Virtual Clinical Care Home Telemonitoring Service

A hospital avoidance strategy in regional South Australia
Regional Health Services in South Australia

- From 1 July 2019 Country Health SA Local Health Network has been devolved into 6 regional Local Health Networks
- 61 hospitals
- 8,000 staff
- 470,000 people over approx. 1 million square kilometres
Use of technology in regional health services

The implementation of a range of virtual services over the past 10 years has enabled regional health services to expand reach and improve access in a resource poor environment across vast distances:

- Digital Telehealth Network (DTN) – videoconference/telehealth consultations
- Access to 24/7 cardiologist support (through iCCnet) – timely review of clinical information to improve management of acute cardiac presentations
- Point of Care Testing in country hospitals
- Home Telemonitoring Services
- South Australian Virtual Emergency Services (SAVES)
- Country Access to Cardiac Services (CATCH) – Cardiac Rehabilitation Programs
- The Statewide Tele-rehabilitation Service
- SA Tele-Stroke Service – access to 24/7 neurologist support

Country Health SA – Showcasing technology in healthcare (YouTube)
Virtual Clinical Care Home Telemonitoring Service

The Challenge:

- Potentially preventable admission data – chronic conditions most prevalent
  - Cardiac
  - Respiratory
  - Diabetes
- Frequent presenters to emergency departments
- Extended length of stay
- Timely access to general practice can vary across country SA
- Access to dedicated chronic condition nursing services, and visiting specialist services is highly variable

- What if we could support people with chronic conditions in a different way to reduce unplanned presentations to hospital?
Virtual Clinical Care – Clients and Equipment

- Identified clients with COPD, Cardiac Failure, Diabetes, Hypertension or a combination of these conditions
- A range of devices measure clinical parameters
- Each day clients take their measures and complete a condition specific health interview
- Results transmitted to secure database for review
- Integrated Cardiovascular Clinical Network (iCCnet, Rural Support Service) manages the equipment, technical set up, the database and provides technical support to the clients
Virtual Clinical Care (VCC) Monitoring Hub

• Chronic condition nurses monitor and review results
• The VCC dashboard flags clients with results outside their individual determined parameters
Virtual Clinical Care (VCC) Dashboard

- The dashboard provides all of the results from their commencement
- Compare results from previous day, week, month or longer
- Identify trends and potential deterioration/change
- Early intervention to reduce hospital presentations
Collaboration - Communication is the key

- VCC Monitoring Hub is a virtual office – nurses based in different locations
- Daily virtual nursing ‘huddle’
- Patient record built into the VCC dashboard facilitates information exchange
Collaboration – Communication is the key

- Works in collaboration with other health services – facilitate information exchange
  - Better Care in the Community program (supporting people with chronic conditions)
  - General Practitioners and practice nurses
  - Specialists – Cardiologists, Respiratory Physicians, Endocrinologists, Nephrologists, Emergency Department Physicians etc.
- Diabetes Services
- Renal dialysis teams
Service Outcomes (2018-19)

- 113 clients
- Average age 70 years
- Average time on the program – approx. 6 months
- Gain an in-depth understanding of how people live daily with chronic conditions
- More than 13,000 occasions of service provided (including clinical review, telephone follow-up, client education, technical support, client reports, advocacy and written documentation)
- 98 Emergency Department presentations avoided
- 206 admissions avoided
- 16 occupied bed days saved
Client Outcomes

- Most people have more than one chronic condition or other comorbidities
- Empower the client to become a skilled self manager
- Every interaction is an opportunity to educate the client
- Many people go on to purchase their own equipment to continue monitoring
- Individual action plans – know when to implement
- Early intervention is the key
The Future

• Patient portal – where clients can input their own results
• Videoconference access to clients in their own home
• Further advancement of the health interviews
• Expansion of VCC to other client groups
Further information

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