clinical dietitians
Lindsey Johnson, Food Services Dietitian, Cairns Hospital

Background and rationale
With an ageing population, changing workforce and increased consumer expectations, it is imperative that local dietetics services are able to determine clinical priorities. Whilst other allied health disciplines utilise validated tools, resources used by Nutrition and Dietetics have not been evaluated and as such are dependent on consensus as opposed to evidence. In a recent article, authors Porter & Jamieson concluded that “further work should be undertaken in this area to address validity and reliability of triage documents, and to monitor changes in priority and focus of dietetic practice”.

Methods
FEEDS (Framework for Efficient and Effective Dietetics Services) is a toolkit being developed to assist dietitians and managers with service development and planning by providing a quick reference to available evidence-based guidelines and clinical support tools. The project engages stakeholders in cross-district consultations to collect and collate data representing the clinical practice undertaken by Queensland Health dietitians. Data being collected includes:

- key tasks performed by dietitians across various clinical caseloads (core business);
- clinical rationale for the completion of nutrition care tasks or services;
- competencies and/or qualifications that must be held by dietitians performing these tasks;
- location, frequency and mode of delivery of dietetics interventions; and
- the supporting evidence that has given rise to this information.

Results
The toolkit will be able to be used in the development and alignment of priorities (local and state-wide), in service planning and restructuring, in benchmarking between sites, and in paving the way for validation of prioritisation tools. The resource will also serve in continuing to promote evidence-based practice amongst clinicians and to ensure that provision of clinical dietetics services across the state continue to be responsive, safe, efficient, effective and, wherever possible, proactive.

Implications for practice
In a discipline that lacks evidence supporting service delivery, a toolkit that integrates available evidence with expert opinion is a valuable resource for supporting clinicians who have limited access to professional supports.

Key message
The development of a toolkit to inform service prioritisation has been a rewarding experience for clinicians involved and has helped improve their networking and professional supports, and is providing a valuable resource that will help shape their and others’ practice.

How do clinicians become research leaders? : Organisational and individual factors that promote research activity
Desley Harvey, HP Senior Research Fellow, Cairns & Hinterland Hospital & Health Service
Ilse Nielsen, Principal Workforce Officer at Allied Health Professions Office Queensland
David Plummer, Health Practitioner Professorial Research Fellow
Robyn Adams, Director Allied Health, Townsville Hospital and Health Service
Tilley Pain, HP Senior Research Fellow, Townsville Hospital and Health Service

Background and rationale
Strengthening the research capacity of the clinical workforce is a state-wide priority within Queensland Health. Conducting research is challenging for health professionals who juggle clinical, management, education, service development, administrative and other duties. This study addresses research capacity development by investigating cases where allied health professionals in northern Queensland have successfully integrated research into their clinical practice. By examining allied
health professionals who flourish as researchers and the conditions in which they thrive, this study provides information to inform a strategic approach to developing a research active workforce.

Methods
This was an exploratory qualitative study using grounded theory methods. In-depth interviews were conducted with 15 research-active allied health professionals across three sites in northern Queensland. Narratives were collected about participants’ research pathways, starting from early career and tracing key events through to the present. Interviews were recorded and the transcripts analysed using constant comparative methods. A modified grounded theory approach was used to construct explanatory models to account for research success.

Results
Two principal explanatory models were developed. The first identified four factors at the organisational level which influenced the outcome of research: research-friendly workplace culture; administrative systems that are supportive of research; productive relationships with colleagues and others; and personal qualities of individual researchers. The second model was a career trajectory model which traces the influences and determining events as a successful research career unfolds.

Implications for practice
Identifying clinicians who are pre-disposed to research and supporting them through exposure to research, skill development, grants, and recognition of achievement is important for developing research leadership. Organisational strategies can maximise ongoing opportunities for research productivity.

Key message
With organisational support, motivated and tenacious clinicians can integrate research into clinical practice.