

Australian College of
Rural & Remote Medicine

WORLD LEADERS IN RURAL PRACTICE



COLLEGE SUBMISSION

National Digital Health Strategy Discussion
Paper

<https://conversation.digitalhealth.gov.au/>

31 January 2017



College Details

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Date: 31 January, 2017



About ACRRM

ACRRM was established in 1997 and is one of two professional Colleges recognised by the Australian Medical Council to provide vocational training towards Fellowship in the speciality of general practice. The College's programs are specifically designed to provide Fellows with the extended skills required to provide the highest quality care in rural and remote communities, which often suffer from a dearth of face-to-face specialist and allied health services.

ACRRM's vision is *Better health for rural and remote people through access to skilled rural doctors*. It progresses this through the provision of quality vocational training, professional development education programs; setting and upholding practice standards; and through the provision of support and advocacy services for rural doctors and the communities they serve.

The College's 4000 Fellows and members are characterised by their relative geographical isolation and broad scope of generalist practice, resulting in an increased reliance on teamwork and fit-for-purpose technology. In order to meet the educational and advocacy needs of members, the College continues to be innovative in the development and delivery of distance education and the creation and use of collaborative e-networks and e-technology to bridge the tyranny of distance.

Background

People living in regional, rural and remote areas tend to have shorter lives and higher rates of disease and injury than their urban-based counterparts. They are more likely to have adverse social determinants of health¹ and lower health literacy, which places them at greater risk of poorer health outcomes². They also have higher risk factors that are associated with the development of chronic disease.

Key reasons for these poorer health outcomes include poor access to services. The degree of isolation and other geographic, climatic, social and economic circumstances of rural and remote communities often limits access to health care services, including visits to GPs, other specialists, allied health services and hospitals. Access often involves long waiting periods and personal and economic imposts in terms of time and travel.

Rural Generalist practitioners work under unique circumstances, with a scope of practice and working environment which is very different to urban general practice. Many rural and remote communities still struggle to recruit and retain doctors with the Rural Generalist skills which can meet the full range of their health care needs, further limiting access. Rural generalists must deal with many different providers, often involving irregular visiting services, and distant tertiary care services.

In these circumstances, the case for digital health strategies and solutions, and support for both patients and practitioners in the access to and use of these technologies is particularly

¹ AIHW 2014. Australia's health 2014. Australia's health series no 14. Cat no [AUS 187](#). Canberra:AIHW; at 186

² AIHW 2012. Australia's health 2012. Australia's health series no 13. Cat no [AUS 156](#). Canberra:AIHW; at 182



strong. ACRRM regards digital health as an essential component of effective rural and remote practice.

Digital health strategies can enhance shared care arrangements by facilitating ready access to information, timely access to specialist services and advice and extending the scope of practice of Rural Generalists to provide comprehensive care for patients in their local community. They can contribute to continuity of care and quality of care outcomes for patients by optimising referral arrangements, follow-up treatment and care coordination.

However these strategies must be appropriate to the circumstances of rural and remote medical practice. They should enhance the existing primary clinician-patient relationship and be used to complement, rather than replace, face-to-face services without causing perverse outcomes that impact on the quality and safety of rural generalist practice. What might be seen as advantageous to the patient by being able to access any provider in Australia using technologies such as video conferencing, can be disruptive and deskilling to the lone practitioner in a rural community who must provide essential procedural services which cannot be replaced by telehealth.

The introduction of digital health services should also not disadvantage those that require access to health care services but have limited access today to the internet and technology devices, such as the elderly, the disability community and those living in poverty or homeless. In rural and remote communities it is also common for access to digital technologies to be impeded by a lack of network infrastructure, high costs and unreliable network services. It is essential that Patients, Providers and Communities are not be left behind due to a lack of access to digital technology and infrastructure.

The Australian Government's national eHealth strategy 2008, provided a roadmap for a coordinated and collaborative approach by state and federal governments, for the development of digital health services in Australia. It recognised that change must address the way information is accessed and shared across the health system, which in turn would transform the way clinicians practice and consumers interact with the health system. The strategy also painted a picture of the current landscape of discrete islands of information with significant barriers to the effective sharing of information between health providers and that population health surveillance and service and policy planning were hindered by a lack of data to support what was really going on. Eight years on the situation still feels very much the same for ACRRM members.

Given all these factors, ACRRM strongly recommends that the National Strategy for Digital Health be structured to support rural communities, and include clear objectives and actions which are designed in consultation with rural and remote practitioners and stakeholders to address their unique needs and circumstances.



ACRRM Response to specific questions identified in the call for submission

How would healthcare workers like to use data and technology to support them to make better treatment decisions?

1. What gets in the way of health professionals being able to connect, communicate and coordinate with the right people?

1.1 Geographical and Access Challenges in Rural and Remote Australia

In Australia we have the geographical challenges of vast distances, rugged terrain and highly urbanised populations that mean that travel time to centralised health services such as tertiary referral hospitals is a significant issue for rural and remote communities. People in rural and remote areas have greater levels of difficulty accessing a range of services, the most significant being healthcare³. Although Australia's population is highly urbanised, health services operate across many rural and remote, and indigenous communities. Currently people in rural and remote communities (compared to their urban counterparts): have lower health status[1], use medical services less and receive far less per capita government health funding[2] and this occurs despite the fact that rurally-based general practitioners are working much longer hours than urban equivalents.[3] The Percentage of people 15+ experiencing difficulties accessing a doctor in 2014, was 3.7% in metropolitan areas and 11.7% in rural/remote⁴.

1.2 Increased rate of workforce specialisation and the role of the Rural Generalist

A Rural Generalist typically will take on a broad scope of roles in a rural community. For example, being a GP and rural hospital doctor providing general, inpatient care and emergency services. Rural Generalists have broad medical expertise which complements the specialist in metropolitan areas when they work together to manage a patient's healthcare. Rural generalists by the nature of their work environment need technology to help them work in a clinical practice network. In that network, they may be working alongside rural generalist nurses, allied health workers, community workers, consultant specialists and sub specialists to create a system of effective, affordable and safe care for their patients. With the increase in specialisation of medicine (in general), information collected is siloed to the speciality. A patient's health records are spread among multiple health care providers, resulting in fragmented care. Most patients attempt to remember it all but cannot keep up.

In this environment there is an increased need for the rural generalist to work with the patient in taking ownership of the patient health outcomes and maintaining a complete medical record. This is an ongoing, time consuming and complicated exercise and there is a risk that

³ <http://ruralhealth.org.au/book/use-health-services>

[1] AIHW. Australia's Health 2014 Australia's health series no. 14. Cat. no. AUS 178. Canberra: 2014.

[2] AIHW. Australian health expenditure by remoteness: a comparison of remote, regional and city health expenditure. Health and welfare expenditure series no. 50. Cat. no. HWE 50. Canberra: 2011.

[3] AIHW. Medical Workforce 2012. National Health Workforce Series No. 8. Cat. No. HWL 54. Canberra: 2014. (S.5.1)

⁴ <http://ruralhealth.org.au/book/use-health-services>



the specialists don't see the consequences of their decisions at a holistic level, which could in turn, lead to patient harm or at best duplication of effort.

1.2 Network Infrastructure

Without access to infrastructure that is reliable and affordable in rural and remote Australia the use of digital technology will be restricted. It is essential for rural and remote communities to have access to appropriate broadband and wireless broadband solutions to support the ability to share records and information, and to use technologies such as video conferencing to improve access to healthcare services, maintain professional development and support the rural and remote workforce.

If digital health is to enable patients to take an active role in managing their own health then patients and their families, as well as the clinicians will need access to the right broadband infrastructure and the right tools to do that. Latency issues associated with satellite services impede the efficiencies of video conferencing.

These ICT networks need to support distance education, peer review and support services for transient and permanent healthcare workers in rural and remote communities. Access to technology, networks and technical support are important requirements for rural doctors and practice staff who can suffer from isolation and a lack of access to clinical education and clinical support.

In rural and remote communities access to fixed-line broadband can be limited and hence there is an increased need to access mobile telecommunications in a clinical setting.

However mobile telecommunications can be expensive, unreliable or not available (70% of Australia's land mass has no mobile phone coverage⁵) in rural areas.

Digital Health solutions should be tailored to the network infrastructure available locally for example providing an asynchronous telehealth service vs a synchronous telehealth service.

1.3 IM/IT Support Services

Implementing and supporting IM/IT system use, requires knowledge and a skill set that often is not available or affordable to a small, busy rural practice. In the public (hospital) health system these ICT services are provided by the organisation often without the need for clinician involvement, they are just there. Services such as network access, backups, maintenance of hardware infrastructure, data quality review, training and change management.

In small private practices clinicians are responsible for finding and providing the required IT support to support the often, multiple systems and technologies they are required to use.

This requires additional time, money and a skill set to be able to do this effectively and needs to be balanced against the need to provide clinical services to the community.

Clinicians working in larger organisations don't have to carry this burden.

1.4 Digital Disruption must not impact quality and safety of healthcare

Digital Health developments that provide benefits to the patient or the clinician can also cause disruption to health care service models. There should be oversight to ensure that such developments don't cause additional quality or safety risks, such as breaking communications channels or dispersing and fragmenting patient information that is then not

⁵ Australian Government Regional Telecommunications Review



available to the patient's primary care provider. This is especially important during the years of transition to full digital health utilisation.

An example would be online telehealth consultations available to patients to access a GP anywhere in the country. Whilst these technology solutions improve access to health services they also impact on the local providers trying to maintain a clinical service on the ground. Online consultations enable city GPs to access and treat the 'simple' (most cost effective) cases leaving complex (more costly) patients to be treated locally, a model that could become unsustainable in the local community.

1.5 Build to a plan

Even with a national coordinated approach to key digital health initiatives there will be many independent developments, from emerging and existing IT companies, that will attempt to have an influence on the provision of healthcare. These include areas such as:

- New Integration of healthcare related services such as the aged care, mental health and My Health record portals.
- Medical training and simulation solutions.
- Medical record keeping and software to support care coordination.
- Telehealth, assistive technologies and mobile health for remote delivery of health services.
- Clinical analysis of patient data with monitoring devices and apps accessing patient data sources.
- Decision support tools to improve clinical or operational decision making

Where possible there should be a coordinated/collaborative approach to these developments (building to a plan) and an adherence to standards and policy so the best outcomes can be achieved from any investment clinicians are making in purchasing and using these solutions.

1.6 Vendors slow to adopt standards and improve systems

Integration continues to be hampered by slow uptake by the software vendor community of standards developed to improve the sharing of health information such as clinical communication standards and clinical terminology. Whilst the College would not want to see the removal of healthy competition between software companies, rural doctors lack the ability to influence the type and speed of software development undertaken by their vendor, which has a knock on effect on adoption and roll out rates.

1.7 IM/IT System Culture in Healthcare

It is still acceptable for the patient to fill the information gap, relaying information between providers. A paper trail is still an acceptable alternative to storing information digitally. Users who are time poor, lack IT support and have systems which are difficult to use and navigate will look for easier options to maintain a clinical record and communicate with others.

1.8 Payment Models

The federal government operates a fee for service payment model for most primary care services provided by general practice. In most circumstances this requires the patient and



the provider to both be physically present, a principle designed to prevent abuse of billing services.

New technology services, such as video conferencing provide many benefits to patients seeking medical services such as removing or reducing the need to travel (especially valuable to rural and remote families), improved access to services and a reduction in waiting time to get an appointment and to see a doctor.

In 2012 Medicare Benefit Scheme item numbers became available for video conferencing under certain circumstances. With the benefits of telehealth consultations demonstrated and with the increased uptake of telehealth as technology improvements are developed and network infrastructure improved, now is the time to consider broadening the criteria for the billing of telehealth services in rural and remote Australia.

The suggestion changes for rural and remote consultations are;

- Payment for the rural GP when they operate as the consultant providing support to others in the healthcare team e.g. community nurses, allied health professionals and other rural doctors.
- Payment for the clinicians at the patient end of the consultation e.g. community nurses, allied health professionals and other rural doctors.
- Payment for the rural GP when they have a video consultation with an isolated or at risk patient.
- Payment for the rural GP with the patient accessing a public specialist. The current MBS telehealth arrangements only fund the GP for participating and organising the consultation if the specialist is a private specialist.

Summary: What gets in the way of health professionals being able to connect, communicate and coordinate with the right people? :

1. People in rural and remote areas have greater levels of difficulty accessing a range of services, the most significant being healthcare. The Percentage of people 15+ experiencing difficulties accessing a doctor in 2014, was 3.7% in metropolitan areas and 11.7% in rural/remote⁶.
2. In an environment of workforce specialisation there is an increased need for the rural generalist to work with the patient in taking ownership of the patient health outcomes and maintaining a complete medical record.
3. Without access to ICT infrastructure that is reliable and affordable in rural and remote Australia the use of digital technology will be restricted. It is essential for rural and remote communities to have access to broadband and wireless broadband solutions to support the ability to share records and information, and to use technologies such as video conferencing to improve access to healthcare services, maintain professional development and support the rural and remote workforce.
4. Implementing and supporting IM/IT system use, requires knowledge and a skill set that often is not available or affordable to a small, busy rural practice.
5. There should be oversight to ensure that digital health solutions don't cause additional quality or safety risks, such as breaking communications channels or dispersing and fragmenting patient information that is then not available to the

⁶ <http://ruralhealth.org.au/book/use-health-services>



patient's primary care provider. This is especially important during the years of transition to full digital health utilisation.

6. Where possible there should be a coordinated/collaborative approach to digital health developments (building to a plan) and an adherence to standards and policy so the best outcomes can be achieved from any investment clinicians are making in purchasing and using these solutions.
7. Integration continues to be hampered by slow uptake by the software vendor community of standards developed to improve the sharing of health information such as clinical communication standards and clinical terminology.
8. It is still acceptable for the patient to fill the information gap, relaying information between providers.
9. Now is the time to consider broadening the criteria for the payment of telehealth services in rural and remote Australia.



2. What do health professionals need to be able to effectively connect, communicate and coordinate with the right people?

The implementation and use of technology has the ability to overcome some of the challenges outlined in section one, by supporting information flow between healthcare providers throughout Australia. However, the current health care environment requires a clinician to use multiple systems (even within the same organisation) and there is an increased need for consolidation of patient, practice and clinical management system information across the health sector.

Technology and access to health information needs to be:

- Available
- Affordable
- Safe in the actions of accessing the information and in the use of the information
- Secure in the actions of accessing the information and in the use of the information
- Trusted
- Easy to use and to be cognisant of new errors or risks that could impact on the quality and safety of health care provided.
- Supported – somewhere to go for help and advice. For systems owned by state and federal governments there needs ownership of useability issues and someone empowered to resolve them. Issues that are preventing rollout and use, should be investigated and dealt with to provide confidence to both the patient and the provider. Patients and providers would be more motivated to use high quality digital health solutions.
- Supported by an equitable vendor playing field to provide choice in the systems to use and to support a range of business types with different ICT needs and available budgets. For example rural generalists can be sole traders or running a larger organisation or corporation.
- High Quality: The systems available in Australia should meet a minimum defined standard in areas such as;
 - Technology – integration capability and connection and use of national IT systems such as the National Identifier Service, or the My Health Record system,
 - Security,
 - Useability,
 - Affordability, and
 - Safety.
- Access to secure, reliable and affordable network services that enable digital health solutions to run effectively and are accessible and useable at the times they are needed.

2.1 Improvement in Patient Safety and Quality health services

The following are suggestions where technology can play a part to improve the quality and safety of our health services:



- Improve patient identification (right patient)
 - There are difficulties in obtaining the national patient identifier (IHI) for all patients seen in a practice.
- Great accuracy in ordering and recording tests and medications (right test, right drug)
 - It is time consuming to maintain an up to date medication list, especially when the GP is one of many providers supporting the patient and the likelihood of changes by others is high.
 - The patient has an expectation that providers will communicate with each other and that the current medication list or test results are accessible to all of them.
 - As with medications, there is a need to access information about tests that have been ordered and the results reported. In rural settings there is an increase use of 'point of care testing' devices and these results are often not shared as it can be difficult for other providers to know who to contact, with the usual reliance on the patient to inform the provider.
- Reduced duplication of x-ray and imaging
 - The current method of access, is for the patient to manually carry the imaging results/report to each provider and there is a risk that the patient can forget or lose the results/report.
 - It can be time consuming (or impossible) to contact the provider (public or private hospital, another rural practice or private pathology or diagnostic imaging providers) who has the results. There are difficulties in finding the provider's contact details and time is required to find and send results.
 - The patient is not willing to wait for this information to be transferred between providers and there can be difficulties with having to make another appointment – such as the timeframe for the next appointment and the cost (if not bulk billed) of seeing the GP twice. There could be significant benefits for the GP and the patient if it was easy to access and look up the results, in the one consultation
- Improved decision making for diagnosis and treatment, and ongoing care. Rural and remote practitioners deal with a wide variety of clinical conditions with limited access to resources, both physical and informational. Important therefore is the development of reliable and integrated decision support. This decision support should be based on good data, filtered according to clinical need, and delivered to enhance delivery of care, rather than replace it.
- Better use of clinician and patient time by reducing waiting times, reducing the need to travel and the distance travelled and improved decision making and appropriate referral.
- Better use of data for health service planning and coordination (data analytics).
 - The ability to know your local health care needs and what is happening in the community.
 - Coordinating visiting specialist services – how many patients need to see a cardiologist, reason for consultation and can it be provided by video consultation instead of waiting for a face to face service (which may be limited



- to every 6 months). What other health services need to be accessed at the same time as the cardiologist?
 - Management of 'failure to attend' patients and reducing the incidence of missed appointments.
- Patient and family access to health information enables the patient to partake in, informed decision making about their care and quality assurance of the information held.
 - Patients can forget what information was provided during a consultation, especially when not written down or it can be difficult to take it all when stressed during the consultation.
 - Family members want access to the same information to be able to support the family member with their healthcare needs

2.2 Single, Truly Universal Patient Health Record

One of the biggest challenges for the rural generalist is keeping their medical records in sync with the changes made and care given by other providers. What is needed are information and communication standards to allow timely updating of changes to medications, allergies and conditions, to form a unified, consistent, patient centred view.

2.3 Easy access to patient records across multiple organisations

ACRRM members often work for multiple organisations – for example private practice, public hospital and community services and would benefit from being able to access all their medical records that reside in multiple systems.

Scenario: Patient is well known to the GP and the practice management system has a full history for the patient including their current medications and allergies. The same patient then presents at the local hospital emergency department, where the GP is working. The GP knows he has a full medical record in his own practice system but can't access that information from the systems he has available to him at the hospital. Access protocols and identification services could be designed at a national level to enable easy access to multiple systems.

When systems become hard to access (managing multiple accounts and different modes of access) or when a complete history is not available (when the patient visited the practice and then the hospital and then had a home visit), users create work arounds which often result in information not being stored in the right place at the right time.

Whilst the My Health Record system can provide summary information from both facilities, it not a 'complete view' and it does not enable access to either organisation's system for the detailed system records to be viewed and updated.

2.4 Ability to Communicate with the entire healthcare team

A high priority for ACRRM members is a system that allows for easy, secure communication across all healthcare providers. Today most providers that a rural generalist wants to communicate with do not have a secure messaging service - community nurses, nursing



homes, A&E, outpatients, physiotherapists, psychologists, pharmacists etc. So communication happens by phone, fax or an encrypted email.

For those providers that do use secure messaging, they are often hard to find as there is no unified address book and there is a lack of interoperability between the different messaging services.

Today's workforce has not embraced secure messaging as a way to routinely communicate especially with adhoc messages. Yet this would be a significant improvement on fax or email when discussing patient needs and outcomes.

Even with wide spread adoption of secure messaging and an accurate and complete address book and systems for communicating, the practice management software used by rural generalists makes it difficult to send messages and to be aware of incoming messages.

2.5 Access to and sharing information across community sectors

There are many socio-economic factors that can affect a person's health and a more holistic view of a patient's life style would aid appropriate decision making in the healthcare sector. Access to health information would also assist other sectors such as when a patient is picked up by the police or when a patient is transferred into an aged care facility or prison. Access to medication information would be beneficial to support ongoing treatment without delay or misadventure. A full view of services may also be beneficial for the patient and their family for general life coordination across services.

2.6 Ability to know of changes and to easily maintain local patient records

The architecture to support use of different systems at a local level and a national summary record, should allow for efficient maintenance of these records. So that when a medication is discontinued or a new medication prescribed, this information is then available in all the systems that have a record for that patient, removing the need for multiple data entry in the various systems that contain a record for the patient.

This would aid efficient record maintenance and effective decision support in the local system when the information in the record reflects the current health information for that patient. This could be provided through a 'notification service' where a provider is alerted to a change which can then be applied to their own records or ignored. Another option could be for the patient to establish a 'community of providers' where all providers in the community are alerted to any healthcare changes.

2.7 Key Information Needs

In Primary care the following are the key pieces of information that a rural clinician and patient would benefit from having access to;

- Medication information. Having a single point of truth that is maintained in real time for all prescribing information including items prescribed and items discontinued. This is particularly relevant for scheduled drugs (e.g. opiates and benzodiazepines), where patients often 'town hop' looking for prescriptions.
- Referral and Wait List information. Knowing who you can refer a patient to and how long the waiting lists are, help in making appropriate referral decisions that could reduce the waiting time for a patient to access to a health service. ACRRM



developed and hosts a national [telehealth directory](#) available to all providers to register and search for telehealth services.

In addition to information about where to make the initial referral there should be notifications about vacancies/appointments that become available. Currently due to a lack of information and visibility on availability of services in a geographical area or state, some providers are referring their patients to multiple services in a lottery style to see which facility can accept the patient first. This is both inefficient and over inflates the waiting list numbers making it difficult to determine the accurate health needs of the population. This is an example of where behaviour is being determined by a lack of access to information for appropriate decision making.

- Medical Imaging and analysis of Patient data.
Images taken by rural doctors for diagnosis and treatment such as skin complaints or ophthalmic conditions can be shared electronically with a Specialist for expert advice. This reduces the need for the patient to travel to see the Specialist, especially in rural locations where the distance to a specialist can be significant (300 to 700kms) and upskills the local GP in diagnosis, treatment and appropriate referral. ACRRM developed and hosts a national tele-dermatology service, [Tele-Derm](#) operational for the last 12 years and recently trialled a tele-ophthalmology service [Ophthal-Assist](#).
- Trusted resources for patient self-management, including online services and tools or apps. Currently there is a wealth of solutions and systems available for a patient to use which is challenging for a clinician to recommend which ones to use as it is difficult to keep up to date with those that are available and to identify those that are clinical appropriate and safe to use.

2.8 Flexibility to consult with patients and providers using digital technologies

ACRRM considers Telehealth can improve health outcomes by facilitating timely access to essential specialist services and advice, as evidenced in the [ACRRM Tele-Derm](#) service. Telehealth further extends the scope of practice of rural generalists to provide comprehensive care for patients in their local community (in consultation with the appropriate specialist).

Telehealth can enhance shared care arrangements and facilitate quality models of care involving the patient-end clinicians (rural generalists) and distance-end consultant specialist. Services provided via telehealth must adhere to the basic assurance of quality and professional health care. ACRRM Telehealth Advisory Committee (ATHAC) [Standards Framework](#) and [telehealth Guidelines](#) have been developed for this purpose.

Telehealth should enhance the existing primary clinician-patient relationship, not fragment it. Telehealth arrangements should complement existing specialist services (where available), build on rural workforce and referral patterns to avoid further service fragmentation, and address practicalities of coordination, scheduling and support from the patient's perspective to improve their continuity of care. However, ACRRM is also aware of possible unintended negative consequences from telehealth. ACRRM recommends vigilance to ensure that these consequences do not undermine the effectiveness of the MBS telehealth strategy and advises vigilance in ensuring that these possibilities do not occur. Negative consequences which concern ACRRM are:



- Reduction in the provision of face-to-face visiting specialist services to rural communities;
- Replacement of scarce face-to-face visiting specialist services to rural communities by telehealth. Commonwealth programs such as MSOAP (Medical Specialists Outreach Assistance Program) and the MSOAP-ICD (Indigenous Chronic Disease) must be maintained as an adjunct to telehealth arrangements;
- State/Territory government cuts to patient assisted transport schemes when face-to-face care is required.
- Reduction of specialist commitment towards face-to-face consultations particularly with regard to impoverished and difficult to access subpopulations - Aboriginal, rural and remote etc. This would have cascading negative consequences - including the potential to add to burden and isolation for general practitioners within remote health services. It also has the potential to exacerbate pejorative views of remote area servicing, by limiting first-hand knowledge of the difficulties faced by remote area staff and patient populations.

2.9 Medical Training and Simulation

Infrastructure established to support digital health also facilitates quality and safety and access to relevant Continuing Professional Development (CPD). ACRRM online training application RRMEO has been in existence for over 10 years and provides access to training, tools and resources for students, registrars and fellows of the College as part of their ongoing professional development program. These services include virtual classrooms, peer networking online and clinical advice services, such as [Tele-Derm](#) and [Ophthal-Assist](#). Important for rural doctors who often don't have the privilege of being able to travel and be away from their community for long periods of time for training and to reduce the feelings of isolation and lack of access to specialist advice services. However improved infrastructure would facilitate further innovation, education and skills transfer.

2.10 IM/IT Education

Clinicians need help to keep pace with changes in technology and the recording and use of data and general digital literacy. They need to learn how to access data, analyse data and apply the data to give them the information they need. They need training and support to transition from recording information for their personal use to recording information that is shared amongst other clinicians and their patients. This includes recording information, data review and data cleansing.

ACRRM proposes the development of accredited education focussing on digitally enabled healthcare in particular in the areas of population health and CQI in the management of chronic conditions. ACRRM is well positioned to develop these online resources having recently launched a new online education module "[eHealth enabled management of chronic conditions](#)"

ACRRM Fellows work in many environments including Aboriginal Community Controlled Health Services (ACCHS), state and territory run rural and remote primary care clinics and hospitals, RFDS as well as private General Practice. ACRRM is best placed to work with other stakeholders to develop and design and upskill doctors in the use of digital health within these clinical settings. This can be seen in the development of the suit of telehealth



education resources undertaken by the college, where development involved collaboration with a wide range of stakeholders (Consumer organisations, Specialist Medical and Nursing Colleges and peak bodies for Nursing, Allied Health, Medical, Informatics (HISA) and telehealth (ATHS) and the Commonwealth Department of Health).

Patients will also need to keep pace with changes in technology and this may result in an additional burden for the patient's primary care provider or Health Care Home service, to support the patient in accessing their information online and improving their digital literacy.

Summary: What do health professionals need to be able to effectively connect, communicate and coordinate with the right people?

1. The current health care environment requires a clinician to use multiple systems (even within the same organisation) and there is an increased need for consolidation of patient, practice and clinical management system information across the health sector.
2. A system that allows for easy, secure communication across all healthcare providers.
3. Improved decision making for diagnosis and treatment, and ongoing care based on good data, filtered according to clinical need, and delivered to enhance delivery of care, rather than replace it. Access to decision support at the point of care.
4. In Primary Care the following are the key pieces of information that a rural clinician and patient would benefit from having access to;
 - a. Medication information. Having a single point of truth that is maintained in real time for all prescribing information including items prescribed and items discontinued. This is particularly relevant for S8 drugs, where patients often 'town hop' looking for prescriptions.
 - b. Referral and Wait List information. Knowing who you can refer a patient to and how long the waiting lists are, help in making appropriate referral decisions that could reduce the waiting time for a patient to access to a health service
 - c. Images taken by rural doctors for diagnosis and treatment such as skin complaints or ophthalmic conditions can be shared electronically with a specialist consultant for expert advice.
 - d. Trusted resources for patient self-management, including online services and tools or apps.
5. Information and communication standards to allow timely updating of changes to medications, allergies and conditions, to form a unified, consistent, patient centred view.
6. Access protocols and identification services to enable easy access to multiple systems.
7. Increased uptake of telehealth. ACRRM considers telehealth can improve health outcomes by facilitating timely access to essential specialist services and advice. Consulting via telehealth further extends the scope of practice of rural generalists to provide comprehensive care for patients in their local community (in consultation with the appropriate specialist).
8. However, ACRRM is also aware of possible unintended negative consequences from telehealth. ACRRM recommends vigilance to ensure that these consequences do not



undermine the effectiveness of the MBS telehealth strategy and advises vigilance in ensuring that these possibilities do not occur

9. Improved patient identification.
10. Greater accuracy in ordering and recording tests and medications.
11. Reduced duplication of x-ray and imaging.
12. Better use of clinician and patient time by reducing waiting times, reducing the need to travel and the distance travelled and improved decision making and appropriate referral.
13. Better use of data for health service planning and coordination.
14. Patient and family access to health information to enable the patient to partake in, informed decision making about their care.
15. The ability to electronically share information across community sectors (health, justice, housing, welfare and social services) to aid care coordination.
16. The architecture to support efficient maintenance of medical records at a local and a national level.
17. Improved infrastructure would facilitate further innovation, education and skills transfer for rural medical education and training.
18. Clinicians need help to keep pace with changes in technology and the recording and use of data and general digital literacy. ACRRM proposes the development of accredited education focussing on digitally enabled healthcare in particular in the areas of population health and CQI in the management of chronic conditions



3. What should be the immediate priority initiative for the My Health Record to ensure it delivers real value for healthcare professionals?

There needs to be value in the My Health Record for a rural generalist to use it and a greater number of patients with a record i.e. the need to move to an opt-out model.

The summary information that would be most valuable to access and then store locally would be;

- Medications – a current medication list, collating and reconciling all medications prescribed for the patient across all providers, including S100 drugs
- Allergies – all allergies recorded by all providers for the patient
- Appointments – all medical appointments, across all providers, booked for the patient. To help with schedule management and care coordination especially useful in rural communities where the access to visiting specialists requires greater coordination. Not only is this beneficial for providers it would also be beneficial for the patient to aid in managing their appointments

4. How could data and technology be better used to improve health and wellbeing?

By providing access to the right information and enabling the sharing of data, can promote transparency and increase confidence in the healthcare system.

4.1 Point of Care Testing

Point of care testing (POCT) refers to pathology testing performed in a clinical setting at the time of a patient consultation, generating a rapid test result that enables informed and timely clinical action to be taken on patient care. Access to new devices and services that are safe to use and quality assured for rural communities can support rural and remote healthcare professionals deliver timely, quality care. The use of POCT in Australia continues to grow, particularly in the rural setting where geographical isolation impacts on timely access to pathology services.

Advancements in technology have provided point of care testing diagnostic capability at the bedside, within rural and remote clinics and hospitals and even inflight.

The POCT results are stored in the local clinical record and as with other providers of pathology and diagnostic imaging services these results should be shared with other providers. The POCT data can be connected with electronic health records and portals to ensure sharing of diagnostic results for the right patient, right test at the right time. Quality assurance processes and training are required and are often delivered remotely where connectivity and systems are available.⁷

4.2 Data Quality

Look at ways to systematise the improvement of data quality and hence increase confidence in the provision and access to information. A common set of algorithms could be developed that are applied to all Australian healthcare systems as part of meeting the minimum standards for health IT systems in Australia, such as not allowing the system to record a pregnant male or a pregnant female over 75.

⁷ <http://www.appn.net.au/>



Practice standards or professional standards to include a minimum set of requirements or behaviours that support the maintenance of data quality and that these standards are included in an approved accreditation process.