Rural General Practitioner Digital Health Interviews

Report from Rural Health West’s eHealth Business Development Network

2 February 2017
Rural Health West

Rural Health West is the trading name for the Western Australian Centre for Remote and Rural Medicine Limited. Rural Health West is a not-for-profit, membership-based organisation overseen by a Board of Directors. As this State’s rural health workforce agency, the organisation receives core funding from the Australian Government Department of Health and the Western Australian Department of Health to deliver its core business activities of recruitment and retention of the medical, dental, nursing and allied health workforce in rural and remote Western Australia.

Rural Health West is committed to enhancing access to high quality primary healthcare for everyone, everywhere across rural and remote Western Australia, aspiring to the achievement of healthy communities. To achieve this aim, Rural Health West conducts research to enhance our understanding of how rural general practice makes use of digital health technologies and the barriers and enablers that affect uptake.

Compiled by

Michael Cordery compiled this report with assistance of Annie Rowe.

Limitations

The author acknowledges the following limitations which have reduced the size of the participant pool, the complexity of the research and have potentially restricted the scope and value of the findings:

- the interview sample was small and restricted to practitioners familiar with Rural Health West
- no preliminary research was undertaken which may have informed the survey development

Acknowledgements

The author would like to acknowledge the members of the Rural Health West e-Health Business Development Network who planned and undertook this research. This report was commissioned and supported by the Rural Health West Executive Management Team.

Suggested citation

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Executive summary

In late 2016, the Rural Health West eHealth Business Development Network were tasked with interviewing a representative sample of general practitioners who had involvement with Rural Health West to assess their experiences and usage of digital health, with the aim of developing recommendations on future business strategic direction.

A selection of 42 general practitioners was made and the interview process ran for four weeks. Thirty-four responses were received, mostly via telephone interviews. Respondents were provided with the questions in advance and were encouraged to comment extensively on their experiences with and expectations of digital health.

The results indicate that generally, the majority of general practitioners interviewed consider digital health to be beneficial, in particular, telehealth and digital health systems (practice software, shared record systems). Opinions on My Health Record were mixed, with respondents acknowledging the potential benefits while highlighting issues such as limited uptake and difficulties in use.

Primary motivations to adopt digital health were to improve patient outcomes and patient access to services. Primary barriers to uptake were time constraints, lack of skills and understanding and internet connection issues. Desired resources to facilitate uptake included better professional development, more practice support, and financial incentives.

When asked what support Rural Health West could provide in this space, respondents nominated the provision of digital health education, expanded practice technical support, the development of a resource centre, and acting as an advocate with government and other stakeholders.

As a result of this research, recommendations for the digital health strategic direction for Rural Health West and its partners include:

- **Research**: develop knowledge base, provide advice and participate in research.
- **Support**: provide education programs, develop documentation and create resource centre.
- **Advocacy**: lobby for better internet, data sharing, standard operating environments and Medicare billing for telehealth.

It is acknowledged that in the undertaking of this research, the interview sample was small and restricted to practitioners familiar with Rural Health West, hence the potential exists that the findings are not entirely representative and biased toward more progressive general practitioners. Furthermore, no preliminary research was undertaken which may have informed the survey development resulting in more useful and informative findings.

The efforts of the Business Development Network and other Rural Health West staff in the collection of this information are acknowledged and appreciated, as is the generosity and enthusiasm of participating general practitioners.
Introduction

Australia’s health sector is in the early stages of a digital revolution which has the potential to entirely change how health consumers interact with health services and professionals, how patient information is shared, and how service funds are allocated. In a rural context, digital health has the potential to reduce the significant health gap caused by geographical distance, enabling providers to deliver timely and necessary health services remotely to areas where access is limited.

Digital health is defined by Rural Health West as ‘the application of information and communication technology to improve health service provision and outcomes’. Some of the many ways in which universal adoption of digital health can benefit the Australian health system include:

- increasing access to health services where they are scarce, effectively negating the impact of geographical isolation on health;
- allowing seamless sharing of health information between patients and care providers, as well as between providers;
- allowing efficient and effective communication between service providers, avoiding service duplication; and
- increasing health consumer literacy by empowering patients to take control of their health information (My Health Record).

Despite these advantages, not all general practitioners (GPs) are taking full advantage of digital health. Many still rely on paper, pen and human memory to deliver health services. For example, My Health Record, established in 2012, had seen only 19 per cent of the population register for the platform by 2015, and just 9,633 healthcare providers. The extent to which rural-based GPs in Western Australia utilise digital health technologies is unclear.

In order to determine Rural Health West’s future involvement in the digital health space, the eHealth Business Development Network (BDN) were tasked with conducting telephone interviews with a sample of hand-picked rural GPs in Western Australia, with the aim of discussing:

- the types of digital health technologies in use;
- how GPs feel about eHealth generally, including enabling factors and barriers to uptake;
- what, if any, resources are currently used by these GPs; and
- what GPs feel is Rural Health West’s role in the future of digital health.

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Methodology

Achieving the aims of this project depended on the individual GPs knowledge of Rural Health West. Therefore, obtaining a representative sample in terms of age and gender was not a primary concern, however the sample’s age and gender distribution did mirror current analysis of the Western Australian GP workforce. Geographical distribution and solo GP status were considered important in terms of sampling. Finally, a balance of 42 GPs from the seven WA Country Health Service (WACHS) regions, as well as a mix of GPs from solo and group practices, were selected to be interviewed.

Initial contact was made with GPs via an introductory letter, followed by a telephone call to their practice to arrange a suitable time to conduct the interview. Interviews were undertaken by members of the eHealth BDN alongside their regular duties. Interviewers were each assigned four to five GPs to contact over a four week period and most interviews were conducted via telephone. Training was provided and supporting resources distributed to staff included the Rural GP digital health interview process (Appendix 1) and Rural GP digital health interview survival guide (Appendix 2).

Interviews were semi-structured with guiding questions (Appendix 3) to provide consistency to the results. GPs were encouraged to respond with their opinions and experiences. Online and paper versions of the survey were developed for those GPs that were not available to be interviewed by telephone or were too busy during office hours. At the conclusion of the interviews, 34 GPs had been interviewed. Loss to follow-up was largely due to GP unavailability during the interview period.

Survey data was collected by means of a standardised Rural GP digital health interview question sheet (Appendix 3) which was completed by the interviewer at the time of the interview. Data was then entered into an online collection tool, hosted by Survey Monkey. At the conclusion of surveying, the completed dataset was cleaned and linked with demographic information drawn from Rural Health West’s comprehensive GP database. All analyses were then performed using Microsoft Excel.

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Results

Demographics

GP participants were all between the ages of 36 and 69 years, with the average age being 50 years. Of the GPs interviewed, 65 per cent were male (N=22). Ten (29 per cent) were solo GPs, whilst the remainder operated out of practices with two or more GPs. Four GPs were acting in locum roles or were not currently practicing. In terms of remoteness, the majority of GPs were practicing in Australian Standard Geographical Classification Remoteness Areas (ASGC-RA) 3 and 4. A breakdown of the number of GP participants per WACHS region can be seen in Table 1.

Table 1 Regional breakdown of GP participants

<table>
<thead>
<tr>
<th>WA Region</th>
<th>General practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldfields</td>
<td>3</td>
</tr>
<tr>
<td>Great Southern</td>
<td>3</td>
</tr>
<tr>
<td>Kimberley</td>
<td>2</td>
</tr>
<tr>
<td>Metro</td>
<td>2</td>
</tr>
<tr>
<td>Midwest</td>
<td>2</td>
</tr>
<tr>
<td>Pilbara</td>
<td>4</td>
</tr>
<tr>
<td>South West</td>
<td>8</td>
</tr>
<tr>
<td>Wheatbelt</td>
<td>6</td>
</tr>
<tr>
<td>Not applicable*</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
</tr>
</tbody>
</table>

*Not applicable includes GPs that are not currently practicing, as well as roving locums

Technologies in use

The first part of the interview investigated what eHealth technology was currently in use. The usage of various digital health technologies are described in Table 2.

Table 2 Technologies in use by interviewed GPs

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital health systems</td>
<td>71</td>
</tr>
<tr>
<td>Telehealth</td>
<td>71</td>
</tr>
<tr>
<td>Connecting patients with services</td>
<td>44</td>
</tr>
<tr>
<td>Mobile and Wearable</td>
<td>18</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
</tr>
</tbody>
</table>
Benefits of digital health technologies

In response to whether or not GPs considered digital health to be beneficial, the majority of responses were favourable (N=21, 61.8 per cent) commenting that digital health “improves patient outcomes, and access to services” by “bridging geographical gaps” and “bring[ing] expertise to rural areas”. However, 23.5 per cent of responses were mixed in their assessment of the benefits. Some GPs were more cautious, claiming that digital health would be beneficial with further uptake by the profession, and that it currently works “for the patients, maybe not the doctors”.

Telehealth

Those who used telehealth generally believed that it was of benefit. Interviewed GPs stated that telehealth was beneficial as it:

- is convenient for patient and GP alike;
- reduces the need for patient travel;
- is useful for follow-up with specialists;
- improves access to care; and
- allows the GP to contribute to the appointment, as they are present in the room.

The existence of State telehealth infrastructure and platforms could explain the high proportion of GPs who had implemented telehealth into their practices. GPs mentioned the usefulness to the GP of being in the room with the patient during specialist consultations, both from an educational point of view for the professional, and as an interpreter for the patient.

Some GPs expressed mixed views on the benefits of telehealth, observing that there is a perceived shortage of telehealth enabled specialists in some fields (eg dermatology, ophthalmology). One GP raised concerns that an over-reliance on telehealth may impact continuity of care and the consistency of the doctor patient relationship. Regarding GP to patient telehealth consultations, GPs are hampered by the absence of an MBS item number for the provision of this service.

One GP was concerned that, if GP to patient telehealth consultations were to become viable through the addition of an MBS item number, rural GPs could be placed at a disadvantage. Larger practices in Perth, with bigger marketing budgets and more readily accessible IT support could provide services to rural residents, leading to a reduction in the patient throughput in rural practice. This would have a profound impact on the recruitment and retention of rural GPs, and restricting usage based on remoteness should be considered should an item number be created.

Digital health systems

Uptake of My Health Record has been aided by considerable marketing and support efforts from the Australian Digital Health Agency and the Primary Health Networks. Incentive payments are also available for use of the platform through the Practice Incentive Payment program.

Despite this support and just over 70 per cent of GPs reporting using the system, attitudes towards the system were mixed. Many interviewed GPs stated that digital health systems were useful in improving patient outcomes by reducing the need for reliance on human memory. This was particularly relevant for rural doctors with an older clientele, or those practicing in tourist towns. Discharge summaries from regional hospitals were hailed as a useful aspect of digital health systems although some commented on the difficulty in obtaining them.
One GP stated that My Health Record was a “complete flop” as “information present can be extremely debatable”, and that “patients are not interested” in the system. Concerns relating to the quality of information present in shared health records were also presented by another GP.

Despite the mixed reviews, previous research has demonstrated that underuse of the shared health record is a factor that negatively influences a doctor’s desire to stay rural.

Connecting patients with services

Interview participants utilising technologies that connect patients with services (such as HealthEngine) stated that they were useful in terms of business improvement, and convenience to patients, however less than half (44%) of the GPs interviewed were using these technologies. Usefulness of services like HealthEngine and other online appointment services depends somewhat on the technological literacy of the GPs clientele, which in turn is affected by telecommunications infrastructure in rural and remote areas.

Mobile and wearable technologies

Overall, GPs were not entirely convinced of the benefits of mobile and wearable technologies. One GP stated that there was not a lot of confidence in these technologies yet. Others saw benefit in remote patient monitoring technology as it applies to chronic diseases like diabetes. One GP described using their personal mobile phone to share photos and medical information between themselves and other health professionals.

Mobile and wearable technologies are a relatively new phenomenon. Moreover, the sheer volume of smartphone apps and wearable devices makes identifying useful apps and hardware complicated and time consuming.

Motivating factors

Improving patient access to services was the most common motivating factor to uptake of digital health technologies among interviewed GPs (74 per cent). GPs stated that the reduced need for the patient to travel, and the connection with Perth-based specialists were important tools to improve patient access to services.

Over two thirds (68 per cent) of GPs stated that improving patient outcomes was a motivator for the uptake of digital health. GPs stated that access to other doctors’ notes through shared medical records improved the “safety of treatments” for rural patients. One doctor stated that he was able to better “diagnose and treat patients with complex [conditions]” using digital technology, where there has been no travel needed. In one such case, telehealth was used to obtain proof of diagnosis of Huntington’s disease, and to rapidly commence treatment. Another doctor stated that enhanced communication between GP and patients through digital health was leading to improved patient outcomes.

Although mostly positive, some GPs were concerned that the information in shared medical records was only as good as “what was put in them”, and limited by what was made available by the patient. There was also concern regarding the impact of misinformation on the internet for patients who tend to research their symptoms before seeing a doctor.

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Just under half (47 per cent) of GPs interviewed had implemented digital health technologies to improve their business. GPs stated that they were able to reduce costs incurred by patients, through receiving higher Medicare rebates from telehealth sessions following implementation of digital health. They also stated that implementation of eHealth and online booking systems reduced the amount of administrative work, and that automated SMS reminders helped to reduce the rate of no-shows to appointments. The learning opportunities whilst attending specialist telehealth sessions at the patient end was also considered a benefit to the business. One GP stated that digital health did not improve their business, as it took the “same time to take a web booking as a telephone booking”, that implementation of eHealth systems was “nifty” rather than “time saving”.

Around one third (35 per cent) of GPs stated that the eHealth Practice Incentive Payment (ePIP) encouraged their uptake of digital health. Some GPs observed that the ePIP assists with the maintenance of digital health systems only and others commented that the ePIP did not provide much in the way of funding. One GP believed that the ePIP made implementation of the eHealth record “worth it” in the long run, whilst another was aware of the incentive payments, but decided not to pursue them.

Finally, 12 per cent of GPs used digital health technology as a means to protect information, and 9 per cent reported using digital health to expand their web presence.

Improving access to services and improving patient outcomes were reported as motivating factors for the uptake of digital health by most of the GP participants. Business improvement was only somewhat important in influencing the uptake of digital health technologies. Incentives in the form of the ePIP was reported by one third of GPs as a motivator, with many GPs stating that they did not believe the incentive was adequate, nor did it cover the considerable cost of setup. The majority of GPs were not motivated by the need to protect their information or expand their web presence.

Figure 1  Motivating factors to the uptake of digital health technology

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving patient access to services</td>
<td>74%</td>
</tr>
<tr>
<td>Improving patient outcomes</td>
<td>68%</td>
</tr>
<tr>
<td>Business improvement</td>
<td>47%</td>
</tr>
<tr>
<td>Incentive payments</td>
<td>35%</td>
</tr>
<tr>
<td>Protection of information</td>
<td>12%</td>
</tr>
<tr>
<td>Expand web presence</td>
<td>9%</td>
</tr>
</tbody>
</table>
Barriers to uptake of digital health

Barriers to the uptake of digital health as indicated by interviewed GPs are listed in Table 3. Time constraints (including set-up, training, and operational time), lack of skills and understanding of technology, connection and coverage issues, lack of patient uptake, and cost received the most mentions.

A review of the literature relating to barriers to the uptake of electronic health records supports the GPs assertion that these factors negatively influence the uptake of digital health.

Table 3 Barriers to uptake of digital health

<table>
<thead>
<tr>
<th>Rank</th>
<th>Barrier</th>
<th>Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Time constraints</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Lack of skills and understanding</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Connection and/or coverage issues</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Patient uptake</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Cost</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>Participation by other professionals</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Software compatibility and standards</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Hospital participation</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>IT professional support</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Specialist accessibility and clinician directories</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Ability to bill Medicare</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Staff training opportunities</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Security concerns</td>
<td>1</td>
</tr>
</tbody>
</table>

Resources needed to facilitate uptake

Most GPs mentioned the need for more digital health professional development opportunities. The responses showed that a mix of methods of delivery were needed, including workshops, webinars and one-on-one training. Secondly, both on-site and remote practice support activities were mentioned as important resources for GPs.

Respondents mentioned the desire for financial incentives for the set-up and maintenance of IT hardware and software, as well as to cover the time taken for set-up and training. GPs also emphasised the need for a directory containing details of all specialists willing to offer telehealth services to the rural community.

Many GPs commented on the need for internet access with improved quality and speed. New billable Medicare Benefits Schedule (MBS) items for digital health activities including GP to patient telehealth consultations were also desirable. Fact sheets and brochures with information pertaining to digital health were also seen as useful resources. Other resources included information websites endorsed by the Royal Australian College of General Practitioners (RACGP), and a service to review patients online.

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Table 4  Resources needed by GPs

<table>
<thead>
<tr>
<th>Rank</th>
<th>Resource</th>
<th>Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Education</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>Practice support</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Incentives</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Specialist directory</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>MBS</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Fact sheets/brochures</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

What can Rural Health West do?

The majority of the GPs interviewed stated that Rural Health West could establish a role as providers of digital health education (18 mentions). The methods for the delivery of education around digital health varied, with GPs requesting:

- face-to-face sessions in regional and remote locations;
- expert workshops with GP presenters;
- training for all staff, particularly practice nurses and practice managers; and
- provision of incentives for attending sessions including financial incentives and continuing professional development (CPD) points.

Secondly, practice support activities were requested (17 mentions). Responses relating to practice support activities included:

- development and distribution of brochures, factsheets and leaflets on available technologies;
- expert support with bespoke advice for practices, assistance with set-up of technologies;
- employment of a tech savvy GP to advise what new technologies are useful;
- provision of an online discussion forum for GPs to discuss technologies; and
- development of a directory with all private and public specialists using telehealth.

Thirdly, several participants highlighted the usefulness of the establishment of a resource centre within Rural Health West (8 mentions). In this role, Rural Health West would “act in the role of helpdesk, directing GPs and practices to available resources”.

Fourthly, GPs mentioned that there was a role for Rural Health West in advocacy (6 mentions). GPs requested that Rural Health West:

- lobby for better internet connection in rural areas;
- query the restrictions on sharing de-identified information;
- advocate for a consistent, standard platform for the shared health record;
- lobby the Western Australian Government for streamlined information from hospitals; and
- advocate for funding for GPs to implement new technologies.

Finally, there was one mention of Rural Health West collaborating with The Rural Clinical School of WA on research into digital health.
Recommendations

GPs suggested several ways in which they believe Rural Health West could contribute to the uptake of digital health. Recommendations can be categorised into the following activities: research; support; and advocacy, and are summarised in Table 5.

Research

Research activities and the building of digital health knowledge will support future Rural Health West activities in the digital health space. Presently, Rural Health West is involved in a Digital Health Readiness Assessment with the WA Primary Health Alliance (WAPHA). This project, which is currently in the scoping phase, seeks to determine the influencing factors related to digital uptake by rural health service providers and determine strategies for improvement. In addition, the study will map the usage of digital health across Western Australia and cover the factors influencing digital health technology use.

Establishing a knowledge-base of the types of technologies available to practices and their reliability will enable Rural Health West to offer localised advice to GPs when required. Members of the eHealth BDN have developed and continue to expand a digital library of articles relevant to digital health in rural areas, as well as attending relevant webinars and conferences in order to increase knowledge and awareness of digital health at Rural Health West.

Furthermore, the creation of a directory of telehealth enabled specialists will address a need identified in this project. Rural Health West databases currently record all specialists providing rural services. These records include information on whether or not specialist services are delivered via telehealth. Expansion of this data, with permission of the specialists involved, could be used to develop a resource to assist rural GPs to identify and connect with telehealth specialist services.

Support

Rural Health West offers education on a wide range of topics to health professionals in a variety of forms including webcasts, workshops, supervised clinical attachments, events and conferences. At present, digital health training resources offered by Rural Health West are limited to practice management software webinars.

GPs support the development of a multi-channel digital health education platform at Rural Health West. Face-to-face sessions delivered in regional locations, as well as providing online training resources will ensure that training is accessible to remote GPs. In addition, GPs requested that some training be delivered by GP experts in digital health. One possible way of addressing this issue could be to identify GPs who are early adopters of digital health and to invite them to present at a Rural Health West event or conference or to facilitate roundtable discussions.

GPs also requested that time spent during training be incentivised in some way. GPs participating in Rural Health West’s Continuing Professional Development (CPD) events are able to receive points through RACGP and Australian College of Rural and Remote Medicine (ACRRM).

Rural Health West’s Practice Support team provides several resources and services relating to digital health. The comprehensive Practice Management Business Support Tool covers a wide range of digital health topics including:
**Practice software**
- Purchasing or upgrading practice software
- Data cleansing activities

**Telehealth**
- Becoming telehealth enabled
- Free and paid software options for telehealth consultations
- Conducting a telehealth consultation
- MBS telehealth items

**My Health Record**
- Preparing for My Health Record
- Using the My Health Record

**Security**
- Privacy for video consultations
- RACGP computer and information security standards

The Practice Support team visit rural practices to assist with accreditation as well as other support including the set-up of telehealth. Another Practice Support tool is Conversations – a professional chat forum for rural Western Australian practice managers, through which practice managers can discuss a range of topics include digital health.

Through these activities, Rural Health West already satisfies some of the recommendations of interviewed GPs. This suggests a lack of awareness in the rural GP workforce, as support in many cases is targeted towards practice managers. Further promotion of practice support services to GPs as well as their practice staff would raise awareness and increase utilisation.

The establishment of a digital health resource centre at Rural Health West was supported by interviewed GPs. Such a centre could combine the research and support activities in a way which offers rural GPs a ‘one-stop-shop’ for digital health in Western Australia. The resource centre could provide expert support to GPs through bespoke advice, as well as a visiting service to assist with the set-up and implementation of technologies.

The resource centre would serve as a way for GPs to quickly deal with IT issues and save time contacting software service providers for troubleshooting. To avoid duplication, the activities of the resource centre would need to complement existing digital health resources. Such a centre could be established in partnership with stakeholders, including WACHS and WAPHA.

**Advocacy**

Addressing the barriers relating to infrastructure and remuneration via the MBS requires Rural Health West to advocate to Government on behalf of GPs. Interviewed GPs requested the Rural Health West advocate for the following:

- better internet coverage and infrastructure in rural areas;
- a consistent, standard platform for the shared health record;
- funding for digital health activities (GP to patient telehealth consultations) and set-up costs; and
- better sharing of information through removal of restrictions on sharing de-identified data.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Recommendation</th>
<th>Barriers addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Digital Health Readiness Assessment</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Knowledge base, provide expert advice</td>
<td>GP understanding, time constraints and participation by other professionals</td>
</tr>
<tr>
<td>Support</td>
<td>Education platform</td>
<td>Lack of skills and understanding, participation by other professionals, staff training opportunities and security concerns</td>
</tr>
<tr>
<td></td>
<td>Fact sheets, brochures, pamphlets</td>
<td>GP understanding, patient uptake and participation by other professionals</td>
</tr>
<tr>
<td></td>
<td>Resource centre</td>
<td>GP understanding, time constraints and participation by other professionals</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Lobby for better internet coverage in rural areas</td>
<td>Connection and/or coverage issues</td>
</tr>
<tr>
<td></td>
<td>Query restrictions in place of sharing de-identified information</td>
<td>Security concerns</td>
</tr>
<tr>
<td></td>
<td>Advocate for a consistent, standard platform for the shared health record</td>
<td>Software compatibility and standards</td>
</tr>
<tr>
<td></td>
<td>Advocate for funding including MBS items and set-up costs</td>
<td>Cost and ability to bill Medicare</td>
</tr>
</tbody>
</table>
Limitations of the project

The interview format, while producing detailed qualitative responses, meant that only a limited number of general practitioners could be contacted. This is further impacted by the small team allocated to make the calls and the short time frame allocated for the project. The result is that diversity and breadth of opinion available with a large (statistically significant) sample was unachievable.

The subject selection was limited to GPs who had knowledge of Rural Health West business activities. It was felt that this would provide more willing respondents as well as a more informed response to questions relating to the future Rural Health West’s strategic direction, however may have resulted in GPs who are generally more proactive and business minded participating.

Due to the short project time frame, no time or resources were allocated for preliminary work prior to interviewing, such as a literature reviews or assessment of current levels of digital literacy amongst the professional workforce.
Acknowledgments

This project required significant amounts of additional work by the eHealth BDN members as well as other Rural Health West staff who assisted in interviewing GPs. The eHealth BDN leads express their thanks and appreciation to all staff who contributed.

There would be no report without the GPs who cheerfully made time for these interviews and who were so enthusiastic and so generous with their time and knowledge. Thanks go also to their practice and support staff.
Appendix 1 - Rural GP digital health interview process

The eHealth Business Development Network (eHealth BDN) have been tasked with conducting telephone interviews of a sample of hand-picked rural GPs. The aim of these interviews is to determine GPs views on Rural Health West’s future involvement in eHealth in rural Western Australia. The results of these interviews, along with the Digital Health Readiness Assessment Initiative will form a solid basis on which to form an eHealth strategy for Rural Health West.

A handful of eHealth BDN members have volunteered to conduct these interviews. Volunteer interviewers are responsible for interviewing 1-5 GPs, as well as ensuring that answers to all questions as set out in the GP Interview Question Sheet are recorded. Below is a recommended process for conducting each GP interview. This process is to be used as a guide, and where relationships between interviewers and GPs exist, flexibility is allowed.

Process for interviews

- Prior to arranging an appointment, please ensure that you read all filenotes pertaining to your allocated GPs. If any issues are evident, discuss them with the author of the filenote to determine if calling the GP is appropriate.
- Call the GPs practice and make an appointment for a time that is appropriate both for yourself and for the GP. Book this time in your outlook calendar. Suggestion: GPs tend to take meetings during lunch, try and organise your interviews for then.
- There is a strong chance that your call will be rescheduled. Try and be flexible with times when you can.
- Call the GP at the agreed time. Record responses to questions on your sheet. Where conversation stalls, use the prompting questions. You may record the conversation using the headset if you wish.
- Immediately following the interview, key each recorded response into Survey Monkey (if you do not wish to key the responses in, please give the completed response sheet to either Michael or Annie).
- Provide feedback of any issues encountered to the eHealth BDN as lessons learned may assist others as they conduct their interviews.
Appendix 2 - Rural GP digital health interview survival guide

Introduction

Australia’s health system is one of the best performing health systems globally. However, there are no shortage of challenges in continuing to improve patient outcomes. People living in rural and remote areas experience far worse health outcomes when compared to those residing in cities. Moreover, Aboriginal and Torres Strait Islander people still unfortunately experience lower life expectancy and greater incidence and prevalence of both chronic and infectious diseases compared to non-Aboriginal people.

The health sector is on the cusp of a digital revolution which has the potential to entirely change the way in which patient information is shared; how health consumers interact with health professionals; how surgery is performed; and how service funds are allocated. Rural Health West are conducting these interviews to determine our place in this changing landscape, and to inform ourselves specifically of the needs of rural and remote GPs with regards to digital health.

The purpose of this document is to provide an information resource for volunteer interviewers participating in the Rural GP eHealth Interview project.

Digital health and why it is important

Information industries such as the telecommunications and financial services industries have invested heavily into digital solutions over the last 20-30 years, and consumers are now reaping the benefits of these improvements. Health is a similar, information and service industry. By contrast, there are a select few health professionals in Australia that still rely on pen, paper, and human memory. Also, health professionals that are digitally enabled still experience difficulties in sharing patient information between providers.

“Australian consumers can seamlessly transfer their telephone and broadband services from one provider to another and can access global telecommunications networks from any point in the developed world. By contrast, the health care sector struggles to share potentially critical patient information between service providers within the same postcode” – Australian Health Ministers’ Conference

Digital health is defined by Rural Health West as ‘the application of information and communication technology to improve health service provision and outcomes’. Some of the many ways in which universal adoption of digital health can benefit the Australian health system include:

- Increasing access to health services where they are scarce, effectively negating the effect of geographical isolation on health;
- Allowing seamless sharing of health information between patients and care providers, as well as between providers;
- Allowing efficient and effective communication between service providers and avoid service duplication
- Increasing health consumer literacy by empowering people to take control of their health information (My Health Record)
The benefits of digital health adoption are overwhelming. However, the digital health space is littered with confusing jargon, as well as inconsistent, fractured, and numerous failed implementation strategies. Barriers such as these have stalled the progress of digital health in Australia, however we are very much on the cusp of a digital revolution in health.

What technologies are available to GPs?

**Telehealth:** Put simply, Telehealth is the use of telephone or video conferencing systems to deliver health services. This allows health professionals to deliver care to consumers without them having to travel. In Australia, health practitioners deliver the following services via telehealth:

- Specialist Medical Videoconferencing (patient-end attendance)
- GP consultation via videoconferencing
- Telephone consultations

*Note: GPs are not eligible to receive MBS payments for direct GP-to-patient consultations via telehealth. This is a significant barrier to delivery of these services. GPs are however able to claim MBS if they are providing clinical support to patients who are participating in a videoconference with a specialist at the patient end.*

**Mobile and wearable technology:** digital health technologies which enable GPs to care for patients with chronic disease without the need for face-to-face consultations. (e.g. ‘wearable’ devices, remote patient monitoring, smartphone apps, etc.)

**eHealth systems:** There are a wide range of eHealth systems that are available to GPs. These include but are not limited to:

- Data extraction and analytics (Canning tool, PENCAT)
- Shared health records (My Health Record, formerly PCEHR)

**Connecting patients to services:** Online appointment services, directories, and other resources (e.g. HealthEngine, HealthPathways, and clinician directories such as the National Health Services Directory).

Barriers to uptake of digital health

There are several reasons why a GP may not adopt digital health practices. Some of the reasons are listed below:

- Inadequate training
- Lack of, or poor financial incentives, remuneration schemes.
- Too time-poor
- Lack of trust in systems/technology (i.e. privacy, security)
- Cost, availability, and accessibility of technology
- Lack of infrastructure – (e.g. broadband internet coverage in rural areas)
- Lack of support
- Lack of faith in digital health agencies, implementation policies
Available resources

There are several resources available to GPs at present through a variety of agencies. These include:

- Australian digital health agency – training and information
- RACGP – training and information (digital business kits)
- WAPHA – support (getting started, My Health Record, data extraction and analysis)
- Private providers and resources (Telstra Health, Extensia)

What could Rural Health West do?

There are a myriad of things that Rural Health West could do to improve and support digital health uptake for rural and remote based health professionals. Ultimately, this question will be answered by GPs participating in these interviews. Some preliminary thoughts have been discussed, such as:

- Digital Health Resource Centre – a one-stop shop for digital health information and support
- Digital health as a part of practice support
- Digital health training and development

Some potential FAQs

Why are Rural Health West conducting these interviews?

We are conducting these interviews in order to get an idea of the kinds of digital health technologies that are being used by GPs in rural and remote Western Australia; the barriers and motivating factors to digital health uptake; and to determine if Rural Health West can do anything to support GPs in the digital health space.

Who else are you calling?

We are calling a handful of other General Practitioners across country Western Australian who are known to Rural Health West to get their views as well.

What are you doing with this information?

The information gained from this survey will assist Rural Health West in determining what we can do to assist rural and remote GPs with regards to digital health. We will not be sharing this information with any third parties as per our privacy statement, which is available on our website.

Can I get a copy of the results?

I will inform you at a later date if this is possible.

Are you going to quote me?

We will be collating the information provided into a presentation to our board. The broader themes identified in this interview will be collected as data, and no direct identifiable quotes will be used.
Appendix 3 - Rural GP digital health interview question sheet

Date: ____________________________
Time: ____________________________
Doctor Name: ______________________
Interviewer: ________________________
Region: ____________________________

Introduction
Rural Health West defines eHealth to be the application of information and communication technology to improve health service provision and outcomes. We have categorised eHealth technologies into four distinct areas:

Telehealth
- GP video consultations (between patients and GPs)
- Specialist Medical Videoconference (between patients and specialists with primary care giver present)
- Telephone consultations (between patients and GPs)

Mobile and wearable technology
Digital health technologies which enable GPs to care for patients with chronic disease without requirement for face-to-face consultations. Includes ‘wearable’ devices, telephone apps, etc.

EHealth systems
Shared electronic medical records (My Health Record)

Connecting patients to services
Online appointment services, HealthEngine, HealthPathways, and clinician directories.

Questions
1. Based on this definition, what, if any eHealth technologies does your practice use?
   - [ ] Telehealth
   - [ ] Mobile and wearable technology
   - [ ] eHealth systems
   - [ ] Connecting patients to services
     - Do you think eHealth is beneficial to your patients?
     - Were there any factors in particular that made uptake of eHealth technologies difficult (i.e. barriers)?
     - Are there other technologies that you are not using that you would like to?
     - IF YES: What technologies, and why are you unable to use/not using them?
2 What factors enabled or motivated you to implement these eHealth technologies?
   - Improve patient outcomes
   - Improve patient access to services
   - Business improvement
   - Increase web presence
   - Protect information
   - eHealth Practice Incentives

3 What resources or support do you believe GPs need to uptake eHealth technologies, and continue to use them?

4 Based on your knowledge of Rural Health West, what do you think we could do to support yourself and other GPs with regards to eHealth?

5 Any other comments?

Time interview concluded