About the Series

HISA is delivering a new thought leadership series - *Innovating Health. Creating a New Conversation.*

Through an ongoing series of roundtable events and other activities, we aim to lift and support the digital health innovation agenda in healthcare.

To create a new conversation, we seek to bring together health leaders with industry experts, challenge current thinking with new and different perspectives, harness our collective knowledge and ideas, and ultimately share topics and discussion with others to stimulate sector change. The series is in collaboration with and supported by Accenture.

Never has there been a time of such pressure on the healthcare system. The need to transform is vital.

Conjointly, the conditions and promise of innovative change are tangible through the development and application of new digital technologies, rapidly changing business models, Government policy reforms, the rise of health consumerism, and service led reform.

“Many of the ways we go about improving health and care were designed in a different mindset for a different set of circumstances.

*Given the radical and complex nature of our transformational challenge, these 'tried and tested' methods increasingly won't deliver what we need to deliver for patients.*”

*Helen Bevan and Steve Fairman NHS UK*
Event 6 – Innovation and Knowledge Translation in Healthcare
Canberra 8 April 2017

Overview

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The Innovating Health Series returned to Canberra to commence our conversation for 2017. This roundtable examined the Knowledge Translation in Healthcare against the backdrop of innovation.

The topic is a constant challenge for those working in health policy, clinical practice and service delivery. We all acknowledge that we can do better in applying the latest knowledge and evidence base from collated research, innovation and others’ practical experience. Attendees agreed that research continues to be siloed and fragmented. It takes too long to translate new knowledge into practice in the health system. Fundamentally, we all aspire to do our best with the knowledge at hand and understand what works. Knowledge translation is the process of putting into practice what we have learnt through the process of research, innovation and progressive change.

There are many questions to answer as to why this area continues to be a problem, but how can it be addressed? If we are investing considerable funding and effort into health research and innovation, how much are we benefiting? How can we be innovative with a new wave of data science, informatics and analytics leveraging the vast amounts of data that research and clinical practice evidence is generating? What would be required to fast track change and build scale to things “we know work” or “potentially work”? How do we implement innovative change into a large scale and conservative health delivery environment?

We welcomed Dr Tamika Heiden to guide and lead our discussion on knowledge translation in healthcare. Tamika focused on a common understanding of knowledge translation to ensure a broadened scope of discussion. This included not just technical research and innovation, but also socio-technical knowledge and change. We know from the National Academy of Medicine in the USA, there is on average a 17-year gap between the publication of research outcomes to those findings being put into practice. Other challenges included creating pragmatic mechanisms for distilling meaningful information from the sheer volume of research being generated to support impacted health professionals to keep up to date. Tamika focused our discussion on what we can collectively do to “close the 17-year” gap, as well as encourage the notion of integrated knowledge translation working across research, clinical practice and service areas to reduce research wastage and increase impact.

The discussion was free ranging with participants, in some instances, providing practical measures on what we can action in the short to medium term to make step-change gains. These take-away points are highlighted below.

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Highlights and Take-Away Points:

1. **Focus on Research Impact** – When is research just research for research’s sake? It was argued that the practical uptake of knowledge in healthcare would be greatly enhanced if research continues to be more targeted to areas where health practitioners see real need in the delivery of care. We have the ‘push’ system where we undertake research and then we seek to disseminate it and get clinicians to use it. Health systems and practitioners want a ‘pull’ system - where they have questions they want answered and they want to partner with researchers and arrive at meaningful, personalised patient outcomes. There is a misalignment between research push and clinician pull, research is not answering some of the questions we need answered at the ‘pointy end’ of healthcare.

Researchers are conscious that there is a level of inefficiency and waste of research funds. It is acknowledged by researchers that we are spending billions of dollars on research, where it is known that it would have no impact on improved health outcomes whatsoever. Research impact comes when research and the subsequent knowledge generated, influences positive change and becomes available in the market and transforms day to day practice. Better processes to support the framing of research to enhance impact would be welcomed. There are opportunities for digital tools and the more meaningful use of data, to better assist in our decision making and posing targeted research questions, not re-investigating what we already know and building a more intimately networked knowledge platform as a foundation for future work. We need to do more with what we have.

“We have some real questions we need answered at the pointy end of healthcare.”

Dr Paresh Dawda

2. **Practicalities in Legislative and Regulatory Change** – There are a number of barriers to implementation of change in healthcare and introducing new paradigms and research knowledge into practice. It is frequently the case that the restrictions are imposed by legislative and regulatory barriers which do not reflect our societal progress and current community expectations.

A practical example is the treatment of basic medical and pharmaceutical information and the entrenched political and regulatory barriers that prevent secondary use of that data in order to improve population health. Currently, we have legislation that precludes data linkage between what is prescribed (MBS) and dispensed (PBS) to the patient. In today’s connected world, people would have an expectation that this should occur and it should be quite an easy change to make. In reality, there is no easy mechanism to change the law and the institutionalised behaviours that prevent doctors from knowing whether patients got their prescriptions dispensed. Whilst privacy and security of information remains a visible concern and area of interest for health leaders, there are changes in the way we regulate which could transform the system and open the doors for greater research impact. There was a general consensus in the room that ‘privacy is a transaction, it’s not an absolute’. In today’s society, most people are happy to share their information if they get something of value in return.

Those working within the research community and knowledge translation space agreed that we need to think more broadly about how to create system change and bring current and future knowledge to the fore. Incentivising system change needs to be broader than just the economics of change. We need to look at what we can do to change the system and create easier pathways as an alternative to the current way the health system is regulated and managed.
“We need to show the value (of knowledge) beyond the PIP (practice incentive payment).”
Health Leader Roundtable Participant

3. Addressing Cultural Change and Traditional Barriers — Cultural change in healthcare is a constant theme that continues to re-emerge throughout the series’ conversation. In addressing and closing the knowledge translation gap of 17 years it was suggested that the research community reflect a little more on what can be done within the current system.

Academic representatives in attendance commented there is an appetite to better target research with the limited funds available. There has been a paradigm shift away from basic science toward research that is able to be commercialised. Traditional models for selecting research topics are being challenged by new, digital, technological approaches that enable whole ecosystems of data to be collected and completely new research questions to be posed. Research organisations and the way research is funded need to evolve quickly to adopt new health informatic approaches and become more innovative in their outlook. In fact, all organisations need to reflect and respond to these societal changes to remain relevant and of value moving forward. None are immune.

Those who work tirelessly within health and research organisations described the often-slow pace of change and the constant administrative hurdles impeding progress toward improved outcomes. The more sophisticated use of research findings and the more effective communication to system stakeholders in order to improve engagement and deliver better health outcomes could be enabled through better application of available tools and processes.

“They sentenced me to twenty years of boredom for trying to change the system from within.”
Leonard Cohen (quoted by Health Leader Roundtable Participant)

4. Data Sharing in a Digital Age — In our rapidly changing world where the digital age becomes more prominent and relevant in all our lives, we need to reflect on the role that digital plays in knowledge translation in healthcare. Fundamentally, we are getting to a point where there is no technology barrier. Health organisations were designed for a different information age.

If this is the case, we need to ask the question, ‘how would you design a health system for the health needs of today?’ Once we accept that health systems are not designed for the present needs of the population, then we can map what we need to do in order to move forward. Recognising and accepting that the legacy, data sharing environment is not fit for purpose will address the inertia and catalyse knowledge translation.

The models of evidence collection are changing and the presumption of ubiquitous big data is a fallacy. How to use digital tools to help knowledge translation in healthcare? Could consumers be the drivers of knowledge translation? In our day to day activities we gather data on our wearable devices (Fitbit etc.) and on the web-sites we search when we feel unwell. Some points for consideration.

- ‘Flybuys’ and similar retail reward schemes are not about accumulating points at all. These schemes give information about purchasing behaviour. Health could tap into this retail data source to address the obesity epidemic.

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4 Sited 15 April 2017 [http://www.webheights.net/essential/manhat.htm](http://www.webheights.net/essential/manhat.htm)
• Encourage the evaluation, feedback, benchmarking of what we are doing i.e. the health outcomes and patient experience. This approach will provide ‘lubrication’ for terminating entrenched practices that do not add value.

• The systems that researchers and clinicians use are often not inter-operable, better compliance with data standards would help to decrease unproductive work-arounds and wastage.

• Genomics of individuals compared to genomics of populations can create a broad range of possibilities for precision medicine, research and knowledge translation. Populations and individuals will need to access and securely share those data.

A practical way to think about evidence base, knowledge translation and behavioural change is to focus on the feedback loop. People generally respond very well to feedback. If presented in the right way it can reinforce decision making and lead to behavioural change whether for healthcare professionals or consumers. Fundamentally, we want to empower the clinician-patient relationship rather than put the power solely in the hands of the clinician or to move it to the patient.

“Digital won’t solve anything alone. It is a people problem.”
Craig Thomler, Gov 2.0 Advocate

5. **Ensuring Outcomes Focused Research** – We need a renewed motivation to ensure that any research or project undertaken is focused on patient outcomes. As an example, when it comes to digital change in healthcare we have been poor to date on building the evidence base of outcomes and benefits. We have asked the Government and the health community to continue to take on trust the value of digital health and digital change in healthcare. We need to start building the evidence base with the outcomes in mind, and progressively check on our efforts. In short, we need all projects, not just research projects to have a mantra of building and contributing to a shared knowledge base that measurably impacts on positive patient outcomes.

Moving forward, we need to ensure a co-production of research and innovative projects with all key stakeholders, and factor in a process of evidence building in all things we do to be available and shared across the broader health sector. Accompanying this new philosophy of open source research would be an approach of generating the evidence to support anything new, reduce duplicate efforts for the same project and speed up knowledge translation of what works and what doesn’t.

Australia requires a concerted, national incentive towards Triple Aim\(^5\) type frameworks as a way to target research and projects in optimising health system performance by factoring in and measuring population health, experience of care, and overall cost for any project contributing to health system improvement. We also need to create a ‘quadruple aim’ by better supporting the health professionals who we are asking to use the digital health system.

“Where is there outcomes research for the end of any project?
We need to design projects with outcomes and evidence base in mind.”
Andrew Ingersoll, Australian Digital Health Agency

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Conclusion - HISA Reflection on the Event

The level of discussion and thought sharing at our first Innovating Health Roundtable for 2017. It was worthwhile discussion and we thank the attendees for their participation. We also thank Dr Tamika Heiden for leading the discussion and providing her considerable experience and thinking in this area.

Our key take-away as participants and observers at the event were:

- More efforts to increase the **focus on research impact** to assist in closing the gap for knowledge translation in healthcare. Focus on the problems at the pointy end of healthcare, involve the clinicians with patients, and provide feedback to introduce change.
- Consider **practical legislative and regulatory changes** which may be outdated, to address increased knowledge translation in healthcare. The includes enforcement and oversight of systems, interoperability and data standards.
- Continue to challenge ourselves and our organisations on the **cultural barriers to change** that we see and how to address them internally.
- **Knowledge and data sharing in the digital age** should ultimately empower the clinician-patient relationship rather than put the power solely in the hands of the clinician or to move it to the patient.
- Ensuring we have an **outcome focused research approach** in everything we do, particularly in digital health which still needs to build a knowledge and evidence base.

We look forward to our next instalment in the series in May on the **Responding to Changes to Funding and Payments**.

Innovating Health – Health Leaders in attendance for this Roundtable:

- Dr Tamika Heiden, Principal, Knowledge Translation Australia (Guide)
- Professor Matthew Cook, Professor of Medicine ANU
- Ian Bull, eHealth National Program Manager ACT Health
- Gaylene Coulton, CEO, Capital Health Network
- Professor Rachel Davey, Director of Health Research University of Canberra
- Dr Paresh Dawda, GP and Australian Digital Health Agency Q&S Board Advisory Committee Member
- Marcus Dawe, CEO, Health Horizon
- A / Professor Paul Dugdale, Centre for Health Stewardship ANU
- Dr Josie Di Donato, Advocacy and Leadership Director, HISA
- Suzanne Greenwood, CEO, Catholic Health Australia
- Andrew Ingersoll, Director of Research, Australian Digital Health Agency
- Gary Moorehead, Chief of Staff, Senator Kim Carr
- Dr Fiona Nelms, Director Technology Transfer ANU
- Paul Story, Director, PBS Information Management, Department of Health
- Craig Thomler, Digital Marketing Senior Manager, Gov. 2.0 Advocate
- Shannon Roper, Senior Manager Accenture
- Ian Manovel, Principal Innovation Accenture
- Dr Louise Schaper, CEO HISA
- Greg Moran, HISA Host