Delivering quality healthcare in partnership with our communities

Research Annual Report 2016
Darling Downs Hospital and Health Service
Research in the DDHHS

The Darling Downs Hospital and Health Service (DDHHS) is committed to the establishment of research as a core activity in all sectors of the Service, recognising that it provides the basis for safe, effective and efficient outcomes for the Hospital and Health Service, particularly in patient care. The DDHHS Executive supports the embedding of research into clinical practice to enhance service delivery and outcomes through service evaluation, quality assessment and clinical research activities. Accordingly, a positive research culture is being built across all disciplines and service areas within the DDHHS including Rural, Mental Health, Medicine, Nursing and Midwifery, Allied Health and Pharmacy.

The current Research Strategic Plan (2015 to 2018) serves to encourage, support and build research capacity within the region, under the strategic guidance of the Research Advisory Committee. These efforts are supported by the work of the Research Fellow, who is available to provide research support to DDHHS staff across all disciplines and facilities. The Research Fellow heads a small Research Support Team (RST) which offers support to DDHHS staff in all aspects of research and quality improvement activities. An important part of this support is capacity building through the provision of targeted education sessions, and one to one research consultations.

The DDHHS continues to maintain strong partnerships with a number of higher education providers in the region. While this is primarily for the clinical placement of nursing, allied health and medical students, these links also afford opportunities to work collaboratively with the parent organisations through student involvement in clinician-driven research projects. In addition to this work with students, research within the DDHHS benefits greatly from collaboration with researchers from external organisations such as the University of Queensland, Griffith University and the University of Southern Queensland. Whether led by DDHHS staff or external researchers, these collaborative projects represent a valuable opportunity to work together to increase research conducted within the region, and with it, a locally focused evidence base.

Although grants and publications are the most conspicuous output from research activity, translation of findings into improvements in policy and practice are possibly the most valuable outcomes for the HHS. Each year there are an increasing number of DDHHS publications and conference presentations disseminating local research findings to the broader health community. The results of DDHHS research and evaluation activities also frequently inform changes to district policy and clinical practices.

Research is not a solitary affair; it takes a great deal of interaction and commitment on the part of many people to make a project successful. We would therefore like to acknowledge the contribution of all those involved in any aspect of research in the DDHHS, including the health service consumers whose lives we ultimately hope to improve.

Martin Byrne
ED Medical

Karen Abbott
ED Nursing

Annette Scott
ED Allied Health
Year at a Glance

2016:

- **33** new research projects were approved within the DDHHS
- **16** DDHHS led research projects commenced in 2016
- The DDHHS commenced collaboration on **25** research projects
- **5** new sponsor initiated clinical trials commenced
- Over **$107,000.00** in competitive research grants obtained
- **35** research applications reviewed by the ethics Committee
- **425** research consultations provided to DDHHS staff by the research support team
- Inaugural DDHHS Staff Research Awards nominations received, celebrating excellence in research
- **31** peer reviewed publications and numerous conference presentations by DDHHS affiliated authors
- DDHHS Research Publication Procedure approved
- Research Webpage launched on DDHHS website (QHEPS)
1. Research Activity

1.1 Research Projects
Thirty-three new studies were approved to commence in the DDHHS in 2016. Twenty-one of these studies were collaborations; while 12 had a DDHHS staff member as the lead researcher. Note that this number differs from the number which were actually begun as not all studies begin immediately following approval.

1.1.1 Research Led by DDHHS staff
The number of research Projects led by DDHHS staff that commenced in 2016 includes all projects where a DDHHS staff member has been listed as a primary or chief investigator. Research leads are responsible for conducting the research, obtaining funding if required and leading research dissemination. Of the studies commenced in 2016 there were 17 projects where DDHHS staff were the lead researchers. Of the 17 projects, there were nine from Medical Services, six from Allied Health and two from Nursing.

1.1.2 Collaborative Research Projects
Collaborative research projects include all research projects based within the DDHHS where a DDHHS staff member is listed as a collaborator, without the responsibility of designing or leading the research project. The DDHHS staff member may assist the research study by enrolling patients, collecting data and/or being a site contact for the external team. This is an excellent opportunity for staff to get a taste for the research process and may lead to the development of internally led projects. Collaboration is most commonly with teams from universities, research centres, or other hospital and health services. Of the studies that commenced in 2016 there were 21 collaborative projects. Of these, three were Allied Health, ten were Medical services, two Nursing, one management, one Pharmacy and four unspecified University projects.

1.1.3 Clinical Trials
In 2016, three new sponsored clinical trials were initiated in DDHHS facilities:

- A randomised controlled trial of slowing kidney disease progression from the inhibition of Xanthine oxidase (CKD FIX Study). Sri Krishna Venuthurupalli (Renal Unit).
- A randomized control trial of on-line versus telephone based information and support: Can electronic platforms deliver effective care for lung cancer patients? Dr Khageshwor Pokharel (Cancer Care Services).
- ALLG CML 12 Dasatinib Intensity Regulation to Eliminate Cumulative Toxicities - the DIRECT study. Dr Joshua Richmond (Cancer Care Services).
2. Research Performance

2.1 Research Grants and Funding

Research grants reported in Tables 1 and 2 are those which provided research funding which was administered within the DDHHS. Table 3 identifies one grant awarded to a DDHHS staff member for research conducted within the region, but held outside the HHS.

**Table 1: 2016 Research Funding for Projects Other Than Clinical Trials**

<table>
<thead>
<tr>
<th>Investigators</th>
<th>Research Project Title</th>
<th>Granting Body and Scheme</th>
<th>Amount Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Furness</td>
<td>Calderdale Project: OT contribution to patient services and supervisor workload</td>
<td>Toowoomba Hospital Foundation: $23,218.00 Health Practitioner Research Scheme $16,111.00</td>
<td>$39,329.00</td>
</tr>
<tr>
<td>Priya Martin</td>
<td>Comparison of supervision training modes</td>
<td>Toowoomba Hospital Foundation</td>
<td>$13,807.65</td>
</tr>
<tr>
<td>Jacob Crosdale</td>
<td>Head &amp; Neck transfers of trauma patients for neuroimaging to Toowoomba Hospital ED</td>
<td>Emergency Medicine Foundation</td>
<td>$8,620.00</td>
</tr>
<tr>
<td>Anna Tynan</td>
<td>OT led EAM to prevent falls in older people in regional and rural settings: A pilot study using implementation science.</td>
<td>Toowoomba Hospital Foundation</td>
<td>$17,409.00</td>
</tr>
<tr>
<td>Taygan Tucker</td>
<td>The Cherbourg community oral health study</td>
<td>Health Practitioner Research Scheme</td>
<td>$28,404.00</td>
</tr>
</tbody>
</table>

**Table 2: 2017 Research Funding From Sponsored Trials**

<table>
<thead>
<tr>
<th>Investigators/ Collaborators</th>
<th>Research Project Title</th>
<th>Granting Body and Scheme</th>
<th>Amount Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Adam Visser</td>
<td>Allostasis and Sedation Practices in Intensive Care Evaluation - ALL-SPICE</td>
<td>Sunshine Coast Hospital and Health Service</td>
<td>$100 per participant. SCHHS to pay for pathology.</td>
</tr>
<tr>
<td>Investigators/Collaborators</td>
<td>Research Project Title</td>
<td>Granting Body and Scheme</td>
<td>Amount Awarded</td>
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</tr>
<tr>
<td>Dr Guranjan Grewal</td>
<td>Do changes to chemotherapy dose and increased toxicity explain survival outcomes in advanced cancer patients with systemic inflammation?</td>
<td>$1,000.00 in total</td>
<td></td>
</tr>
<tr>
<td>Nicole Owen</td>
<td>Telehealth parent counselling trial: An evaluation of parent and clinician experiences of using video conference.</td>
<td>Telehealth Support Unit</td>
<td>$330</td>
</tr>
<tr>
<td>Dr Khageshwor Pokharel</td>
<td>A randomised controlled trial of online versus telephone-based information and support: Can electronic platforms deliver effective care for lung cancer patients?</td>
<td>Up to $2500 from University of Newcastle</td>
<td></td>
</tr>
<tr>
<td>Joshua Richmond</td>
<td>ALLG CML 12 Dasatinib Intensity regulation to eliminate cumulative toxicities - the DIRECT study</td>
<td>Australasian Leukaemia &amp; Lymphoma Group</td>
<td>$20,000.00 10 participants x $2,000</td>
</tr>
<tr>
<td>Sree Krishna Venuthurupalli</td>
<td>CKD - FIX Study</td>
<td>Australian Kidney Trials</td>
<td>$1,600 per participant &amp; $3,000 bonus for each group of 15 participants</td>
</tr>
</tbody>
</table>

Note. Information reported in these tables pertains to new funding obtained in 2016. Not reported are research projects funded in previous years with carry-over funding which may continue to bring research funding into the Health Service.

**Table 3: 2017 Research Funding Held Outside the HHS**

<table>
<thead>
<tr>
<th>Investigators/Collaborators</th>
<th>Research Project Title</th>
<th>Granting Body and Scheme</th>
<th>Amount Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margaret McElrea</td>
<td>Reference values for spirometry and fractional exhaled nitric oxide (FeNO) in Aboriginal and Torres Strait Island children and young adults</td>
<td>Queensland Health Aboriginal and Torres Strait Islander Health Unit</td>
<td>$1,043,060</td>
</tr>
</tbody>
</table>
The DDHHS itself provided financial support to projects commenced in 2016 with approved in-kind costs in excess of $112,813. This amount cannot be calculated precisely as some support is provided on a per participant basis.

### 2.2 Publications

Publications include peer-reviewed journal articles, where a DDHHS staff member is a named author or co-author with a declared DDHHS affiliation. Books, book chapters, electronic publications, abstracts, conference proceedings are not included in the list below. Similarly, articles ‘in press’ or ‘accepted’ but not published at the end of 2016 are not included.

In late 2016 an improved search formula was developed in consultation with the DDHHS Librarian, identifying a substantial number of previously unidentified publications with DDHHS affiliations. The known peer reviewed journal publications from DDHHS for 2016 are as follows, with DDHHS staff indicated in bold:


3. Research Support and Operations

3.1 Research Consultation Services

3.1.1 Consultation by Professional Division

Research support was provided for both ongoing and new projects during 2016. Research consultation includes any advice given by the Research Support Team to assist staff with their research projects. Allied Health staff continued to dominate research support activity by the RST (see Figure 1), however this imbalance can probably be explained by the historical positioning of the Research Fellow within the Allied Health sector prior to 2015. Consultations by Medical staff increased notably in the second quarter of the year and remained at this higher rate for the remainder of 2016. There was also a notable uptake of research support by Nursing staff in the latter part of the year.

![Consultations per Professional Division for 2016 reporting periods](image)

**Figure 1: Consultation by Professional Division n=425**

Whilst the overall proportion of Allied Health consultations for the year was unchanged, 2016 saw a reduction in the proportion of Medical Services staff consultations when compared with 2015, and a concurrent increase in the proportion of consultations by Nursing staff (Figure 2).
3.1.2 Consultation Type per Quarter in 2016

The RST supports a number of researchers who consistently return for assistance across the life of a project, or several projects, as well as individuals who seek assistance with only one or two aspects of their study (e.g. just with the ethics process, or only for advice with writing a manuscript). It cannot be assumed therefore that the ebb and flow of consultation type across the reporting periods is due to the progress of projects being supported by the RST through the various stages. Peaks in any type of consultation may be quite random.

Figure 3 illustrates the types of consultations sought for the four reporting periods in 2016. Consultations in the protocol development and ethics assistance category were consistently higher during 2016. This may be attributable in part to the broad nature of this category which encompassed activities from study design to writing the protocol, creating participant information and data collection documents, and completing and submitting the ethics application. Once these activities have been completed, researchers may feel more able to progress independently with less frequent assistance. Initial enquiries were fairly stable across the year; all other categories having rather more variation. Implementation consultations were greater in the first half of the year, while funding and data related consultations increased in the second half of the year. Consultations in the ‘Other’ category also increased across the year, but this is an ambiguous category, comprising not only enquiries about quality activities, but also non research related enquiries such as Research Higher Degree enquiries and requests for information from parties external to the DDHHS. The final bar on the graph in Figure 3 shows the overall trend for 2016 consultations.
3.2 Research Education
A variety of research education opportunities were offered in 2016 including sessions provided by the RST and external organisations.

3.2.1 Research Education Sessions
Nine research education sessions were facilitated by the RST during 2016. Presenters included DDHHS staff and external speakers from three universities whose catchments include the Darling Downs. Two of these presentations specific to research within the DDHHS were recorded for publication in the new Research Skills Learning Online program. Three presentations in particular stand out as being particularly well attended:

- In February, Dr Anna Tynan presented “Getting started and Finished in Research” which was attended by 20 staff members including via videoconference.
- In July Dr Anna Tynan hosted “All you need to know about doing a PhD” with guest presenters form the University of Queensland; the University of Southern Queensland and Queensland University of Technology. This session had 18 attendees.
- In September the DDHHS HREC Coordinator and Governance Officer presented “Ethics Governance in Research” which was attended by 14 staff members.

3.2.2 Grand Rounds Research Showcase
In September, the RST organised three research-active clinicians from the local area to present a Grand Rounds showcasing their research and the resources, rewards and enablers they have encountered as DDHHS clinicians. This session was well attended and resulted in several new requests to the RST for assistance in initiating research activity.

3.2.3 CAHRLI New to Research Seminar Series
In 2016, the Metro North HHS Collaborative for Allied Health Research, Learning and Innovation (CAHRLI) ran a series of monthly seminars for novice researchers. The RST encouraged and facilitated attendance of these sessions by DDHHS staff by hosting videoconferences at the Toowoomba Hospital.

3.3 Inaugural Staff Research Awards
In 2016 the Research Advisory Committee discussed ways to recognise and celebrate the many outstanding achievements in research by DDHHS staff culminating in a plan to introduce annual awards recognising research active DDHHS staff. The Executive Committee approved the proposal, adding two DDHHS Research categories to the annual Employee Awards. Four nominations were received for awards in the Novice Researcher category and six in the Advanced Researcher category in this inaugural year. Results are to be announced at the Awards ceremony on 30 January, 2017.

3.4 Other RST Projects to Support Research Activity
3.4.1 Research Support Drop-In Sessions
September saw the introduction of fortnightly drop-in research consultation sessions conducted in the DDHHS Library. There has been good uptake of this service with most two-hour sessions at least partially utilised. The sessions provide an opportunity for researchers to access skilled support and assistance when completing ethics and/or grant applications, or simply have a dedicated time and location to work on their research. It is hoped that increased uptake of this service over time may assist researchers to build support networks with other beginning researchers, and contribute to the budding research culture within the DDHHS.

3.4.2 DDHHS Research Webpage
In June 2016 the DDHHS Research Webpage was published on QHEPS. The Webpage provides resources to support researchers such as links to relevant DDHHS guidelines, policies and other resources, or quality resources provided by external sources. The page also includes embedded
documents which provide advice, guidelines, training tools and templates for various stages of the research process. A calendar of research related events and education is included, along with contact details for research personnel within the district. The DDHHS HREC page can now be accessed via the Research tab; a more intuitive site than the previous location.

3.4.3 Research Publication Procedure
A new procedure entitled Research Publication Submission (4.3.31) was approved by CSIC at the December 2016 meeting. This procedure describes the processes required for DDHHS staff submitting a research manuscript for publication where the manuscript is based on research either utilising DDHHS data or conducted by staff whilst engaged in their DDHHS role.

3.4.4 Research Mapping Project
A Research Mapping project was commenced. In the last quarter of 2016, a temporary 0.5 FTE staff member was made available to the RST, enabling the commencement of a project aimed at identifying the status of all research currently active within the DDHHS. At commencement of the project, approximately 270 studies were listed as active on the HREC files. Investigations revealed that lead investigators of a number of these studies had not contacted the HREC for over 12 months (the mandated reporting period), raising questions about the current status of the studies.

The research mapping project aims to track and map several aspects of research activity across the HHS. In the first phase every open study within the DDHHS HREC records will be audited to determine the last contact date. Studies not having provided contact within the last 12 months will be listed for follow-up. Follow-up aims to distinguish between those studies which have been abandoned, those which have concluded (but not reported), and those which are active (but have missed reporting dates). Researchers will be assisted to provide final and annual reports for concluded and ongoing studies respectively.

The RST will engage with researchers from studies which have been abandoned to offer support and assistance; determine whether the research can be salvaged; advise on finalisation processes for those which can't; and to determine if there are common factors which lead to the abandonment of studies in the region.

3.4.5 SSA Guidelines
Work began on a Guideline for the completion of the Site Specific Assessment form, which is required by the Research Governance Office before any research commences in a DDHHS site. This process follows ethics approval and can involve site approval from legal, finance, management and clinical leads, depending on the nature of the research. The potential benefit of producing guidelines to assist staff in navigating this system was identified by the RST and the Research Governance Officer, in response to numerous staff enquiries about completion of this paperwork.

3.4.6 Secure Research Data Storage Facilities
The Australian Code for the Responsible Conduct of Research lays out clear instructions related to the secure storage, retention, disposal and access to research data, including both electronic and paper records. It is clear that meeting these obligations can be difficult for researchers within the DDHHS at times. In 2016, RST staff joined forces with local library staff to begin identifying methods for a secure central store for paper based research records and to create secure electronic storage for DDHHS research data.

3.4.7 DDHHS Central Research Repository
Research output from the DDHHS including publications and conference presentations, represents an important evidence base for our district. This resource is also a valuable, concrete record of successful research activity in the region. In 2016, the RST supported local library staff in their work to create a searchable, central research repository for this work. While there is still work to be done in entering these publications, this repository is now available to staff within the district and across the state. In addition to the contributions this may make to evidence based practice within the district, this resource also serves
to showcase and celebrate DDHHS research achievements, further contributing to the district’s research culture.

3.4.8 Guidelines for Completing a Research Protocol

Work commenced on the Guidelines for completion of the DDHHS HREC-preferred protocol for non-clinical trials. Submission of a research protocol is mandatory for an ethics application; however the completion of this document continues to pose challenges for staff. It has therefore been decided to compile a guideline incorporating easy to follow, clear instructions to assist clinicians with the completion of this document. Development includes substantial consultations with the HREC Coordinator, HREC Chair and DDHHS Librarian.

3.4.9 Online Research Skills Training Package

With permission from the authors, work commenced to adapt the Gold Coast Hospital and Health Service ‘Stimulating Action in Research’ (STAR) training program for use by DDHHS staff. It is hoped that this package will provide a structured program of teaching which the beginning researcher can complete at their own pace, to gain a broad understanding of research processes and methods. Five presentations have been judged as potentially suitable for use in our region, and forwarded to the Cunningham Centre for consideration for development of the online resource. It is envisaged that further units will be developed to provide a comprehensive resource.

3.4 Library Services

The library contributed to DDHHS research activity in 2016 in many and varied ways. With its core function of information discovery and provision the library:

- Conducted 25 literature searches per month
- Loaned 85 books per month
- Retrieved and supplied 250 articles per month

A significant portion of these services were for staff either directly engaged in research projects, or undertaking training in research skills. In addition, the library conducted at least 50 training sessions for individuals and groups in Toowoomba and the rural facilities. Education was provided on everything from defining a good question, through literature searching and selecting appropriate resources, to managing references in Endnote. The library also consulted with many individual researchers and provided direct support for literature reviews along with advice on facets such as referencing, journal selection, and manuscript submission.

In 2016 the library continued to manage access, train users, and troubleshoot problems for local subscriptions to UpToDate and JBI. These are two important sources for synthesized evidence and are used regularly in conducting literature reviews prior to undertaking primary research. Topic reviews on UpToDate, for example, are accessed on average over 800 times per week by DDHHS staff, with peaks well in excess of 1000 access views.

Librarian Daniel McDonald is a standing member of the Research Advisory Committee. The library also contributes to training sessions offered through the Research Interest Group. Fortnightly the library serves as host for “drop-in” sessions where staff on the Toowoomba Hospital campus can seek guidance from the research support officer.

The library coordinates the monthly Grand Rounds program for the Toowoomba Hospital. September 2016 Grand Rounds was a research showcase, with presentations given by local researchers Peter Gilbar, Sam Gollan, and Doug Murtagh. An audio recording of this presentation is available here (https://soundcloud.com/ddhhs-library/ddhhs-real-world-research-peer-gilbar-doug-murtagh-sam-gollan/s-8re2X).

In 2016 the library established an institutional repository with the purpose of capturing and making available the research output of DDHHS staff. This repository is managed through the library’s catalogue software and is publicly available. Though in its infancy with many records yet to be added, the repository can be viewed here
Daniel McDonald
Senior Librarian
4. Research Collaboration

4.1 The University of Queensland Rural Clinical School

The University of Queensland Rural Clinical School Toowoomba site (UQRCS - Toowoomba) continued its strong relationship with Darling Downs Hospital and Health Service (DDHHS) in 2016 with significant accomplishments in health-related research, and the training of medical students. This successful collaboration was celebrated in January, with a Toowoomba Hospital Grand Rounds centered on research activities and collaborations between the DDHHS and the UQRCS Research Centre.

In 2016, UQ and DDHHS were partners along with University of Southern Queensland (USQ) and South West Hospital and Health Service (SWHHS) in an application for funding to commence a collaborative venture to establish a University Department of Rural Health, the Southern Queensland Rural Health (SQRH) which focuses on inter-professional education and training across the regions. This new program would expand the research capacity of the region and increase the evidence base for addressing local health issues, both clinical and workforce. Research is an important component of health professional training and ongoing practice as these skills assist the health professional in keeping up to date. Such clinicians are more likely to be life-long learners, able to adapt to change and provide advocacy and leadership.

Apart from our ongoing collaborative studies, the following collaborative studies were approved and commenced their activities in 2016.

**HREC/15/QTDD/37**
What factors predict hospital outcome and readmission for patients presenting to a regional hospital with DKA?
PI: Dr Sheila Cook; UQRCS researcher: Marcella Kwan

**HREC/16/QTDD/24**
Patient safety in rural transfers: Baseline audit prior to an education intervention
PI: Dr Sheree Conroy, UQRCS researcher: Remo Ostini

**HREC/16/QTDD/25**
Outcomes of transfers in trauma patients for neuroimaging to Toowoomba Hospital Emergency Department
PI: Dr Jacob Crosdale; UQRCS researchers: Marcella Kwan, Srinivas Kondalsamy Chennakesavan

**HREC/16/QTDD/48**
Assessing Q Fever understanding in primary care
PI: Dr Penny Hutchinson; UQRCS researchers: Marcella Kwan, Remo Ostini

**HREC/16/QTDD/62**
Non-fasting triglycerides and gestational diabetes mellitus
PI: Dr Sheila Cook; UQRCS researcher: Marcella Kwan

In terms of research outputs, DDHHS staff who share an academic title at UQ have published at least four peer-reviewed manuscripts and 14 abstracts or posters at major scientific meetings. Some of the results may take time to show, however we are building on a very strong and enduring collaborative relationship between UQRCS and DDHHS, which is now in its 15th year.
4.2 The University of Southern Queensland

The University of Southern Queensland (USQ) plays a significant role in the teaching, training and support of the local health workforce, particularly in the fields of Nursing and Psychology. In 2016, USQ continued to strengthen its long-standing relationship with the DDHHS through ongoing student training collaborations and collaborative research endeavors. USQ looks forward to continuing its work with the DDHHS to harness this collaborative research capacity to improve health service delivery, and with it, the health and well-being of Darling Downs residents.
4.3 Griffith University: Griffith Rural Longlook Research Program

In partnership with DDHHS, Griffith University Rural Health conducts a number of programs placing medical and dental students in rural hospitals and practices. Griffith Rural Longlook is responsible for medical students placed at Kingaroy, Dalby, Warwick, Stanthorpe and Goondiwindi Hospitals. In all these locations, Griffith Rural students undertake service evaluation and/or research projects relevant to the local communities and health facilities. Many of these students choose to remain on the Downs to complete a QRME Summer Scholarship in research.

Carrying over from 2015, the Farm Injury study (DDHHS HREC/14/QTDD/80) project was expanded in 2016 to focus on more extensive and detailed review of life-threatening farm injuries presenting to rural hospital emergencies. The study produced novel information about the high level of care available for this high level injuries arising on farms around the Downs.

In agreement with the DDHHS, the Griffith Rural Longlook students placed across the Downs through 2016 conducted five main research projects and presented these to representatives of the DDHHS Board and Executive at the end of the academic year at the Darling Downs Clinical Training Centre in Toowoomba.

The End of Life advanced care planning project audited advanced care planning and resuscitation planning in rural hospitals (DDHHS HREC/16/QTDD/17). Findings were that there were significant opportunities for improvement in end of life care planning for elderly patients admitted. Those hospitals with an identified Registered Nurse to discuss and assist had a significantly higher rate of care planning.

An audit of presentations of community acquired pneumonia to rural hospitals (DDHHS HREC/16/QTDD/16) found some variation in the preferred methods of severity assessment and treatment choice. A subsequent small pilot study of education of SMO standardized antibiotic stewardship resulting in a recommendation that Griffith medical students deliver an annual education session discussing CAP assessment and treatment with SMO.

A clinical audit of paediatric presentations to rural hospitals (DDHHS HREC/16/QTDD/14) identified the nature of these presentations and their disposal. A significant over-representation of children presenting following farm accidents was identified.

Surgical presentations, specifically those with acute abdominal and pelvic pain presentations to DDHHS rural hospitals were audited (DDHHS HREC/16/QTDD/15). An important finding from this study was that a major barrier in treatment of these patients was accessibility to CT scanning in rural locations. A further surgical study of the obstetric outcomes of obese mothers was conducted (DDHHS HREC/16/QTDD/13). Notably, this study identified that obese mothers managed at the maternity centres on the Darling Downs had comparable outcomes to non-obese mothers, however, those mothers with BMI over 40kg/m2 were required to be referred and their pregnancy typically ended with surgical intervention.

In 2017, Griffith Rural Longlook students will continue to provide locally relevant research projects to the DDHHS including a review of the surgical approaches in rural facilities to hysterectomy for benign gynaecological disease in rural women (HREC/17/QTDD/27), a review of handover quality between residential aged care facilities and rural hospitals (HREC/17/QTDD/26), the review of indigenous children mentioned above, and a project being conducted in partnership with the National Heart Foundation Queensland Branch reviewing local detail in relation to the National Heart Foundation Map (HREC/17/QTDD/24). In this latter project, DDHHS will be the first HHS to provide more detail around “heart admissions” for which the Darling Downs rates above the Australian aged-standardised rate.

The Griffith Rural Longlook program conducted on the Darling Downs in association with the DDHHS is the most innovative rural medical education program in Australia in 2016. In an international typology of longitudinal integrated clerkships this program in the DDHHS was identified as only one of two multiple LIC programs globally. Research and evaluation of the program continues. The current rural retention as junior doctors of Griffith Rural Longlook students trained in the DDHHS remains over 60%. Of those students completing two years or fully half their medical doctorate in the DDHHS, retention is over 90%.
Griffith School of Medicine has now conducted several graduations of Medical Doctorate students. The Griffith Rural Longlook students well represent the spirit of the MD in choosing their scholarship path to include rural medicine experience and contributing to rural health research. The Longlook program and Griffith Rural Health Research Centre will continue to support the DDHHS in 2017.

Professor Scott Kitchener  
Clinical and Academic Lead, Rural Health  
Griffith University

4.4 Other

The DDHHS continues to examine ways to increase research activity and skill in the region through strategic partnerships and research collaboration with the university and tertiary training sector. In addition to the three universities with a bricks and mortar presence in the region discussed above, several other universities external to the DDHHS region have played a key role in building research capacity within the DDHHS.

This includes a current Memorandum of Understanding held between the DDHHS Division of Allied Health and the School of Health Sciences at the University of South Australia. This memorandum provides a framework through which these two organisations can harness their complementary resources and expertise to work together to develop and pursue collaborative activities.

In 2016, the following research projects arising from collaborations between the DDHHS and universities from outside the region received ethics approval:

**James Cook University**
- Elizabeth Underwood - Evaluation of a Telehealth-supported lymphedema service
- Melita Trout - Evaluating the educational environment in Qld ICU's using PHEEM.

**Queensland University of Technology**
- Dr Kerry-Ann O'Grady - Prickle Babes study: A pragmatic, multi-centre, parallel design, open, randomised controlled trial to evaluate the effectiveness of a simple SMS vs tailored SMS and home visit compared to usual practice.

**University of Newcastle**
- Dr Khageshwor Pokharel - A randomised controlled trial of online versus telephone-based information and support: Can electronic platforms deliver effective care for lung cancer patients?

Additionally, a number of DDHHS staff completed or commenced a research higher degree from universities both within Australia and abroad during 2016. Access to online resources and external enrolments has made completion of such degrees more attractive and accessible to regional and rural health staff.
5. Committee Reports

5.1 Darling Downs Hospital and Health Service Human Research Ethics Committee  ECOO182

5.1.1 DDHHS HREC Certification

The Darling Downs Hospital and Health Service Human Research Ethics Committee is constituted and operates according to the NHMRC’s National Statement on Ethical Conduct in Research Involving Humans, the Queensland Health Research Management Policy, and the Standard Operating Procedures for Queensland Health HRECs.

The committee gained an extra 2 years certification to 31 December 2018 to ethically review multi-center Human Research applications in the following categories:

- Clinical Trials Phase III
- Clinical Trials Phase IV
- Clinical Trials Devices
- Clinical Intervention Studies other than clinical trials
- Qualitative Health Research
- Mental Health Research
- Rural and/or Remote Health Research including indigenous studies

5.1.2 Membership

This year the committee members were sorry to see the resignation of Dr Peter Gillies (Chair) and Dr Hwee Sin Chong (Chair). A successful recruitment drive to replace the representation across these fields and fulfill roles in other categories resulted in three new committee members:

- Angela O’Shea – Chair
- Dr Martin Byrne – Professional Care, Counseling or treatment of people
- William Minchell – Legal Experience

DDHHS HREC current composition

<table>
<thead>
<tr>
<th>HREC category</th>
<th>Background e.g Nursing, Pharmacy, Epidemiologist etc</th>
<th>Male Or Female</th>
<th>Queensland Health Affiliation (Yes/No)</th>
<th>HREC training in last 2 years (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairperson (a)</td>
<td>Psychology</td>
<td>Female</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Layperson (b)</td>
<td>Research</td>
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<td>Yes</td>
</tr>
<tr>
<td>Layperson (b)</td>
<td>Health Administration</td>
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<td>Yes</td>
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<tr>
<td>Professional care, counselling or treatment of people (c)</td>
<td>Allied Health</td>
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<tr>
<td>Professional care, counselling or treatment of people (c)</td>
<td>Medical Officer</td>
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<td>Yes</td>
</tr>
<tr>
<td>Professional care, counselling or</td>
<td>Medical Officer</td>
<td>Male</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### 5.1.3 Training

The HREC Coordinator and various Committee members participated in a number of professional development education forums and conferences including:

- Low risk research reviews - a practical information session conducted in the DDHHS HREC meeting to introduce the members to the requirements of reviewing low risk research applications.
- HREC Essentials training Course from Praxis Australia; completed by two members.
- Research Methods and Fields conducted by Health, Ethics and Law (HEAL) - UQ Brisbane. Topic "Ethics and academic freedom: the 'racism on the bus' case in Qld", presented by Prof Paul Frijters & Assoc Prof Andrew Crowden.
- Conducting research with Indigenous Populations presented by Dr Maree Toombs, UQ Rural Clinical School.
- Connecting the Dots Research Forum USQ - Resilient Regions Week.
- NHMRC Australasian Ethics Network Conference 2016 at Sydney University; attended by the HREC Coordinator.
- Members were given access to the Princess Alexandra Hospital recorded Ethics Seminars, on request. The seminars are held bi-monthly and are on a variety of topics of an ethical nature. As members are volunteers in their roles on the committee and perform other

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</thead>
<tbody>
<tr>
<td>treatment of people (c)</td>
<td>Medical Officer</td>
<td>Male</td>
<td>Yes</td>
</tr>
<tr>
<td>Professional care, counselling or treatment of people (c)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pastoral care role in community (d)</td>
<td>Religious Minister</td>
<td>Male</td>
<td>No</td>
</tr>
<tr>
<td>Pastoral care role in community (d) - Aboriginal &amp; Torres Strait Islander</td>
<td>Indigenous - Education</td>
<td>Female</td>
<td>No</td>
</tr>
<tr>
<td>Legal experience (e)</td>
<td>Law</td>
<td>Male</td>
<td>No</td>
</tr>
<tr>
<td>Research experience (f)</td>
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<tr>
<td>Research experience (f)</td>
<td>Epidemiology</td>
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<td>Yes</td>
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<tr>
<td>Research experience (f)</td>
<td>Research Fellow</td>
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<td>Yes</td>
</tr>
<tr>
<td>Research experience (f)</td>
<td>Advanced clinical educator</td>
<td>Female</td>
<td>Yes</td>
</tr>
<tr>
<td>Pastoral care role in community (d)</td>
<td>Religious Minister</td>
<td>Male</td>
<td>No</td>
</tr>
</tbody>
</table>
functions in the community they are encouraged to view the seminars using the DDHHS facilities, as their time permits.

• Members attended various educational sessions provided by the Toowoomba Hospital Grand Rounds, University of Queensland, AusHSI University and the Royal Brisbane Women’s Hospital.

5.1.4 Research Application Activity

• Number of research applications receiving ethical review – 28 (17 Low Risk and 11 Full NEAF)
• Ethical review for organisations other than DDHHS, (i.e. St Andrews Radiology, St Andrews Oncology, UQ) – 3.
• Number of research studies given site approval to commence on DDHHS sites – 33. This includes studies which may have been ethically approved by other HRECs.
  ▪ Studies across multiple DDHHS sites – 6
  ▪ Approved to commence at Toowoomba Hospital – 20
  ▪ Approved across rural sites only – 6
  ▪ Approved for mental health - 1
• Applications reviewed but not requiring ethics approval (NRER) – 22. These applications were determined to be either Service Evaluations or Clinical Audits.

5.2 Darling Downs Hospital and Health Service Scientific Review Committee

5.2.1 DDHHS SRC

The DDHHS SRC supports the DDHHS HREC by providing advice of a scientific, statistical and technical aspect on the research applications, to the committee prior to review by the HREC. During 2016, the committee sadly accepted the resignation of Dr Wendy Ducat, and welcomed new member Dr Maxine O’Brien. This committee did not meet face-to-face this year but has conducted seven virtual meetings.

The voluntary contribution of time and knowledge of its members is very much appreciated by the HREC.

<table>
<thead>
<tr>
<th>HREC category</th>
<th>Background e.g. Nursing, Pharmacy, Epidemiologist etc</th>
<th>Male Or Female</th>
<th>Queensland Health Affiliation (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairperson</td>
<td>Experienced Researcher</td>
<td>Female</td>
<td>No</td>
</tr>
<tr>
<td>Biostatistician with experience</td>
<td>Professor of Statistics</td>
<td>Male</td>
<td>No</td>
</tr>
<tr>
<td>Clinical research experience</td>
<td>Senior Pharmacist</td>
<td>Male</td>
<td>Yes</td>
</tr>
<tr>
<td>Research Experience</td>
<td>Health Professional</td>
<td>Female</td>
<td>Yes</td>
</tr>
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</table>

5.2.3 Training

All new SRSC members are provided with the Induction Guide together with copies of the relevant documents listed in the Guide. Members are encouraged to attend relevant education and training sessions along with the HREC members. The SRSC Chairperson and Coordinator will provide ongoing support as required.

Members will attend continuing education and training in research ethics at least every 3 years (National Statement section 5.2.3(c)).
5.2.4 Activity
Number of applications reviewed: 11

5.3 Toowoomba Hospital Foundation Research Scholarship Committee

5.3.1 Toowoomba Hospital Foundation and Pure Land Learning College
The Toowoomba Hospital Foundation (THF) supports the Toowoomba Hospital by administering funds provided by the Pure Land Learning College (PLLC) to support research activity in the region. Each year the PLLC, based in Toowoomba, donates $120,000 to the Foundation to assist our researchers. This funding is allocated by the THF and PLLC Research Scholarship grants to successful applicants. We are extremely grateful to receive this funding and the grants are hotly contested.

5.3.2 Membership
The membership of the THF PLLC Scholarship Grants Committee includes eight members:

- The Chair of the Committee who is independent and not an employee of the Darling Downs Hospital and Health Service
- Two lay people (one male and one female) (recommendation from Toowoomba Hospital Foundation)
- Two experienced researchers from outside the Darling Downs Hospital and Health Service
- Two other people nominated by the Toowoomba Hospital Foundation (one medical, one nursing)
- The Chief Executive or delegate, Darling Downs Hospital and Health Service

The committee evaluates the scholarship applications in line with the Conditions of Funding and Guide for Assessors and makes recommendations to the Toowoomba Hospital Foundation on the basis of their assessment.

5.3.3 2016 Recipients

- Priya Martin – “Factors that contribute to high quality clinical supervision in allied health: A mixed methods sequential explanatory study” $8,800.00.
- Priya Martin – “A comparative analysis of supervision training modes” $13,807.65
- Prof Scott Kitchener – “Farm injuries presenting to hospital emergency departments on the Darling Downs, Granite Belt and South Burnett regions” $15,000.00.
- Dr Sheila Cook – “Effectiveness of the physician in the practice (PIP) model for managing patients with type 1 diabetes in Toowoomba and the surrounding region” $10,506.00.
- Dr Penny Hutchinson – “Assessing Q Fever understanding in General Practice” $8,716.00.
- Dr Anna Tynan – “Occupational Therapist led environment assessment and modification to prevent falls in older people in regional and rural settings: A pilot study using implementation science” $17,409.00.

Successful applicants in 2016 were acknowledged at the Toowoomba Hospital Foundation and Pure Land Learning College Research Grants ceremony held at Fitzy’s Tapestry Room on the 25th October. The ceremony was attended by many dignitaries from across the community and was preceded by a morning tea. A presentation by Lisa Deeth (winner of a 2015 grant) on the study “An integrated approach to oral health in rural and regional aged care facilities using oral health practitioners and tele-dentistry” was very informative and prompted many questions from the audience.

5.4 Research Advisory Committee
The DDHHS Research Advisory Committee (RAC) promotes a culture of research excellence and cross-disciplinary collaboration within the DDHHS research community, with the purpose of improving health outcomes across the HHS district. The RAC provides strategic oversight for fostering and building...
research capacity in the DDHHS, in order to meet the objectives laid out in the research strategic plan. The committee provides advice and direction to the Research Support Team in relation to a broad range of research activities such as strategic planning, research procedures and processes, research resources, and showcasing research outputs within the HHS. In 2016, the RAC considered a number of strategies to support the formation of a robust research culture within the DDHHS. These included:

- Including a dedicated research session on the Toowoomba Hospital Grand Rounds calendar. This session included brief presentations by successful DDHHS researchers, with their reflections on managing barriers and accessing enablers to successful research in the district.
- The introduction of research awards to celebrate and reward successful researchers in the district.
- Strategic oversight for a review of research data storage practices within the DDHHS.
- Strategic oversight in the development of external partnerships with university and other research institutes.

The work of the RAC receives strong support from the DDHHS executive, who value the strategic advice it provides to sustain and encourage the rapidly evolving research activity of the DDHHS.

**Research Advisory Committee Members 2016**

Dr Anna Tynan/Dr Maxine O’Brien [Chair]; Research Fellow
Dr Hwee Sin Chong/Dr Martin Byrne; Executive Director of Medical Services
Annette Scott; Executive Director of Allied Health
Dr Robyn Henderson/Karen Abbott; Executive Director of Nursing
Dr Dan Manahan; Rural Health representative
Wendy Friend; HREC Coordinator
Dr Furhan Iqbal; Mental Health representative
Daniel McDonald; Librarian
Dr Sheila Cook; UQ Rural Clinical School representative
Donna Rouse; Research Support Officer
Col Roberts; Data Management representative (Activity & Costing Evaluation Service)
Helen Towler; Nursing Director, Education & Research