Diabetes Telehealth for Country WA

A Partnership Approach

Presented by: Jennifer Thompson WA Country Health Service (WACHS), Amanda Lee Diabetes WA (DWA) and Prepared by: Carole Rainsford WACHS, Deborah Schofield DWA, Amanda Lee DWA, Gill Denny DWA
The Imperative

Poorer health outcomes for people with diabetes living in regional WA

Bill’s story
Purpose

Improve health outcomes for people with diabetes living in regional WA

• Overcome geographical and specialist staffing limitations
• Provide timely equitable access
• Support planned generalist workforce development
• Offer services both complementary and supplementary to existing services
• Reduce potentially preventable hospitalisations
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.

Context

- WA Country Health Service area - 2.5 million kms$^2$
- 7 regional Health Services
- Widely dispersed, low density population (551,066)
- High diabetes prevalence
- Significant travel demands
- Limited service access
• WA Country Health Service (WACHS) partnered with Diabetes WA

• Service provision via videoconference, internet (desktop) and telephone

• Integrated services

• No wrong door
Model of care

- Empowerment approach - client centred care
- Traditional diabetes education methods, remodelled for videoconference, using screen based tools, document camera
- Shared care, refer on to local services where available
- Aim to fill both short and long term diabetes education gaps
- Sharing of clinical information for internal and external providers
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.
## Issues to consider

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific regional needs</td>
<td>Tailoring &amp; pathways</td>
</tr>
<tr>
<td>Health Service concerns</td>
<td>Engaging, listening and responding</td>
</tr>
<tr>
<td>Local diabetes educators – service effect on workload (private/public)</td>
<td>Demonstrate benefits of cross referral. Involve in PD. Provide holiday cover</td>
</tr>
<tr>
<td>Effective communication, response and support to GP’s</td>
<td>Structured referral and reporting, linking to medical practice software. Shared care offered. PD program</td>
</tr>
<tr>
<td>Holistic approach to diabetes management for complex referrals</td>
<td>Establish shared care roles– link with GP’s &amp; other “MDT” at distance. On-referral</td>
</tr>
<tr>
<td>Embedding service model and quality</td>
<td>Service procedures defined and refined</td>
</tr>
<tr>
<td>Technical development and support</td>
<td>Partner with State Telehealth &amp; expert support</td>
</tr>
<tr>
<td>Building trust</td>
<td>Reliability, responsiveness</td>
</tr>
<tr>
<td>Report and evaluate to show value</td>
<td>Ongoing review &amp; evaluation – share learning</td>
</tr>
</tbody>
</table>
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.

Activity March 2015 - January 2017

Occasions of service 1,094

Referrals:

Total 590
- Aboriginal 65
- Identified mental health issue 29
- Culturally and linguistically diverse (CALD) 2
Mode of delivery

78.1% (854) Videoconference
20.6% (225) Phone
0.6% (7) Face to face
0.7% (8) Unspecified mode

Occasions of service by region

March 2015-January 2017
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.

Referral Sources
March 2015-January 2017

GP 53% (n315)

Nursing 25% (n148)
Self 6% (n33)
Allied Health 5% (n28)
Health Navigator 4% (n24)
Other 7% (n42)
Quarterly Growth

March 2015-January 2017

Total consultations

Diabetes Telehealth for Country WA

- April-June 15
- July-Sept 15
- Oct-Dec 15
- Jan-March 16
- April-June 16
- July-Sept 16
- Oct-Dec 16
Professional Development

March 2015-December 2016

- 38 hours of upskilling
- 744 attendances
- 15-20 sites attending on a regular basis
- All 7 WA health regions participating including remote locations

How far would you have to travel to access face to face diabetes upskilling?

<table>
<thead>
<tr>
<th>Distance Kilometres</th>
<th>Number of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 100</td>
<td>15</td>
</tr>
<tr>
<td>100 - 199</td>
<td>10</td>
</tr>
<tr>
<td>200 - 299</td>
<td>8</td>
</tr>
<tr>
<td>300 - 399</td>
<td>8</td>
</tr>
<tr>
<td>400 - 499</td>
<td>23</td>
</tr>
<tr>
<td>500 - 599</td>
<td>11</td>
</tr>
<tr>
<td>600 - 699</td>
<td>27</td>
</tr>
<tr>
<td>700 - 799</td>
<td>6</td>
</tr>
<tr>
<td>800 - 899</td>
<td>4</td>
</tr>
<tr>
<td>900 - 999</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>18</td>
</tr>
</tbody>
</table>

Carbohydrate Counting
Diabetic Ketoacidosis & Hyperosmolar Glycaemic State
Reversing Diabetes – Myths & Facts
Diabetes & Fasting
Gestational Diabetes
Heart Disease and Diabetes
Chronic Kidney Disease
Diabetes Retinopathy
**Sophie**

**Key issues**
- Referred post diabetic ketoacidosis (DKA), frequent low blood glucose events
- Diagnosed Type 1 diabetes (DM) early 30’s, 2 years ago
- Very limited understanding of diabetes self management
- Felt disempowered, no blood glucose (BG) testing for 8 months

**Solution**
- Intensive education, re diabetes, diet, insulin, problem solving, bi-weekly reviews initially
- Recommend GP and endocrinology review
- Engaging with multidisciplinary team (MDT)

**Health Outcome**
- Hypos reduced by 80%
- Consumer reported increased confidence in self management of problem solving for blood glucose control

**Comprehensive report to GP**
Jenny

**Key Issues**
- 48 year old Aboriginal woman, remote community, type 2 DM for 20 years
- Doesn’t recall seeing diabetes educator
- High long term blood glucose (HbA1c), declining kidney (renal) function
- Feels kidney problems inevitable, “a death sentence”, a sense of fault for high BG
- Had not gained full understanding of reasons to take medications

**Solution**
- Diabetes education provided, shared care with remote area nurse & family
- Understanding of medications and how they help the body was advanced
- Discussed home blood glucose monitoring, willing to try home testing
- Provided a glucometer

**Health Outcome**
- Motivated, taking medications twice a day, diabetes management improved
- Commenced blood glucose testing at home, blood glucose levels reduced
- Happy to follow up with diabetes educator by phone
- Suggested that she may need insulin to bring blood sugars down

Comprehensive report to GP and AMS
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.
Consumer and Health service benefits - August 2016 assessment

113,000 Km travel saved for consumers

$120,000* saved in delivering diabetes education in a more timely manner and closer to home

54 Days of travel saved – for diabetes educators

* Comparison of actual service delivery with to the same service delivery using face-to-face DE's, had they delivered the same service
The Future

- Advance telehealth service as core integrated service option for country WA
- Work in partnership with WA Primary Health Alliance and external agencies
- Improve uptake & sustainability in remote WA and with Aboriginal and CALD consumers
- Inter-agency chronic conditions telehealth hub
- Enhance contribution to GP management planning & annual cycle of care
- Link with electronic health record/s
- PD program, meeting regional PD requirements
Recommendation

Diabetes education and clinical support services (GP, Nursing and Allied Health) provided via telehealth, be recognised on the Medicare benefits schedule, to provide consumers in rural and remote WA and Australia with equitable access to diabetes services.
This project is funded by the WA Country Health Service’s Southern Inland Health Initiative, which is made possible by the State Government’s Royalties for Regions program.

For more information contact:

Gill Denny
Diabetes Telehealth Coordinator
Diabetes WA
P: 9436 6266
E: Gill.Denny@diabeteswa.com.au

Phone: 1300 136 588 | Email: telehealth@diabeteswa.com.au