

14 July 2021

Working towards linking hospital and general practice data

















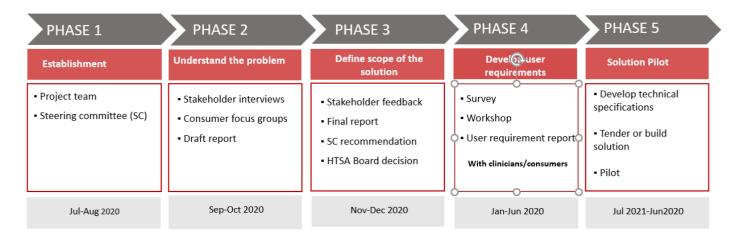


Background

Health Translation SA (HTSA) is working with our partners in education, research and healthcare services to address a significant health system challenge. Namely, improving the coordination and smooth progression of care as people transition between our acute (hospital) and primary care (community) sectors (referred to as the 'primary/acute care interface').

We want to use the rich supply of healthcare data available in South Australia to enhance and improve continuity of care as people transition between our hospitals and the community.

The *Primary/Acute Care Interface Data Project* is driven by a project steering committee comprising healthcare professionals, researchers and community members, that reports to the HTSA Board. The project is supported by the Australian Government's Medical Research Future Fund (MRFF) as part of the Rapid Applied Research Translation program (MRF9100005). Further detailed information on this project is available on our <u>website</u>.



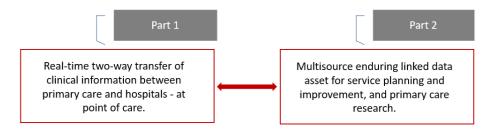
The overarching vision for the *Primary/Acute Care Interface Data Project* is to build a **state-of-the-art, real-time data asset in SA that can improve both clinical care and healthcare services**, consisting of two key components as illustrated below. Other jurisdictions have only tackled one of these components or addressed them separately.

SA has a unique opportunity, based on our whole of state EMR, to create a solution that addresses both:

- > Part 1: connecting clinical information between primary care and hospitals so data can be used in realtime to assist healthcare professionals care for patients
- > Part 2: storing this data in a multisource enduring linked data asset that can be used for service planning and improvement.

Primary/Acute Care Interface Data Project

Vision: To build a state-of-the art, state-wide real time data asset that can improve clinical care and healthcare services.





Progressing the project

To progress the *Primary/Acute Care Interface Data Project*, we needed to determine broad user needs and concerns and discuss the user requirements for a technical solution that provides real-time two-way transfer of patient medical information between general practice and public hospitals.

Evidence has shown repeatedly that the technical solution is rarely the most difficult problem, but rather it is the embedding of a technical solution within routine clinical practice that is the challenge.

To ensure a solution was able to be quickly and effectively adopted by clinicians we knew we must focus on codeveloping these user requirements with clinicians across SA's health system.

The Steering Committee agreed to:

- 1. Conduct a survey to determine broad user needs and concerns, and
- 2. Run a workshop to codevelop the user requirements as informed by the survey results.

Connected care survey

In May 2021, in preparation for the workshop, we conducted a survey among patients/carers, hospital and primary care clinicians in South Australia to determine:

- > At what points in the patient journey will real-time access to a patient's complete medical record significantly improve care and patient outcomes
- > What information (data) is most useful at these timepoints
- > What issues or concerns need to be addressed?

Survey results showed that entry to the hospital via emergency department, outpatient referral or admission as an inpatient, as well as discharge from all these settings back to GP care were critical points in a patients' journey where connected healthcare information would significantly improve care. The most critical information required related to medications, medical and family history, investigations, allergies/intolerances and investigations.





Connected Care Survey Results

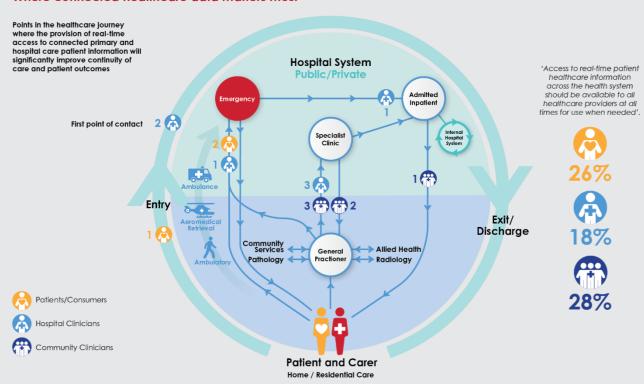
Who took the survey

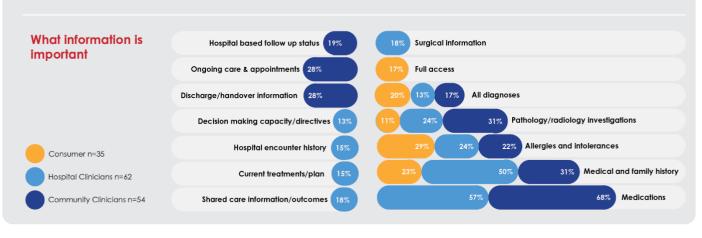






Where connected healthcare data matters most







Connected care workshop

The Connected Care Workshop with general practitioners, hospital clinicians and consumers was held on Friday 4 June at the Adelaide Convention Centre. The workshop was held in collaboration with Digital Health SA, the Commission for Excellence and Innovation in Health (CEIH), South Australia's Primary Health Networks and the University of South Australia and chaired by Wendy Keech, CEO of Health Translation SA. There were 37 attendees collectively representing patients and carers, general practitioners, hospital clinicians and executive, hospital GP Liaisons, Digital Health SA and the project Steering Committee (Refer Appendix 1.)

Results from the Connected Care survey were used to inform the workshop to codesign the user requirements for a technical solution connecting general practice and hospital healthcare data in real time.

The program for the Forum included several presentations, an interactive user requirement development session, panel discussion and Q&A.

Project background	Wendy Keech, CEO, HTSA		
Connected care	Dr Ecushla Linedale, HTSA		
survey results			
Facilitated interactive	Information needs at the three healthcare journey transitions identified in the survey		
session	> Presentation and discharge from hospital emergency departments		
	> Admission and discharge as an inpatient		
	> Before and after referral into specialist clinics (e.g. outpatient departments)		
Digital Health SA's	Dr Santosh Verghese, Chief Medical Information Officer, Digital Health SA		
perspective			
Panel discussion /	> Dr Santosh Verghese, Chief Medical Information Officer, Digital Health SA		
Q&A	> Tina Hardin, Executive Director Clinical Informatics, Commission on Excellence		
	and Innovation in Health		
	> Chris Moy, Vice-President, Australian Medical Association		
	> Ali Krollig, Health Policy Manager, Country SA Primary Health Network		
	> Prof Susan Hillier, Dean of Research, UniSA Allied Health & Human Performance		





Workshop outcomes

Tables were asked to discuss and categorise the types of information identified in the Connected Care Survey as essential, important or nice to have. Due to time constraints, all tables were only able to identify information they regarded as essential (see table 1). Two tables rated the informational needs transitioning between General Practice and hospital care (inpatient or outpatient), and one table assessed the needs transitioning in and out of hospital Emergency Departments (5 X indicates consensus across all settings, as highlighted in red).

Table 1: Essential information needed during patient transition between General Practice care and different hospital care settings

Type of information	Emergency Departments	Inpatient Care	Outpatien Clinic
	(1 table)	(2 tables)	(2 tables)
Medications			
Current	X	XX	XX
Changes	X	XX	XX
Allergies/intolerances	X	XX	XX
Past			Х
Being dispensed	X	Χ	XX
Interactions	X		XX
Current diagnoses	X	XX	XX
Medical history	X	Χ	Х
Family history	X	Χ	X
Diagnostic codes			
Full access to all available information			
Pathology results			
Recent	X	Χ	XX
Previous			XX
Pending	X	Χ	XX
Radiology results			
Recent	X	Χ	XX
Previous			
Pending	X	Χ	XX
Surgical history	X		X
Shared information and outcomes between doctors, specialists' professionals	X	Χ	
Current treatment plan	X	Χ	X
Previous hospital visits (inc. ED)	X	Χ	X
Legal and decision making			
Advanced care directive	X	Χ	Х
Enduring power of attorney		Χ	
Enduring power of guardianship	X	Χ	Х
Substitute decision makers details	X	Х	Х
Patient's carer		Х	Х
Clinical handover information (inc. discharge summary, management and f/up)	X	Х	XX
Ongoing care and appointments with GP, specialists, and Allied Health		Х	Х
Hospital follow-up status		Х	XX
Links to other services			Х
Medication timeline		Х	
Patient Created Care Plan/Advice		Х	



During the open panel discussion, the following recommendations (see table 2) were made regarding general user-requirements for the technical solution to Connected Care and other considerations.

Table 2: Recommendations from frontline staff, patients and carers

Design a simple, elegant, intuitive interface	The clinical risk of not doing something is greater than doing something > Risk is inherent with healthcare and healthcare		
> How information is accessed and presented is most important			
> a single commonwealth database that is linked to Medicare	decision making > Lega risk, IT risk and clinical risk		
 Start with the simple but important information Don't try and be too grand and capture too much information 	Data quality should not necessarily prevent linking and use of existing data > Acknowledge that all data is corrupt to some level.		
Start with something simple that benefits the largest number of people	> Choose an area where data quality is good enough		
Design it with the most complex location in mind	Patient privacy is important		
	> We are not the guardians of patient data		
Build this with our patients not for patients > Consumers are very willing to advocate for	Understand there is a lot of vested interest in not connecting data		
connected healthcare information			
· -	Recognise there is Electronic Medical Record fatigue		
connected healthcare information Pilot test the solution in both metropolitan and rural	Recognise there is Electronic Medical Record fatigue Both public and private hospitals to be considered		





Summary

- > Connected patient healthcare information would significantly improve patient care as people present to hospitals (via emergency departments, inpatient admissions, and outpatient specialist clinics) and are discharged back into their GPs care
- > The information which is most useful is consistent across all these settings
- > Essential information includes detailed medication information, current diagnoses, pathology results, radiology results and clinical handover information.
- > The clinical risk of not connecting care records is greater than the risk of connecting them.
- > It is critical that a simple, elegant, intuitive interface is developed that enables easy access and portrays essential information in a format that supports healthcare decision making for frontline workers.

Next steps

- > Health Translation SA and Digital Health SA will meet to discuss the findings of the forum and confirm the work plan for a pilot implementation trial.
- > A workshop with digital, data and IT experts will be held to develop the technical specifications arising from the user requirement





Appendix 1: Attendee list

First name	Surname	Organisation
Ali	Krollig	Country SA Primary Health Network
Andrew	Kellie	East Adelaide Health Care
Ashley	Parkinson	Flinders and Upper North Local Health Network
Brooke	Bussenschutt	Yorke and Northern Local Health Network
Chad	Collins	Northern Adelaide Local Health Network
Chris	Moy	Australian Medical Association
Chris	Bollen	Oakden Medical Centre
Daniel	Byrne	Chandlers Hill Surgery
Donnamarie	Walker	Eyre and Far North Local Health Network
Ecushla	Linedale	Health Translation SA
lan	Brownwood	Health Policy Analysis Pty Ltd
Jackie	Yeoh	Central Adelaide Local Health Network
James	Black	Southern Adelaide Local Health Network
Jane	Rosser	Women's and Children's Health Network
Jemma	Anderson	Women's and Children's Health Network
John	Williams	Australian Medical Association – South Australia
Katie	Papps	Yorke and Northern Local Health Network
Kevin	Stevens	Consumer Representative
Lana	Earle-Bandalarage	Consumer Representative
Leeann	Harbridge	Eyre and Far North Local Health Network
Lisa	Duffield	Nunkuwarrin Yunti of South Australia
Mai	Duong	Southern Adelaide Local Health Network
Megan	Brooks	Central Adelaide Local Health Network
Monica	Novick	Wellbeing SA
Nicole	Sargent	Health Translation SA
Oliver	Frank	Oakden Medical Centre
Rhys	Parker	Digital Health SA
Rob	Van den Berg	Southern Adelaide Local Health Network
Ryan	Lovett	Wellbeing SA
Samantha	Welke	Central Adelaide Local Health Network
Samuel	Gluck	Northern Adelaide Local Health Network
Santosh	Verghese	Digital Health SA
Shila	Perlina	Consumer Representative
Simone	Laskowski	Nunkuwarrin Yunti of South Australia
Susan	Hillier	University of South Australia
Tina	Hardin	Commission on Excellence and Innovation in Health
Wendy	Keech	Health Translation SA