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# Community Care: The New Frontier in Connected Health

While most of the talk about the benefits of connected healthcare strategies revolves around a national Electronic Health Record, most of the action has been concentrated in acute care settings. Community healthcare is emerging as a new frontier for connected healthcare strategies and technology is advancing to meet the unique demands of this environment.

With ageing populations and increasingly expensive treatment options, governments around the world are asking: How do we start cutting some costs while making things better for patients? One answer is to get patients out of acute care as soon as possible and into their homes and the hands of community care. Psychologically that is better for patients, with less cost and better outcomes.

To achieve this, you must share information between acute and community care settings. The local GP needs to know what has happened to their patient in hospital and what their treatment plan is. Other allied health professionals within the community — like the physiotherapist or the home care nurse — may also need to access the treatment plan and other relevant clinical information.

## SOCIAL CARE BENEFITS

Governments' desires to cut acute care costs while improving healthcare outcomes also cuts across social care. There is pressure on governments to take more responsibility for social problems that impact acute healthcare costs like child abuse, drug abuse and alcohol abuse. As a result, there is more attention being paid to affected individuals while they are still in the community.

In Australia we are seeing IT investments in Community Health agencies through the Victorian HealthSMART program, for example. Most recently, the Victorian Department of Justice signed contracts for an innovative program to supply the InterSystems TrakCare healthcare information system to support both psychiatric and financial counselling to problem gamblers, with further new initiatives expected.

While the InterSystems TrakCare healthcare information system was originally developed in Australia for acute care settings, we are seeing a lot of interest in implementing TrakCare in community settings, including clinical settings like primary care clinics. We recently won a contract in Chile for

primary care clinics across the country as one of two authorised government healthcare solutions providers.

These sorts of solutions need to have a small technology footprint and they need to be easily installed with low ongoing maintenance costs. They need to be easy to use and support a mobile workforce. Last, but not least, they need to be easily connected with existing sources of patient information (systems, databases), many of which are owned by larger acute care organisations.

## INTEGRATING PRIMARY AND ACUTE CARE

With all of these community care solutions there is a requirement to integrate with multiple existing systems in multiple sites. A common approach is to use a product like InterSystems HealthShare — a platform that enables the fast creation of an Electronic Health Record for regional or national health information exchanges — to leverage existing IT investments and achieve quick results. This approach allows you to connect multiple systems across multiple sites to provide a single patient view of clinical information in different care settings. The view can be filtered depending on the setting, so a community nurse would see one view and a doctor would see another.

## CONNECTING AUSTRALIA

Australia is in a good position to facilitate connected health strategies. We are better off than many countries because of high IT penetration rates at the primary care level. Around 70 per cent of general practices use systems like Medical Director for practice management and patient administration. Many GPs also use IT systems for recording clinical information, particularly prescribing, so in many cases there is a record of medications. They are also used for lab results and medical history, particularly allergies.

The HealthShare approach is proven in scenarios which are similar to Australia's, such as Sweden where the platform is used to connect hospitals throughout the country. This usually involves deploying appropriate connector software across hospitals to support three or four different vendors' acute care systems and connectors for common healthcare systems in general practices.

Using a Web-based platform means it is easy to make

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information available from those different clinical settings to provide a single patient view. What you end up with is a virtual repository that doctors, nurses and community healthcare professionals can all access with appropriate permission. Because data still resides with the provider who captured it, this approach simplifies the management of privacy/security issues that often arise.

## **PATIENT ACCESS TO HEALTH RECORDS**

Part of all these projects, and something that seems to be on everybody's lips in government at the moment, is patient access to their records. While it is not a key driver, there is increasing awareness that patient access has to be part of solutions if they are to be accepted by the community.

In Sweden, for example, there is a timeframe for citizens to have access to their health records. Although they won't be able to change their records, they will be able to view them and monitor who else has looked at them.

The model is similar to the way that banks currently make records available to their customers. The bank owns the records and make sure that they are backed up. As the owner of an account you have access to your records. That gives you the operational benefit and comfort that you can control it to some degree – by being able to correct any errors, for example.

The comfort and transparency this gives citizens is not just good for acceptance of connected healthcare systems, it can also add to their usefulness. It would also be possible, for patients who can, to add notes into their record as well. People capable of measuring their own blood pressure and blood sugar levels, for example, could record them in a separate section within the clinical record. This could be appropriately assessed by healthcare workers as supplementary information.

## **EXPANDING COMMUNITY HEALTHCARE CAPABILITIES**

While many healthcare information systems were originally developed for acute settings, connected healthcare systems are driving new functionality specific to community health. For instance, we recently signed a research contract with the European Union to work with a number of other companies to integrate information from home monitoring devices into the Electronic Health Record.

One example is a tablet machine containing a patient's medications and connected via a home telephone line. When patients are due to take medications, an alarm sounds, the machine opens and it registers and records that the medication has been taken. Our systems will monitor the information feed, and if patients don't take the right medication, then a nurse can be alerted to give the patient a call. Blood pressure, respiration and temperature checks are also part of this research program.

I believe we will see more and more initiatives that rely on information technology in the community as awareness of the solutions increases and they develop in functionality.

But the main reason we will see an increase in activity in this area is value for money. By leveraging existing IT investments in acute and primary care, community healthcare systems can make a big difference to healthcare costs and outcomes with relatively little new IT investment. And this is a value proposition that governments around the world simply can't afford to ignore.