

POLICY OPTIONS

Stepping Up Telehealth: Using telehealth to support a new model of care for Type 2 diabetes management in rural and regional primary care

October 2015

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Policy context

People with type 2 diabetes (T2D) have the vast majority of their clinical care in primary care. Clinical care can help people achieve glycaemic targets, yet most patients continue to have out-of-target glycaemic levels without appropriate treatment intensification. These problems are exacerbated in rural and remote areas with limited access to endocrinologist and Registered Nurse-Credentialed Diabetes Educator (RN-CDE) support. Medicare Australia introduced incentives and reimbursement for telehealth consultation in July 2011. The Australian College of Rural and Remote Medicine (ACCRM), the Royal Australian College of Physicians (RACP), and the Royal Australian College of General Practitioners (RACGP) publish standards, guidelines and resources to enhance implementation of telehealth in clinical practice. Yet the overall uptake is low, with less than one telehealth consultation for every 400 specialist consultations made in Australia (1).

Project overview

The Stepping Up Telehealth was a 'proof of concept' study of implementation of the Stepping Up model of care supported by the use of telehealth (webinar education, online data sharing and video consultations) in rural and regional primary care. The project examined the feasibility and acceptability of telehealth intervention to support intensification of lifestyle modification, oral and injectable therapies to achieve glycaemic targets for people with T2D in rural and regional primary care. Eighteen patients, five practice nurses (PNs) and ten general practitioners (GPs) from five general practices in the rural northeast region of Victoria and southern region of New South Wales participated with support of three local RN-CDEs and two endocrinologists in Melbourne.

This pilot project consisted of three key telehealth elements:

1. Online education for GPs and PNs: Education on structured monitoring of blood glucose and treatment intensification based on simple algorithms delivered via live webinar (GoToWebinar © (<http://www.gotomeeting.com.au/collaboration/>))
2. Online data sharing: Patient education in structured monitoring of blood glucose and sharing blood glucose data via an online platform (Online Health Portfolio (OHP) (<https://www.onlinehealthportfolio.com/>)), with follow up by local RN-CDE. Patients were able to share their data with carers, GPs, PNs, RN-CDE and endocrinologist.
3. Video consultation: Patient consultation with endocrinologist and other members of the multidisciplinary team (GP, PN, RN-CDE) via skype © (<http://www.skype.com/en/>).

Policy options

Patients and health practitioners are still a long way from experiencing the potential of telehealth to support seamless unobtrusive monitoring and integrated ‘just-in-time’ video access to consultations with specialists. The broadband internet connectivity, technology infrastructure, affordability to access internet and the economic incentives are currently not in place. Further, unless greater clinical informatics expertise is nurtured the professional and patient cultural norms and communication practices underpinning the current models of care may prevail over telehealth-enabled potential reforms. The project findings highlight important areas to explore in the implementation and integration of telehealth interventions to support effective and efficient diabetes management in rural and regional primary care.

- > Workforce development and competency
 - Consider committing resources to embedding a range of telehealth competencies into undergraduate and postgraduate training for health professionals from all disciplines.
 - Support the incorporation of telehealth training modules as part of continuing professional development programs to overcome geographical boundaries of care for patients in regional, rural and remote areas. Training modules could be developed in collaboration with professional groups and linked to established quality improvement and accreditation programs and cycles.
- > Resources for telehealth coordination and system integration
 - Consider establishing a new “telehealth coordination role” within primary care to support implementation of the Connecting Health Services With the Future initiative. This role, while not necessarily requiring clinical training, would encompass the capacity to help educate and support patients to use telehealth technology in the context of their medical conditions, to coordinate multidisciplinary care appointments and to coordinate telehealth information collected from patients.
 - Consideration should be given to expanding and promoting the current national and regional directory of telehealth-ready medical specialists.
 - Consider collective and collaborative strategies and partnerships with all commercial providers of electronic medical records to harmonise and optimise the integration of telehealth interventions.
 - Explore opportunities to integrate seamless patient self-management data sharing and communication between and amongst health professionals and patients.
- > Funding models and implications
 - Advocate for innovative and sustainable funding models that support change in practice to achieve better quality care improvement. Consideration should be given to developing financial incentives to higher uptake of telehealth within a blended payment system, which provides greater local autonomy and flexibility in service configuration to achieve clinical and other outcomes.
 - Consider a funding mechanism for PNs, RN-CDEs and other members of the multidisciplinary diabetes team to actively participate in monitoring and responding in a timely manner to patient self-management and clinical information collected from telehealth platforms and to participate in telehealth multidisciplinary consultations.
- > Further research
 - Consider larger scale, long term, Australia-wide implementation and evaluation of a multidisciplinary research in diabetes telehealth program that is likely to deliver maximum value for investment.

Key findings

Findings from this proof of concept study on the implementation of the Stepping Up model of care supported by the use of telehealth are discussed below. These findings underpin the policy options outlined above.

- > The model of care is feasible and acceptable to health practitioners and people with out-of-target T2D in rural and regional primary care. Sharing of self-management data with health professionals was acceptable however there was limited capacity in the current online platform to facilitate this. Video consultations that included patient, GP, PN, RN-CDE and endocrinologist were acceptable to those involved. The multidisciplinary nature of the video consults increased patient confidence that all their health care providers were in contact and working together. The video consults also played an educational role for patients, as well as GP and PN.
- > The use of telehealth to support the Stepping Up model of care overcame geographic and financial barriers; enhanced access to multidisciplinary diabetes specialist care; and produced clinical, biochemical and empowerment benefits for people with T2D. Our findings highlighted the potential benefits of telehealth to reduce health inequity among people with T2D in rural and regional primary care.
- > Current fee-for-service models and support systems are inadequate to integrate telehealth within usual primary care practice. Fee-for-service (FFS) structures under the current Medicare arrangements do not incentivise GPs and PNs to engage together and with other health professionals as part of a multidisciplinary care.
- > There was a lack of exposure to and skills in information technology among rural and regional health workforce. In particular IT infrastructure systems did not support the smooth conduct of remote training *via* webinar where system incompatibility, variable levels of staff access and a range of software incompatibility issues acted as barriers.
- > Significant human resources were needed to undertake the intensive work of coordinating and arranging this type of collaborative care that is potentially enabled by telehealth. Resources are also need to deal with IT skills and infrastructure issues on-site in practices. This work was undertaken by the Study RA in the present study but this highlighted a new telehealth coordinating role that may be critical to promoting more widespread uptake of telehealth in practice.
- > Building information technology infrastructure capacity, increasing broadband connectivity and affordable internet access across the primary care sector and ensuring seamless integration of telehealth modalities within the electronic health record is more likely to see telehealth integrated within the working day and billing routines of practices.

1. Wade VA, Elliott JA, Hiller JE. Clinician Acceptance is the Key Factor for Sustainable Telehealth Services. *Qualitative Health Research*. 2014;24(5):682-94.

The research reported in this paper is a project of the Australian Primary Health Care Research Institute, which is supported by a grant from the Australian Government Department of Health under the Primary Health Care Research, Evaluation and Development Strategy. The information and opinions contained in it do not necessarily reflect the views or policies of the Australian Government Department of Health.