

31 January 2017

Mr Tim Kelsey
Chief Executive
Australian Digital Health Agency
Level 25, 56 Pitt Street
SYDNEY NSW 2000

Dear Tim

I am writing in response to your letter to Dr Michael Stanford, dated 3 November 2016, which was referred to me. Thank you for this opportunity to provide input on the future direction of digital health in Australia.

St John of God Health Care (SJGHC) is a Ministry of the Catholic Church. The history of the organisation spans 122 years commencing with the Sisters of St John of God establishing a health ministry in Kalgoorlie. Today the organisation comprises 16 hospitals of a metropolitan, regional, private and public nature including Acute, Psychiatric and rehabilitation hospitals in Western Australia, Victoria and New South Wales.

In addition to our hospitals, our ministry includes home nursing services along with a range of community services including disability, perinatal infant, mental health and homeless youth. As is demonstrated by the diverse nature of our operations, our Mission goes beyond just that of providing health care. We care for and provide a home to the disabled and the mentally ill. We support the homeless and vulnerable.

At SJGHC, we too are looking to the future. We acknowledge the importance of high quality information in the delivery of health care and as such have one of our key strategic priorities to significantly increase our investment in Information, Analytics and Technology over the next five years. By the end of 2017 we are hoping to have selected a vendor who will provide us with a Clinical Information System that will eventually be rolled out to all hospitals across the organisation. This will enable us to capture data with greater effectiveness and utility than ever before.



In parallel, we have established a project which seeks to harness the power of the data that we already collect, and to govern and direct that which we will collect in the digital future so that we can deliver the highest quality of care to our patients. We believe these initiatives will deliver the outcomes as well as efficiencies that will help our organisation continue to grow in its capability to deliver our Mission. SJGHC has appointed myself as the inaugural Chief Medical Information Officer to help us deliver this future. I am leading the conversation in the organisation on these matters.

While we plan for the future, we are also embracing the present. Our patients, doctors and our staff by-and-large have embraced the digital age, with most being regular users of the internet-of-things, smart devices and computers.

We are seeking to provide solutions to all of these groups that allow them to access the information that they need, at anytime, anywhere and on any device, in order to be able to provide or receive high quality health care. For our patients, we are implementing an online patient portal, enabling them to provide their personal and clinical information to us electronically, and by which we hope to better plan for and optimise their experience within our hospitals. For our doctors, we are in the process of developing a 'Doctors' App' which will enable them to access patient results and information on their mobile devices which is vitally needed in order to deliver timely clinical care. For our caregivers, our intranet renewal project will deliver a solution which means that the organisation is more connected to the people who make it work than ever before.

It is our hope that the future of digital health in Australia, of which the My Health Record (MyHR) is only a part, will complement and build on our initiatives.

Please find our response below, we have used your survey questions as a guide and have identified several key themes which relate to our responses:

1. We are seeking to be better connected to our patients in order to contribute to the betterment of their health before, during and after their stay with us. We would hope for and support any solution which enables patients to, more easily and conveniently, provide us with the information we need to provide our best care.
2. For our doctors we are seeking to facilitate access to all of the clinical information needed in a manner which is easy, convenient and yet secure and provide information which allows them to benchmark the outcomes of their patients compared to other clinicians of the same craft group.



3. As our Mission is broader than health care alone, we would support initiatives which aim to link information across government and industry. This is so that as a society we can become proactive, rather than reactive, in addressing the social problems of our time.

What aspects of healthcare currently work well from your perspective?

1. The Australian health care system provides a quality of care which is among the highest in the world.
2. The private and public option enables those who can afford to pay for their health care to do so. It also provides them with access to more timely care than might otherwise be provided by the public option.
3. The system is able to deliver care to the population despite vast geographical challenges.

What aspects of healthcare need improvement?

1. There is a lack of vertical integration of information between the tiers of the health system: public and private, General Practitioner and Other Specialists, Community and Hospital. This results in a non-holistic model of care for the patient despite high quality care of health events.
2. The system is focused primarily on treatment rather than prevention. The system would benefit from a focus, associated with funded activity, on public health, prevention and wellness.
3. There is a lack of real informed financial consent whereby, even on the highest level of cover, patients cannot escape gap payments. This lack of information regarding outcomes and out-of-pocket expenses means that patients often don't understand what is the final cost or what value (quality or otherwise) they derive from paying it. This serves to encourage patients to question the benefit of private health cover.
4. Information exchange between health care organisations is complex and difficult to achieve on a lasting basis. Despite there being vast amounts of patient information which has been collected and stored, I find it unlikely that any one stakeholder ever has the complete picture and there is significant record duplication. Currently it is incumbent on organisations to build ad-hoc integration mechanisms which are both expensive and complex to build and maintain.



5. Our system is driven by activity not outcome. This has led to a focus on volume and not necessarily quality or value. As a result, beyond the realms of journal publications, our system does not routinely compare the quality or outcomes of practitioners or treatments in the name of continuous improvement.
6. Lastly, on the point of data and lack of integration, it is unclear what data integration exists between health, human services, child protection, education, and other government departments with responsibility over the social determinants of health.

For the aspects of healthcare that you consider need improvement, what do you think are the barriers to improving performance in this area?

1. Considerable effort and funding should be diverted to home and community-based care, assessment, monitoring and related enabling technologies. Public and private healthcare providers should be enabled and appropriately funded to deliver care in these settings.
2. Rather than an organisation needing to build multiple integration mechanisms for a myriad of partners, and for this to be repeated multiple times for different organisations, it would be more efficient if we all had two-way integration with a single repository such as the MyHR.
3. There is opportunity to use big data to monitor patient outcomes in order to inform treatment guidelines and even accelerate clinical research.
4. The use of data to predict an illness/exacerbation or identify early-warning signs is highly valuable. This would enable practitioners to make strategic decisions which might be more expensive initially but provide a better outcome for the patient and which is more cost-effective for the system. For example: A patient may have a resource-intensive (appropriately compensated) admission which prevents 5 repeat admissions for that year.
5. Information sharing between various departments and levels of government that link to health care and other sectors. We know there are indicators which predict poor health and antisocial behaviour with lead times of many years. We would hope that the government is working towards systems which enable ease of access to information that allows holistic care of the patient in their unique medical and psychosocial context across the private and public sectors and hospital and community settings.



What does 'being in control of your healthcare' mean to you?

Truly allowing patients to be in control of their own healthcare means that healthcare providers need to afford them the capability of informed decision-making. Patients are not clinical experts but they can be the experts in their own bodies and minds. We need to give them the information they need with the appropriate contextual advice in order to allow them to be the expert clinical decision-maker for their own context such as has been referred to in the TED Talk - It's Time to redesign medical data - Thomas Goetz

How would you like to see digital technologies change people's experiences of managing their health, and the way they interact with the healthcare system? How could data and technology be better used to improve health and wellbeing?

In the age of the rise of chronic disease, the answer to better health care isn't necessarily better treatments, more hospitals or more health care practitioners. Empowerment is the answer. Digital technology has empowered the average individual to have a much greater influence on the world around them - think of the random tweets that go viral. Similar digital technology will empower people to better care for themselves. This is about prevention. Primary prevention - empowering patients to identify and mitigate trends in their self-care that might be risk factors for disease. Secondary prevention - empowering patients to identify troublesome signs to be diagnosed far earlier and thus treated earlier, resulting in a far better outcome. Tertiary prevention - empowering those individuals already struggling with chronic disease to better monitor their current health to identify early warning signs and thus prevent further deterioration.

Digital technology will better enable individuals to be cared for in the comfort of their own homes, surrounded by the people and the things that they love. Digital technology will make for a far more transparent health system, with individuals better able to determine the consequences of the decisions they make about their health.

What would you like the system to be able to do to make the My Health Record more useful for you?

1. Ability for clinicians to access through a simple and intuitive interface.
2. Ability for clinicians to access a variety of data (not only summarised) from a variety of clinical providers: pathology, radiology, specialist referrals and responses.



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

Currently when patients travel between different health care tiers or entities, we rely on letters of referral or the patient’s memory to convey information. As can be expected, the quality of this handover varies significantly and it is not uncommon for pertinent information to be omitted. Given that we have a system that does not necessarily empower patients, they cannot be expected to have the answers.

When seeking information, clinicians face barriers relating to how consent is authenticated, such as requirements for written consent, they need to depend on unsecure and unreliable methods of transmission such as fax, and the process of transmission itself is very manual. As such there seems to be a lot of waste and delay.

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

1. A simple and intuitive interface which allows all data to be viewed in the one place.
2. Ability for clinicians to access to a variety of data (not only summarised) from a variety of clinical providers: pathology, radiology, specialist referrals and responses, GP summaries, pharmacy records
3. Rather than the tool just being a repository, a system should track the progress of a patient through the course of their various interactions with the system

Please indicate which of the three options best applies to you for each of the following activities below:

	Our Clinicians currently use a computer, smart phone, or tablet	Our Clinicians don’t use but would be interested in using a computer, smart phone, or tablet	Our Clinicians don’t use and don’t have any interest in using a computer, smart phone, or tablet
Sending referrals to or receiving referrals from other practitioners		X	
Transferring prescriptions to the pharmacy		X	
Providing interactive decision-making support		X	
Ordering pathology tests and viewing results	X		
Ordering and viewing diagnostic imaging	X		



	Our Clinicians currently use a computer, smart phone, or tablet	Our Clinicians don't use but would be interested in using a computer, smart phone, or tablet	Our Clinicians don't use and don't have any interest in using a computer, smart phone, or tablet
Completing event summaries such as a hospital discharge summary or specialist report	X		
Sharing health records with my patients		X	
Sharing health records with other practitioners		X	
Patient booking and scheduling	X		
Billing and patient rebates	X		
Viewing and/or recording patient information during consultations		X	
Entering patient notes after a consultation		X	
Communicating with patients before or after consultations about health-related issues		X	
Accessing online clinical reference tools	X		
Tracking aspects of my patients' health		X	

Describe a situation where digital technology supported you to provide quality care to your patients.

As part of its commissioning, a Clinical Information System and scanned medical record solution were implemented at our SJG Midland Public and Private Hospital. At this stage I believe it is still too soon to be able to identify such examples related to this system as requested.

Recently, SJGHC implemented an infection control database in several of its Divisions. This system is linked with our Patient Administration System, Theatre Management System and our Pathology Lab System. It draws all the relevant information for infection control staff to manage micro alerts, antimicrobial stewardship and outcomes. It has built-in alerts which enable the staff to be advised of and commence action for alerts as soon as the results come to light. While a major barrier is the difficulty in connecting with external pathology, staff have identified improved workflow and outcomes as a result.



Describe a situation you have had where you think you couldn't provide optimal care to your patients.

A patient presented with a stroke to a country hospital, they were referred to one of our hospitals (1-2 hours' travel). The patient arrived before the CT scan images became available on SJGHC systems for clinicians to review.

In a similar vein, a patient presented with a stroke at a SJGHC hospital. They were transferred to a quaternary site for treatment. Again the patient arrived before our scans became viewable on their system. Clinicians resorted to sub-optimal transfer of images via a personal smartphone in order to ensure the patient received timely and lifesaving treatment.

What are your organisation's priorities in respect to digital health or eHealth?

1. SJGHC is committed to implementing a CIS/EMR in all of our hospitals by 2019, with larger acute sites reaching HIMSS level 4/5 within that period.
2. Additionally, we are committed to:
 - 2.1. Implementing a mobile app to deliver information into the hands of our Doctors and caregivers.
 - 2.2. Implementing a Patient portal which better facilitates information collection from patients, adequate preparation for appropriate care delivery and provides data which can be used to better improve the health and welfare of our patients.
 - 2.3. Implementing a better apparatus for communication with primary care to ensure that our patients receive better continuity of care in the community.
 - 2.4. Enabling technologies, software and hardware, that better support clinical workflow and the initiatives above.
 - 2.5. Investigating ways in which SJG can keep pace with the changing model of care that we are seeing with the advent of new technologies and a more connected world.



What are the barriers or obstacles to innovation in health and care?

Lack of consensus:

Internally, and between SJGHC and our contractual partners, we struggle to agree on how to present data together for clinical interpretation, when it originates from different sources. Going forward this debate is only going to become more complex. We need leadership in this space so that we can bring disparate data together.

Technical legislation:

Any legislation which requires a wet-ink signature should be amended to accept electronic authentication. The Federal legislation on this topic is quite advanced but state and territory legislation is not.

Legislation in some jurisdictions requires that relevant documents which are digitised are scanned at a level of quality which is impractical. It has meant that some hospitals are unable to eliminate hard copy storage and that secure but easily accessible platforms for clinical photography are not feasible.

What opportunities would you prioritise in respect to innovation in health and care?

There are two aspects that can be covered here:

Functional Innovation:

These are the immediate technical priorities which have been applied in other industries that would provide great value in health. Namely they are:

1. Information availability for patients;
2. Information exchange between patients, practitioners and health care providers; and
3. Tools of convenience such as scheduling, billing and so on.

True Innovation – Changing the model of care:

These are concepts which involve a paradigm shift:

1. Given that the amount of time a patient spends in hospital before and after an intervention is likely to decrease, it would be sensible to facilitate support for health care providers to expand into providing more cost-effective care at home.



2. Currently, a large amount of care provided by the private sector is relating to interventional procedures and is elective. With the growing prevalence of chronic disease, this may well change and public health initiatives and care may enter the scope of work of the private health sector. Support for health care providers to work in prevention (primary/secondary/tertiary) is needed. Currently there is limited funding for this in the private setting for providers, despite some billing items for practitioners.

What support do entrepreneurs need to enable greater innovation in healthcare?

There are limited opportunities for start-ups to apply for funding. Many accelerator programs have prohibitive terms and conditions relating to equity and control which do not facilitate growth.

Further, the cost and resources required to bid for government tenders is prohibitive: There are strict criteria to determine which organisations can place a bid. The resources required to develop a tender mean that many smaller entities either would not or could not participate. Entities that do bid may inflate their price beyond that which would have been available via a direct negotiation process. Consequently, it is likely that in some cases a competitive tender provides neither the true market test nor the value for money that was its intent.

Action in this area would be ground-breaking.

What should be the immediate priority initiative for the My Health Record to ensure it delivers real value for clinicians and the public?

In order to complement hospital discharge summaries and GP patient summaries I believe the My HR would benefit from:

1. Inclusion of pathology results from all sources into the record (preferably in a manipulable form).
2. Inclusion of radiology reports into the record (images aren't crucial but would add value).
3. Inclusion of specialist referrals and responses (public and private) into the record.
4. Ability to accept data from wearables, vital signs monitors and similar devices available to consumers and providers.



As you can see, within our organisation, as in yours, we have an ambitious body of work ahead of us. We hope that road ahead, yours and ours respectively, will be able to align. It is absolutely essential that we harness the technology and information that is already at our fingertips. It is also essential that we plan for a future where the whole system may be vastly different from that of today. We believe that these activities will lead to far more informed patient and a far more informed clinician. This will in turn lead to greater efficiencies achieved from the operation and outcomes of the system.

Once again, thank you for affording SJGHC the opportunity to provide input. You are welcome to contact myself to discuss the contents of this response or for additional comment. I look forward to future dialogue on this matter and I believe there would be value in meeting to discuss this and more. If you are agreeable, I will make arrangements with your office to meet when next I am in Canberra.

Kind regards

A handwritten signature in black ink, appearing to read 'A.T. Jul'.

Dr Alexius Taylor Julian
Chief Medical Information Officer
St John of God Health Care

Cc: Dr Michael Stanford