Reducing medication misadventure. A comparative analysis of telepharmacy and home medication reviews

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**Abstract**

**Background:** Medication misadventure is a serious issue with two to three % of all hospital admissions being medication-related. The federally funded Home Medicine Reviews (HMRs) have provided an avenue for pharmacists to undertake medication reviews to reduce medication misadventure and they have been shown to be beneficial in improving quality use of medicines and overall health outcomes. The HMR program does not give reasonable access to medication reviews in Cape York due to accessibility and funding restrictions. A service model was required to address the challenge of providing medication reviews and to reduce the incidence of medication misadventure within the funding parameters.

**Methods:** A service model using telepharmacy was trialled in ten primary health care clinics throughout Cape York. The solution supported individualised, culturally appropriate medicine education/counselling via telehealth to outpatients who had complex or extensive medication regimes or were recently discharged from hospital. Resources were developed to support the service model. A comparative analysis evaluated the outcomes of the state-funded telepharmacy service model to the HMRs using a cost analysis, clinical variables, patient safety factors and patient satisfaction.

**Results:** Telepharmacy delivery is a more cost effective way to deliver medication management reviews to remote communities than the current HMR funding model, which is not financially viable for remote communities. The safety evaluations indicated an improvement in service quality, safer use of medications and reduced hospitalisation due to medication misadventure. The comparative analysis has informed business model planning and provided a better understanding of cost difference for remote pharmacy medication review methods.

**Discussion:** The telepharmacy trial has increased access to services, developed clear process and increased the capacity to provide treatments closer to home. Phase two of the implementation will embed the service model within the rural and remote facilities.

**Background**

Cape York is a large geographical territory of 130,238 square kilometres with significant distances between communities, health services sites and to the major referral hospital located in Cairns. The area has challenging topography and difficult road conditions, presenting significant physical barriers to the delivery of health services. Most residents reside in ‘Very Remote’ (81.9 per cent) areas and experience very little accessibility for goods, services and social interaction; and live with extreme socioeconomic disadvantage (73.2 % Quintile 1 compared to 20 per cent for Queensland in 2011), which contributes to higher demand for health services.

Aboriginal and Torres Strait Islander residents accounts for 63.7 per cent of the total resident population in 2011, with the largest numbers of Indigenous people residing in the Local Government Areas (LGAs) of Torres Strait Island (3,857), Torres (2,063), Northern Peninsula Area (NPA) (1,963)
and Aurukun (1,195). One quarter (26 per cent) of all residents are aged 45 years and above and this cohort is most likely to suffer from comorbid and long-term chronic conditions.

Medication misadventure is a serious issue with 2-3% of all hospital admissions being medication-related, which equates to 230,000 per year in Australia. Additionally, up to 30% of admissions of patients over the age of 65 are medication-related. Home Medicine Reviews (HMRs), which are federally funded through the 6th Community Pharmacy Agreement (6CPA), have been the avenue for pharmacists to provide medication reviews to reduce this issue. Pharmacist medication reviews have been shown to be beneficial in improving quality use of medicines and overall health outcomes.

The Cape York’s Queensland Government health services are managed by Torres and Cape Hospital and Health Service (TCHHS). Extremely limited access to clinical pharmacy outpatient services for primary care patients. Outreach Pharmacy from Cairns Hospital and Health Service provides clinical support to health professionals in the primary health care clinics by telephone however direct patient pharmacy services, such as medication reviews or medication counselling, had not been available. The local pharmacy services available are provided by the retail pharmacies in Weipa and Cooktown. One accredited community pharmacist in the Cape had provided HMRs to patients in the Weipa/Napranum/Mapoon area. Delivery of HMRs to communities beyond this area was not economical and this is illustrated in Table 1. For example, to charter a flight to Kowanyama will cost $2,840 and if five HMRs were to be completed during the visit, the total loss, inclusive of wages, would be $2,510.35.

### Table 1: Economics of delivering Home Medicine Reviews to remote Cape York Communities

<table>
<thead>
<tr>
<th>Location</th>
<th>Income if 5 HMR’s completed</th>
<th>Approximate cost to charter from Weipa*</th>
<th>Pharmacist (travel, consult and admin)</th>
<th>Pharmacist wage (costed at $50/hr as per HP4)</th>
<th>Net difference (Income minus costs and wage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kowanyama PHC</td>
<td>(5 x $210.93) + $125 = $1,179.65</td>
<td>$2,840 - 1 hour flight</td>
<td>17 hours</td>
<td>$850</td>
<td>-$2,510.35</td>
</tr>
<tr>
<td>Pormpuraaw PHC</td>
<td>(5 x $210.93) + $125 = $1,179.65</td>
<td>$2,230 - 1 hour flight</td>
<td>17 hours</td>
<td>$850</td>
<td>-$1,900.35</td>
</tr>
<tr>
<td>Aurukun PHC</td>
<td>(5 x $210.93) + $125 = $1,179.65</td>
<td>$1,000 - 30 minute flight</td>
<td>16 hours</td>
<td>$800</td>
<td>-$620.35</td>
</tr>
</tbody>
</table>

*Approximate costs provided from local charter Flight Company for return flights from Weipa to the communities in one day
# Income from rural loading funding when delivering a HMR under the 6CPA (must be greater than a 200km trip and is only single payment), which the program rules state that it is not designed to cover costs just contribute to them
NB: 5 HMR’s would be a minimum of 10 and up to 15 hours of work for the pharmacist depending on complexity of the cases (inclusive of consultation)

Telepharmacy trials have previously been delivered in Australia with recommendations that telepharmacy is funded for remote community clinical pharmacy delivery. Rothwell et al concluded, ‘telehealth can enhance the provision of pharmacy consultation to rural areas improving patient access to a pharmacist and decreasing patient risk of medication misadventure.’ Internationally, telepharmacy has been used in a more specific manner, resulting in non-inferior INR targets compared with the face-to-face model, which suggests the service can be expanded into specialties. The remoteness of Cape York and its communities qualifies the HHS as a prime candidate to initiate telepharmacy as a method of reducing medication misadventure.
Method

A new service model was trialled to address the challenge of providing HMRs in TCHHS (Southern Sector) to reduce the incidence of medication misadventure that aimed to:

- provide a telepharmacy service that supported individualised, culturally appropriate medicine education/counselling to outpatients who had been identified by local clinicians as having complex or extensive medication regimes or recently discharged from hospital
- compare and contrast the feasibility, sustainability and efficacy of the face to face federally funded HMRs to the state funded telepharmacy reviews for remote clients across TCHHS (Southern Sector).

Development of Telepharmacy Service Model

The telepharmacy service was aimed at people with polypharmacy and multiple chronic conditions at the following Primary Healthcare Clinics: Napranum; Mapoon; Aurukun; Kowanyama; Pormpuraaw; Laura; Coen; Lockhart River; Hope Vale and Wujal. The pharmacist delivered the service from Weipa Integrated Health Service one day per week. Figure 1 outlines the geographical locations of the communities.

Figure 1 Queensland Health Cape York facilities

*As this project was a comparative analysis with the HMR program, Napranum and Mapoon were not targeted for telepharmacy due to accessibility from Weipa to deliver HMR’s to these patients.
The target group for patients within the service model was guided by the following criteria:

- currently taking 5 or more medicines
- taking more than 12 doses of medications/day
- significant changes to medication therapy in the last 3 months
- medications with narrow therapeutic index
- symptoms suggestive to adverse drug reaction
- suboptimal response to treatment
- suspected non-compliance or inability to manage medical devices
- dexterity issues
- number of different doctors
- recent discharge from hospital.

The medication review process was developed in accordance with the Pharmaceutical Society of Australia’s (PSA) Guidelines for Pharmacists Providing Home Medicine Review (HMR) Services and the Society of Hospital Pharmacists Australia (SHPA) Standards of Practice for Clinical Pharmacy Services. The clinical pathway process was developed to ensure the steps required, from patient identification to consultation, were streamlined, consistent and simple for all clinicians and PHC staff to engage with and implement the new service. This process is represented below in Figure 2:

Figure 2 Pictorial Administration Process
Clinical and patient resources were developed to support the service model. They included: clinical pathways, clinical forms, pre-service letter, post-service letter, letter to the doctor, and patient resources including: patient information, medicines list and patient survey.

**Evaluation methodology**
The study measures evaluated the following elements:

- **Occasions of Service (OOS):** number of patients seen was measured for both telepharmacy and HMRs.
- **Demographic Analysis:** age, average number of medicines per patient, gender, use of dose administration aid, inclusion criteria, ethnicity and location.
- **Clinical Efficacy of Medication Review:** clinical effectiveness as a pharmacy service was measured by the following:
  - Number of recommendations/interventions per occasion of service
  - Types of interventions/recommendations sub grouped as:
    - dose alteration,
    - cessation of medicine,
    - addition of medicine,
    - change to more suitable therapeutic option,
    - patient specific monitoring, other.
    - no recommendations i.e. current therapy appropriate
- **Adherence data:** collected for the 12 weeks preceding the consult and 12 weeks after to determine improvements in adherence. Data was gathered retrospectively from patients charts and collection of medication/dose administration aid (DAA) and assessed as a ratio
- **Cost:** A crude analysis for the two methods of medication review
- **Patient Satisfaction:** A telehealth patient survey at the completion of the service.

**Results**
The following is the reported outcomes in line with the study measures in the evaluation frameworks.

**Occasions of Service**
Occasion of Service (OOS) data was collected from February to June 2016. A total number of 45 OOS were provided, inclusive of 13 HMRs and 32 telepharmacy consultations.

**Demographic analysis**
The comparative analysis was conducted from January to June 2016, with both the HMRs and telepharmacy consultations delivered by the same pharmacist. Table 5 outlines the patient demographics of the population for which the medication reviews were delivered. Average age was almost the same; with HMR average age 58 years (distribution 35 years to 84 years) and telepharmacy average age 60 years (distribution 36 years to 78 years). The average number of medicines per patient was slightly higher for HMR patients being 10.5 in comparison to 8.2 for the telepharmacy patients. Gender was equally spread for both HMR and telepharmacy (with approximately 50% for male and female). Nearly all patients who participated in HMRs and telepharmacy used a dose administration aid, which highlights the burden of chronic disease experienced by the Cape York population and is illustrated by the majority of patients also having...
three or more chronic medical conditions. The majority of patients were of Aboriginal or Torres Strait Islander descent.

Table 5  
**Patient demographics for Telepharmacy and HMR Patients**

<table>
<thead>
<tr>
<th></th>
<th>Average age (years)</th>
<th>Average number of medicines per patient</th>
<th>Female</th>
<th>Using dose administration aid (DAA)</th>
<th>3 or more Chronic medical conditions</th>
<th>Diabetes patients</th>
<th>Aboriginal or Torres Strait Islander patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMRs</td>
<td>58</td>
<td>10.5</td>
<td>54%</td>
<td>100%</td>
<td>92%</td>
<td>62%</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>(35-84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telepharmacy</td>
<td>60</td>
<td>8.2</td>
<td>50%</td>
<td>97%</td>
<td>97%</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(36-78)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 below illustrates the locations and number of the medication review services

Table 6  
**Locality and number of medication review services**

<table>
<thead>
<tr>
<th>Locality</th>
<th>HMRs</th>
<th>Telepharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurukun</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Mapoon</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Napranum</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Pormpuraaw</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Kowanyama</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Weipa</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>32</td>
</tr>
</tbody>
</table>

Clinical Efficacy of Medication Review

The average number of medications taken by patients in HMR and telepharmacy consultations was approximately equal. An average of 10.8 medications per patient in the HMR setting and 8.0 medications per patient in the telepharmacy setting were prescribed, see Table 6. For both medication review delivery methods, the number of pharmacist interventions/recommendations were similar. HMRs averaged 2.6 interventions/recommendations per patient, and telepharmacy averaged 2.3 per patient.

Table 7  
**Pharmacist interventions/recommendations comparison**

<table>
<thead>
<tr>
<th>Type of intervention</th>
<th>Average number of medicines per patient</th>
<th>Number of pharmacist interventions/recommendations</th>
<th>Average Number of pharmacist interventions/recommendations per patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMRs</td>
<td>13</td>
<td>34</td>
<td>2.6</td>
</tr>
<tr>
<td>Telepharmacy</td>
<td>32</td>
<td>73</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Graph 1 highlights the types and numbers of interventions made. The higher number of interventions bars for telepharmacy are due to the differing number of services delivered, however, the pattern is relatively similar between the two review methods. Each type of intervention/recommendation was detailed and the number and percentage based on the total medications taken by the patient.
Graph 1 Types and Number of interventions/recommendations

There were 34 total interventions/recommendations made in HMR consultations, which represented 24% of medications being taken. For telepharmacy, there were 73 interventions/recommendations, which represented 29% of total medications being taken. The number of consultations was higher for telepharmacy, but the rate of all types of interventions/recommendations were similar between the two medication review methods.

Adherence data
Reliable adherence data was collected from eleven patients from both the HMR and telepharmacy groups. From the HMR group, four patients were assessed and an average ratio of 0.97 was calculated, which indicates that there was essentially no difference before and after the HMR in regards to adherence. The telepharmacy group had seven patients assessed, which resulted in an average ratio of 1.32, indicating that adherence increased as a result of the telepharmacy consultation. This is very positive, as many of the patients targeted in the telepharmacy group were non-adherent to their regime and referred for this sole purpose. Limitations to the collection and utilisation of the adherence data included small sample size, one PHC was not included in the analysis, and reliance on staff documentation.

Cost
Cost comparisons between HMRs and telepharmacy are illustrated in Table 7. The HMR program fixed costs were $941.20 and included reaccreditation fee, blood pressure machine, stationery and accounting fees. The cost required to deliver the 13 services (the total expense excluding fixed costs) included travel, internet usage and pharmacist wage. Telepharmacy fixed costs of $2,139.20 included videoconference hardware, computer and administration costs and telehealth training. The cost to deliver the service included other health professional wage (i.e. nurse or Indigenous Health Worker (IHW) and pharmacist wage. The fixed costs were significantly larger for telepharmacy ($1,198) due to the infrastructure and additional personnel required to implement the service.
The average cost per service (13 services) for a HMR was calculated to be $279.89, with the variables impacting this the most being travel and wages associated with additional time taken with travel. In comparison, the average cost per service (32 services) for telepharmacy was $214.66, with the main variable being who attended at the recipient end i.e. Indigenous Health Worker or Nurse. In contrast to fixed costs, the cost per service was significantly lower for telepharmacy due to the additional variables of travel expense of $65.23 and pharmacist wage paid during travel time. An analysis was also completed for local HMRs (Napranum, Mapoon and Weipa), as well as remote HMRs (Aurukun). The cost per service significantly reduced for the local HMRs and increased for the remote HMRs due to the increased travel time.

The amount of income generated per service, which was set at $318? For telepharmacy (under the Queensland Health purchasing initiative for telehealth 2015-2016) and $210.93 for HMRs under their respective funding streams. The difference in income for HMRs (all) and HMRs (Aurukun only) is derived from the addition of the rural allowance provided under the 6CPA, which is $125 when over 200km is travelled. Also of note, the income generated at the recipient end for telepharmacy ($318 per consultation) is not included in the analysis. The income for telehealth is only generated if the HHS reaches a certain threshold of OOS (i.e. above the threshold from the previous financial year). This analysis has not been done for the financial year and this could impact on the income from these telepharmacy consultations. For the analysis, it is assumed all OOS were funded. (It should be noted that this funding initiative is subject to change on an annual basis and these funding amounts were those that were available at the time the study was conducted). The revenue from service is very dependent on the occasions of service and the significance is better explained by the net profit per service and number of services required to break even. The most significant indicator to analyse are net profit per service excluding fixed costs and number of services required to meet the cost of service. Both of these measures consider the sustainability of the service and are unlikely to vary if the service continued. Other KPIs are likely to change as number of services increase. For telepharmacy, 13 services are required to overcome fixed costs and start making $167.19 per service. This is in comparison to all HMRs, in which 42 services are required to start making $22.67, which is not financially sustainable for an individual pharmacist in a retail pharmacy setting.

When considering HMRs according to location, they are viable when performed in the local area to the pharmacist. Only nine services are required to overcome fixed costs (better comparatively to telepharmacy), to start making $75.01 per service, which suggests the business model for local HMR delivery is sound. However, when you consider remote HMR delivery to Aurukun, including the rural allowance, the service will never be viable as $95.07 is being lost per occasion of service. It is important to recognise that only two HMRs were performed on each visit to Aurukun and if this was increased, the cost per service would likely decrease. However, with two HMRs, the total pharmacist time is already nine hours (including report writing and travel) and increasing this could be detrimental to patient outcomes and pharmacist safety, due to fatigue.
Table 7 Comparative cost analysis of HMRs and telepharmacy

<table>
<thead>
<tr>
<th></th>
<th>Telepharmacy</th>
<th>HMRs (all)</th>
<th>HMRs (Napranum, Mapoon, Weipa)</th>
<th>HMRs (Aurukun only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenses</td>
<td>$6,869.20</td>
<td>$3,538.52</td>
<td>$1874.92</td>
<td>$1,763.60</td>
</tr>
<tr>
<td>Total expenses (excluding fixed costs)</td>
<td>$4,730.00</td>
<td>$2,597.32</td>
<td>$1223.32</td>
<td>$1,474.00</td>
</tr>
<tr>
<td>Average cost per service (including fixed costs)</td>
<td>$214.66</td>
<td>$279.89</td>
<td>$208.32</td>
<td>$440.90</td>
</tr>
<tr>
<td>Average cost per service (excluding fixed costs)</td>
<td>$147.81</td>
<td>$207.49</td>
<td>$135.92</td>
<td>$368.50</td>
</tr>
<tr>
<td>Average income per service</td>
<td>$315.00</td>
<td>$230.16*</td>
<td>$210.93</td>
<td>$273.43*</td>
</tr>
<tr>
<td>Revenue from service</td>
<td>$3,210.80</td>
<td>-$646.43</td>
<td>$23.45</td>
<td>-$669.88</td>
</tr>
<tr>
<td>Net profit per service (excluding fixed costs)</td>
<td>$167.19</td>
<td>$22.67</td>
<td>$75.01</td>
<td>-$95.07</td>
</tr>
<tr>
<td>Number of services required to overcome fixed costs</td>
<td>13</td>
<td>42</td>
<td>9</td>
<td>Unable to calculate as making a loss each service</td>
</tr>
</tbody>
</table>

*including rural allowance, which is $125 when over 200km (round trip) travelled
# Calculated as an equivalent %age i.e. 9 out of 13 HMRs performed which is 69% of total fixed costs for Napranum, Mapoon and Weipa; 4 out of 13 for Aurukun which is 31% of total fixed costs.

The results of this analysis indicate that HMR delivery to remote areas of Cape York was not financially viable for the retail sector. If the retail pharmacies or the HHS does not deliver this type of service, the population of remote Cape York, who are already at high risk of medication misadventure, will not have access to the HMR program. This is currently evident in Kowanyama, Pormpuraaw, WujalWujal, Hope Vale, Laura, Coen and Lockhart River. In contrast, the findings from the telepharmacy method of medication review indicate a more financially viable service. This cost analysis demonstrates that telepharmacy provides the avenue to enable outpatient pharmacy services to be delivered to remote communities.

**Patient satisfaction**

The medication reviews were delivered in an individualised and culturally appropriate manner, which was supported by the patient surveys completed. Eleven surveys were completed (35% of total consultations) by patients receiving the telepharmacy service, with eleven (100%) respondents stating ‘Yes’ for five out of seven questions, including:

- Were you given enough information before your telehealth videoconference appointment such as where to go and at what time?
- Did you feel you were treated with courtesy and respect during your appointment?
- Did you understand what your pharmacist said to you in your telehealth videoconference consultation?
- Were you happy with the way your appointment was provided?
- Would you be happy to have your appointment this way again?

Four respondents (36%) stated it was not explained what a telehealth videoconference was and one respondent (9%) stated they were not sure if they had opportunities to ask questions. Two comments were received, both positive stating, “It’s good,” and “Chris is alright.” Recipients of HMRs did not receive or complete surveys, however there is evidence available that stipulates a high level of
consumer satisfaction with clinical medication reviews. Although the response rate to the surveys was low, the high level of patient satisfaction is critical as an adjunct to the positive comparative efficacy results. As mentioned previously, HMRs already have proven high level of satisfaction and a potential barrier to telepharmacy implementation would be a resistance to technology. There is no evidence of reluctance to engage in telehealth. Patients received the service positively, which enables the accessibility of medication review services in remote Cape York.

**Barriers to telepharmacy**

A number of potential barriers to delivering the telepharmacy service were identified. The failure to attend rate, illustrated in Table 8, was higher for telepharmacy when compared to HMRs as the patient was required to attend the clinic at a pre-specified time. However, this figure would have been much lower had the clinic not utilised drivers to collect patients. This was not included in the cost analysis as it was sporadic, difficult to monitor and would add minimal cost.

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Failure to attend rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OOS</td>
</tr>
<tr>
<td>HMRs</td>
<td>13</td>
</tr>
<tr>
<td>Telepharmacy</td>
<td>32</td>
</tr>
</tbody>
</table>

A major barrier to service delivery was turnover of staff at the recipient end. Engaging clinics was challenging. All of the same strategies were used and it is likely that the existing rapport between the pharmacist and engaged clinics was the major reason for successful implementation.

**Limitations**

The following limitations were identified:

- The financial analysis is not an economic analysis, rather a cost analysis and there may be costs which were missed or over- or underestimated. It is intended to be a guide as a comparator for the two services.
- The sample size was small for both groups (HMR and telepharmacy), which doesn’t allow for sufficient statistical analysis
- The adherence score is not a validated tool, but a useful guide. Collection of medication does not always translate to an accurate reflection of adherence.

**Conclusion**

The efficacy of the medication review methods was similar between HMRs and telepharmacy. The number and types of interventions/recommendations were similar, resulting in comparable clinical outcomes. The reported level of patient satisfaction for telepharmacy was high, which is an important adjunct to the similar clinical efficacy, as technology was not seen as a barrier to service delivery. Both of these findings indicate that medication management reviews are well received and clinically relevant; importantly, the cost analysis clearly showed that telepharmacy provides a financially viable avenue to enable outpatient pharmacy services to be delivered to remote communities.
Achievement of the project purpose has created the following benefits:

- Bridged service gap—giving patients access to a medication review service and medication counselling by a pharmacist
- Ensure safe and quality use of medications by ensuring greater therapeutic input from a pharmacist
- Patients have received culturally appropriate medicines list, which the Society of Hospital Pharmacists Australia (SHPA) see as central to optimal use of medicines
- Developed a service model that is applicable to other Hospital and Health Services.

References

2. Torres and Cape Hospital and Health Service, Geographic and population profile, Queensland Health
4. Muscillo N, DeSilva S, Stokes J, Lum E, Forsythe R, Telepharmacy: reaching out to patients admitted to rural hospitals
6. Singh L, Accursi M, Black K, Implementation and outcomes of pharmacist-managed clinical video telehealth anticoagulation clinic, 2015, American Journal of Health-System Pharmacy. Available from: http://eds.a.ebscohost.com/eds/detail/detail?sid=6e8134a1-44a7-4ec5-b3f7-0078be5ca8c%40sessionmgr4001&vid=0&hid=4205&bdata=JkF1dGhUeXBllwLGF0aGVucyZzaXRxIPVkcy1saXZj&preview=false#AN=100784043&db=asx
7. Torres and Cape Hospital and Health Service, Queensland Health Specialist Outpatient Services Implementation Standard, Queensland Health

Presenters

Upon graduating as a psychologist Fiona Hall worked as a counsellor and psychologist in educational, community and hospital settings in rural, remote and metropolitan locations in Australia. Following this she worked as a clinical psychologist and researcher providing mental health services for more than a decade and completing post-graduate studies in clinical hypnotherapy, acute care in the community and a Doctorate in Psychology. The last ten years in the workforce have been committed to progressing the National allied health workforce and mental health reform agendas through the management of Statewide projects and programs. Fiona lives with her family in Cairns, North Queensland and works for the Allied Health Professions Office of Queensland, where she manages statewide strategic workforce planning and policy development activities and provides leadership to allied health professionals in the Torres and Cape Hospital and Health Service of Queensland Health.
Used to providing telephone support and advice to elderly patients in her role as a Practice Nurse, Debi Dean now helps develop clinical services being delivered by videoconference across Torres and Cape Hospital and Health Service. Having trained at St Bartholomew’s Hospital in the City of London more than 36 years ago, Debi has swapped the delights of Liverpool Street and Hackney for the scenic beauty of the Cape York Communities. Working in these facilities provides many challenges but these remote locations are exactly where videoconference consultations can be most effective. By enabling Torres and Cape patients to be able to access specialist care from their community with the support of their family and friends, ensures that they receive timely health care, in a facility familiar to them without the stress of travelling. Debi is a passionate champion of clinical videoconference services and is keen to share her enthusiasm and experience.