Information Management

Active analytics for clinical governance

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What do your executive dashboards look like? Do they provide insights for clinical and corporate governance?

What actions can your information systems trigger in relation to key metrics? And how do they support connected care initiatives, such as personally controlled electronic health records (PCEHRs) and the governance issues they create?

Correct me if I'm wrong, but that is not how most board members and senior executives of healthcare organisations currently receive and act on information. And that, I submit, is something that has to change.

IT systems already support a wide range of administrative and clinical tasks. Administrative systems streamline many activities and support fiscal governance, while clinical systems offer advanced functionality and support quality of care objectives. But they generally have limited support for clinical governance, which requires real-time visibility of operations across the organisation.

The problem is that existing systems are not good at talking to one another. They have also created countless discrete islands of information.

Despite the trend to try to consolidate or integrate IT systems, few organisations can access and analyse all of their data in one place, in real time. This makes it almost impossible to create executive dashboards like those now commonly used in other industries, such as financial services.

Clinical governance, in particular, requires ongoing analysis of current information across the organisation for early risk identification, triggers for timely intervention, and real-time tracking of key performance indicators.

Dashboards, for example, can monitor time to treatment against government-mandated guidelines, and analysis of current data can be used to pinpoint and resolve bottlenecks.

Hospital readmission rates – which averaged 20 per cent in a recent US survey – can be monitored and analytics used to drill down into any data spikes to identify possible causes and take appropriate and timely action.

Many healthcare providers are now moving beyond capturing and sharing data, into the breakthrough realm of real-time analysis and deep understanding that drives actions to achieve better financial and clinical outcomes.

Some of our forward-thinking clients, like the Royal District Nursing Service and Mater Health Services in Queensland, have deployed a strategic healthcare informatics platform that integrates existing systems around a unified data set with the tools to both analyse data and act on it in real time.

This also gives them the agility to adapt to changing requirements, something Mater Health Services has demonstrated as a lead site for PCEHRs.

Others have standardised on an enterprise-wide healthcare information system that integrates with existing systems to create a unified data set for real-time analysis.

For example, medication management having both a single information repository and shared program logic allows doctors, pharmacists and nurses to work more collaboratively. This reduces medication errors, overheads for data entry, unnecessary communications and stock wastage.

In addition to supporting good governance, analysis, understanding and data-driven action provide measurable benefits to demonstrate a return on investment (ROI) on new technology.

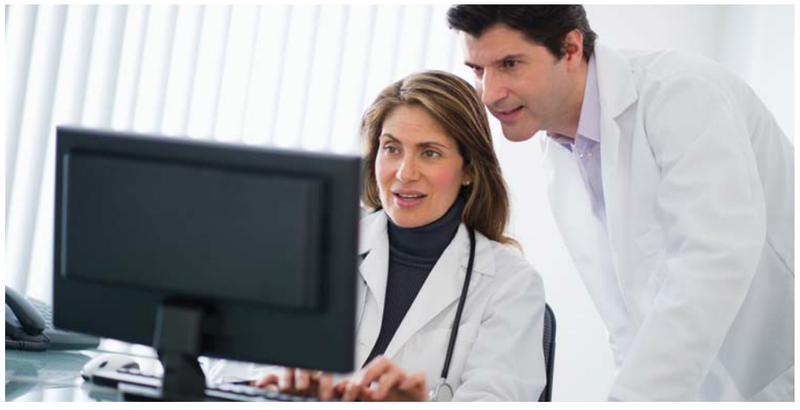
Dr. Karanvir Singh discovered this as Head of Medical Informatics for Sir Ganga Ram Hospital in India: "Essentially, analytics is what provides the ROI on healthcare information system investment.

"Our first tangible ROI was when we analysed the various patient treatment packages offered by the hospital.

"Another ROI was identifying workflow bottlenecks and streamlining processes as a result. All this was possible because decision-makers could get data within minutes or hours, which used to take weeks or months to deliver."

Is that the sort of valuable information your board and executives would like to be able to see and act on?

InterSystems is a healthcare informatics specialist provider. For further information visit **www.intersystems.com**



Planning and Health

Designing communities around better health

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During the 20th century, unbelievable advances were made in medical science, enabling our society to dramatically reduce – and in many cases eradicate – diseases that had plagued humankind for centuries, dramatically increasing life expectancy around the world.

There will be similar changes in the 21st century, with increased life spans and consumption-led lifestyles combining to bring new challenges and a major shift in the health profile.

We can diagnose many causes of sickness but what are the main causes of health? How do we maintain our health, our independence and quality of life into old age? How do we reduce the burden of cost on our health care system and aged care globally, through the prevention of chronic disease?

It is clear that medical science alone will not provide solutions to these huge questions – there needs to be collaboration across all disciplines. Scientific research is only part of the process of preventing the onset of chronic disease.

How we plan our built environment and the way we design our communities provides a context for civil society, and has a huge influence on our lifestyles and health. We need more endeavours in the planning of our physical environment to reduce its direct impacts on people's health and wellbeing, and to facilitate how we lead healthier lifestyles.

Planning cities and towns around walking, cycling, work/home relationships, commuting habits and recreation needs must be at the forefront of preventative health measures. Healthcare will not present itself as a single silo, but will be intricately linked into the way we live and go about our business, recreation and travel.

Sixty years ago, 75 per cent of the population was within walking distance of a local grocery store. Today this figure is under 15 per cent. This simple example illustrates the relationship between city design and health issues.

Demographic shifts, population growth and increased affluence are forecast to accelerate future demand for new medical centres, hospitals and health precincts, which are significant generators of transport activity and are critical anchors for future mixed-use centres.

> "There needs to be a new mindset around how land use planning deals with health issues, to weave them into the overall fabric of our town centres, shopping strips and malls."

We need to consider the operational focus of health sector planning – which traditionally resulted in stand-alone facilities and precincts with limited capture of cross-sectional corroboration economies and transport infrastructure.

Land use planning must facilitate a new approach. There needs to be a new mindset around how land use planning deals with health issues, to weave them into the overall fabric of our town centres, shopping strips and malls.

The overly restrictive, single-purpose designation for hospitals and healthcare facilities is redundant and does not take into account the demands of the new health world. In the future, large single-purpose hospitals will focus on the acute care role, rather than trying to deal with every aspect of healthcare. Other needs will be delivered through mixed-use centres located close to transport and centres. Our planning system needs to make this happen.

The main street community health model will be complemented by opportunities provided through technology and communication advances. Special advice and care will be available from centres to patients a thousand kilometres away, or in the next suburb. Care will be brought to the patient, rather than the patient visiting single-purpose care facilities.

In Australia, the technology revolution offers new care delivery models and opportunities for significant savings and benefits to populations that are often dispersed across broad geographic areas.

Australia is at the forefront of an opportunity to demonstrate leadership in the application of scientific research that will build a future society that is healthy, harmonious and economically and culturally progressive.

We are considered one of the world's healthiest nations but we are spending an increasing percentage of our gross domestic product on hospitalisation and acute care, with diminishing returns on the overall health of our population.

The challenge for planners in Australia is to help new ideas and initiatives materialise, instead of remaining preoccupied with a regulatory model for providing healthcare products that are becoming redundant to the needs of our community, and are creating cost pressures that diminish our ability to find innovative solutions.

Brian Haratsis is a best-selling author and leading economic and strategic advisor in the property sector. His new book *Beyond the Fringe* is due for release next month. Brian is key note speaker at the ACHG conference being held on May 16-17.
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