Shared Care Record View

Although most essential health services were maintained in the aftermath of the February 2011 earthquake, damage to buildings and infrastructure meant patient records were inaccessible and there was frequently no reliable way to check the medical history of people presenting for treatment.

It became clear there was a pressing need to develop a robust system for sharing patient information across key healthcare providers to ensure timely and accurate records would be available at any point of care. Shared Care Record View (eSCRV) was designed to meet this need.

**Innovative response** In collaboration with the wider healthcare community, Canterbury District Health Board (CDHB) developed a secure, cloud-based clinical management database allowing health practitioners to see a patient’s medical record electronically. eSCRV did not emerge in isolation, but its development was accelerated by the situation created by the quakes.

Before the quakes healthcare providers collected and managed their own patient records, which increased the incidence of duplication, discrepancies and clinical risk. Although some information was transferred between services, few – if any – providers had a complete picture of a patient’s history.

In 2007, a series of workshops showcasing innovative ideas and models of care helped to set the CDHB’s vision of a ‘whole-of-system’ approach to health and wellbeing. Patients are placed firmly at the centre of the health system and pathways are built around meeting their needs.

eSCRV has been designed to ease the patient’s journey, facilitate quality care and enhance communication, not only between the patient and the provider, but also between practitioners and services.

**Who** eSCRV is an initiative of the CDHB, in partnership with Pegasus Health, the Canterbury Community Pharmacy Group, Nurse Maude and healthcare software development company Orion Health.

**How it works** “eSCRV provides one health portal, regardless of where you work in the health system,” says CDHB Chief Executive David Meates. eSCRV:

- Provides a faster and more effective way for clinicians to access important information.
- Allows community and hospital health professionals, pharmacies, general practitioners, laboratories and nursing services to share information.
- Displays essential patient information and diagnostic test results, eg, details about allergies or chronic conditions, x-rays and blood tests.
- Prevents duplication of diagnostic tests, which has significant benefits in terms of cost savings and cutting time wastage for both patient and provider.
- Increases capability for clinicians to deliver services in a non-hospital setting.
- Improves patient safety and reduces clinical risk.
- Supports a whole-of-system approach to health and wellbeing.

The eSCRV initiative is overseen by a clinically-led governance group representing the major clinical groups in the Canterbury health system. It marks a shift from storing patient information at a number of distinct sites (recorded multiple times in multiple places) to an electronically based and smartphone capable system, accessible to all authorised users.

When a patient comes in clinicians can refer to their medical history – including a summary of medical conditions, details of recent or long-term illnesses, hospital and GP visits, operations, diagnostic test results,
medications and information about home care visits. This detailed resource helps make faster diagnosis and decisions about treatment and care options possible. In helping health professionals make informed, timely decisions, eSCRV contributes to improved patient safety and health outcomes.

All health information stored on eSCRV is confidential, with a number of protections embedded in the system to ensure privacy of patient information and security of users. eSCRV may only be used by healthcare providers for the treatment of patients in their care and each clinician can only see information relevant to their role.

eSCRV is unique in that it covers the entire patient population. However, patients can easily opt out and withhold their information if they choose not to participate.

As Pegasus Health’s Clinical Leader IT and CDHB Clinical Director Informatics Dr Martin Wilson puts it, the February quake precipitated an acute emergency, where patients were displaced, doctors’ surgeries were closed and hospital services were under massive stress. Public and private healthcare providers alike immediately looked for ways to ameliorate the situation.

The CDHB’s commitment to its vision of a whole-of-system approach and an existing culture of innovation and responsiveness helped foster the development of eSCRV. “The earthquake gave us the impetus to say that things we were planning to do need to happen today,” says Meates.

Prior to the earthquakes there had been recognition of the benefits of developing and using a single patient record, accessible by all health professionals involved in an individual’s care. After the earthquakes, when many of the normal delivery mechanisms failed it became time to put that theory into practice and make it happen.

A project team lead by the CDHB’s Chief Medical Officer, Dr Nigel Millar, invited a number of hospital specialists, nurses, pharmacists, GPs, allied health professionals and community health service providers to participate in a series of workshops to discuss the issue of sharing and disseminating patient information. The participants agreed there were valid reasons for sharing key patient information and that developing a new system for electronically sharing patient records would achieve improved health outcomes, as a result of having a complete and accurate history available at the point of care.

The project team also used existing systems – such as interRAI for Aged Care and the CDHB’s Health Pathways website – to inspire and guide planning and development of what would become eSCRV.

From the outset, leading healthcare software company Orion Health was an integral part of the eSCRV project. The close working relationship between key stakeholders, users and Orion Health was extremely important to getting the system up and running so swiftly. The technology behind eSCRV has been designed to meet the needs of clinicians and improve patient care.

Results eSCRV cost around NZ$1 million to develop (the CDHB’s total operating budget is approximately $1.4 billion per annum). Its potential benefits are significant, its costs offset by it being substantially more cost effective over time.

A pilot project, where a number of CDHB staff, GPs, pharmacies and community nurses were invited to trial use of eSCRV, was underway by October 2011. Their response has been overwhelmingly positive, with at least one doctor (according to Wilson) describing eSCRV as “the best invention since the stethoscope”. This group’s feedback and advice has enabled Orion Health and IT specialists at Pegasus Health to fine-tune the system in advance of its wider roll-out by the end of 2012.
Seismic Shifts

Client Stories

Focus on better care

“It’s fantastic. Shared Care Record View makes a huge difference to our daily clinical lives,” says Simon Brokenshire, Clinical Director of Pegasus Health’s 24 Hour Surgery, Christchurch’s after hours and urgent accident and medical centre.

According to Brokenshire, eSCRV is an exciting first step to a more systems-oriented, patient-focused approach. It allows all providers – whether GP, hospital, pharmacy or allied health professionals – access to a full medical history as the patient moves between various services. Information about prescribed medications, allergies, laboratory, x-ray and test results, clinic notes and discharge letters can all be stored on the eSCRV system. “It gives us a more complete picture of who the patient is,” says Brokenshire, “and helps us make better informed decisions about their care.”

Brokenshire also believes eSCRV has a significant system benefit, as much for the patient as for the healthcare provider, in terms of reducing duplication and enabling comparisons between results. “Now, a patient can have one test and everyone can access the results. Not only that, but we can also see and compare previous results. That’s a huge plus.”

Before it became part of the eSCRV pilot, the 24 Hour Surgery frequently missed out on follow-up communication. “We’re owned by and refer everything back to general practice,” says Brokenshire. “Now we can see the investigations a patient has had and find out if we’ve acted appropriately. It’s great.”

A streamlined service

Through its team of dedicated multidisciplinary healthcare professionals, Nurse Maude delivers hospital, hospice and home support services to thousands of clients in Christchurch and Canterbury, and even as far afield as the West Coast and Wellington.

Hospital and Hospice Palliative Service Manager Jane Rollings knows comprehensive and up-to-date patient information is essential for providing responsive and timely care. She was delighted when her service was invited to be part of the pilot for testing eSCRV.

“We felt there was a certain amount of clinical risk attached to not being able to see patient records, we didn’t always know exactly what we were dealing with. This (eSCRV) has made a huge difference.”

Rollings believes using eSCRV – having a patient’s full clinical history – enables the Nurse Maude team to offer more complete patient-focused care. Access to the system has also made a significant difference to the time Rollings spends chasing up missing or incomplete information.

“Patients have so much to remember and it can be very confusing for them if they have to deal with multiple health professionals,” says Rollings. “Now we have that background information, so we’re able to treat them more appropriately. It’s just fantastic. It’s really helped to streamline our service.”
Critical success factors

• Putting the patient at the centre of health service delivery to ease the patient’s journey and ensure seamless care. This provides a more integrated approach to patient management, leading to better outcomes.

• Strategic partnership between the CDHB and private health and social service providers.

• Existing culture of innovation and willingness to embrace and trial new ideas.

• Ability to act responsively and decisively to support the immediate needs of the community.

• Collaborative development, bringing together the best ideas and suggestions from all stakeholders. All participants came to a consensus, agreed there were valid reasons for sharing key patient information and identified what information should be shared.

• Leveraging existing successful examples of patient assessment and care management tools (eg, interRAI for Aged Care and the CDHB’s Health Pathways website) as inspiration for the development of eSCRV.

• Technology developed to meet the needs of clinicians and to improve patient care. A close working relationship with software developer Orion Health has been critical to the system’s success.

Looking forward eSCRV is now well on track to be rolled out across the whole of the Canterbury health sector by the end of the year. Plans are also underway to give St John Ambulance access to the system. Although still in its pilot phase, it has immediately proven to be a patient management tool that is scalable for the future and replicable elsewhere. Other New Zealand health districts have already expressed interest in adopting eSCRV and it could also be adapted for use overseas.

Canterbury has established a reputation for supporting and investing in clinical innovation and partnerships aimed at improving patient care.

A core philosophy of the CDHB is to deliver the right care, in the right place, at the right time, by the right person, to achieve the best health outcomes for the community.

The CDHB is committed to continue working in partnership with a range of public and private providers – people and organisations that share a vision of a fully integrated system of healthcare delivery that has resilience, capacity and connected infrastructure. eSCRV has quickly become an integral part of that dynamic patient-focused whole-of-system approach to care.

Acknowledgements The State Services Commission wishes to thank the following contributors to this case study: CDHB, Pegasus Health, 24 Hour Surgery and Nurse Maude.