6 MAJOR TRENDS SHAPING THE DESIGN AND DELIVERY OF HEALTHCARE FACILITIES IN AUSTRALIA

CREATING THE 21ST CENTURY INFRASTRUCTURE NEEDED TO DELIVER BEST VALUE
The looming impacts of an ageing and rapidly increasing population have been on the radar of the Australian healthcare sector for some time now.

The past couple of years have seen a big push to develop and build hospitals in Australia that are designed to ensure continuous improvement in patient care and delivery for years to come.

What’s more, the impact of an ageing population that is living longer, coupled with the fast paced nature of technological change, means that the case for reform has never been greater.

But how will these forces impact on the current new build and redevelopment health facility projects already underway across Australia? And, more importantly, what steps does the industry need to take to ensure Australia is equipped with the necessary healthcare facilities and services needed to meet future demands?

Earlier this year at Healthcare Facilities Design and Development at Australian Healthcare Week, three industry leaders—Andy Black, Chairman of Durrow (UK), Bruce Wolfe, Managing Director of Conrad Gargett and Arch Fotheringham, Director of Health Projects at Brookfield Multiplex—led a roundtable discussion exploring the strategies needed to create and deliver 21st century infrastructure to deliver best value in the future.

Ahead of Australian Healthcare Week 2016, this report outlines the results of their panel discussion, exploring six key elements that should be considered when designing, constructing and delivering health facilities for the future, in order to drive innovation and success in the years to come.

Whether it’s planning, expanding, building, maintaining or retrofitting a health facility, one thing remains certain: planning for the future is critical. This report aims to explore the key considerations to ensure we are able to respond effectively and efficiently to the health problems facing Australia in the 21st century.
Evidence based design: a driver for innovation or an unnecessary evil?

Andy Black

“As an industry over time we’ve become too obsessed with evidence based design. I do not understand how you can link evidence based design and innovation. If you’re doing something exciting, brilliant and for the first time in healthcare facility design, I do not think it is possible to show evidence to demonstrate how it has worked previously.”

Bruce Wolfe

“When evidence based design first emerged about 10 years ago, there was an early feel that it was a great tool to be able to justify design decisions to the client – for example, things like the importance of natural light, or good circulation. Design elements that were often discarded by people that were adjudicating the cost of a building, were suddenly taken into consideration due to evidence based design.

However, innovation cannot only be justified or linked to evidence based design. It is important to think outside of the box and try new things. It really is an area of risk, but in healthcare it is best taken with consent of all parties involved in the project team. Evidence based design still has a part to play for this reason – you cannot embark on taking a risk without a level of confidence of where you are going to end up.”

Arch Fortheringham

“Over the past 10 years there are two areas of evidence based design I have come across. The first is the concept of scientific analysis, which involves research and ultimately a report which is published and we call it ‘evidence based.’

However, it is actually observation from the people doing their daily jobs in the hospital and what they see happening that is good and bad, which constitutes as evidence.

The other angle is the model used in the United States. In America, the healthcare sector has ‘pebble projects’ which are about identifying an opportunity to improve health services delivery. They state what they are trying to correct, then they look to implement an innovative or corrective manner to fix it. The next step is to measure whether it succeeds or fails.

This is another form of identifying how to improve our services. It is just as important to report a failure as it is a success, because both give insight into the right steps to be taking.”

Will evidence design have a place in the future of healthcare design and delivery? Ross Dawson, Futurist, will be exploring this and more at Health Facilities Design and Development 2016. Click here to find out more
Good decision making = good outcomes

Andy Black

"Abandon your obsession with public procurement processes, which ultimately reduces the question to the marketplace to be: who can build me a hospital that is the cheapest and nastiest one on the planet? Public procurement leads to poor decision making."

Bruce Wolfe

"Good decision making is about having the right people in the room to make the right decisions. We waste a lot of time in our industry not having the correct people in the room at the critical times. It partly comes down to organisational capacity to manage the process of getting people’s time.

A lot of the people who have the right information, are actually very time poor. It is important to try and get those key people in those meetings for decisions to be made based on relevant information.

It is also critical to have a body of knowledge behind decision making. We often go into meetings and people bring their procedures with them. You have to have a fair width of experience in order to embark on a decision making process, because it does affect the future as well as the immediate project."

Arch Fortheringham

"It comes down to selecting the right people from their skills base. Most importantly, it comes down to giving them empowerment to make decisions, and then allowing them to communicate and discuss with their teams. This will allow them to come back to the table when decisions need to be made. Ultimately, indecision costs money, time and usually creates havoc within projects."
IN THE SPOTLIGHT:

The importance of communication in meeting the client vision

St Stephens Hospital, Hervey Bay

By Richard Royle, Executive Director, UnitingCare Health and Bruce Wolfe, Managing Director, Conrad GArdett

Project overview

Richard Royle

“Located across from the public hospital in Hervey Bay in Queensland, St Stephen's Private Hospital is a new build on a greenfield site consisting of 96 in-patient beds and five operating theatres.

It’s the first site in the country where an EMR runs through an entire hospital, and also integrates a number of other components of the hospital’s business as part of the IT platform.

A large proportion of funding for the project has been from the federal government, with $21 million alone specifically for the eHealth, along with $15.5 million from UCH and our main software vendor, Cerner.

As a national first, it is hoped this pilot will result in further digitisation of UnitingCare Health’s other hospital assets, as well as other hospitals around Australia.”

Meeting the client brief

Bruce Wolfe

“Ensuring the design intent and vision of UnitingCare Health were met was all about communication and quality of trust. From the early stages in the project, we ensured we were all on the same page and talking the same language. This enabled people to have confidence in us as architects and to trust us to get on with it with it and know what we are doing.

Evidence based design also gave weight and objective value to the design. We analysed evidence based design outcomes so that we can include things in the design that often do not end up in the brief.

For example, waiting areas and foyers often don’t come with a detailed brief, but they have a role in reducing stress for patients. We put a lot of weight on those sorts of qualitative things that may not get incorporated into the initial design brief.

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Getting the right people involved in the project

Richard Royle

"When you consider international experience in implementing these sorts of systems, it’s apparent you need to bring staff and doctors along with you on the journey, rather than simply implement a fully integrated digital system and expect them to work with it.

We also had lots of programmed user-group meetings – there were multiple user groups that met many times throughout the project life cycle. We saw that it was essential that everyone involved was heard. But at the same time, we also ensured that information was evaluated in terms of design and planning, before we took it back to UnitingCare Health to consider.

We had eight ‘work redesign teams’ working for two years which comprised about 80 of our staff and 30 doctors who worked through the American-based software, Australianised it and adapted it to our requirements.

As a result, doctors and nurses now working in the hospital have taken ownership of the software because they were the ones who set up the framework for the new technology in the first place. These redesign teams were fundamental to getting the hospital set up and running.

We also employed Australia’s first Chief Medical Information Officer (CMIO) who is the go between the IT people and the doctors to ensure everyone is speaking the same language.

We’ve also had to train and teach people how to work in a non-paper environment, which is very foreign in the healthcare sector in this country. We’re finding a lot of people are really interested and want to come and work at this hospital, because this is the future of healthcare in Australia.”

Richard Royle and Dr Monica Trujillo, Chief Medical Information Officer, UnitingCare Health & Regional Director of Medical Services, The Sunshine Coast Private Hospital & St Stephen’s Hospital, will be further exploring the delivery of eHealth technologies and advanced models of patient care at St Stephen’s Hervey Bay at Healthcare Efficiency Through Technology 2016.

For more information click here
The importance of stakeholder engagement should never be underestimated

Andy Black

“To put the importance of stakeholder engagement into perspective, I will refer to the following antidote: when I was a Chief Executive of a London Hospital, I visited a colleague in another hospital who was facing a very awkward decision of moving their hospital from the city centre to another location. There was quite a lot of difficulty internally deciding where this location should be – North, South, East or West?

The team had a very long and important internal discussion process and reached a majority decision that the hospital was to be relocated in the North. The team then had to go to the Minister of Health to explain this decision. The Chief Executive and his team went and presented their argument to the minister for 20 minutes as to why the hospital should be in the North. They then invited those who opposed the decision, to present their counter argument for the remaining 20 minutes to the Minister as to why they opposed the board’s decision. When explaining the process this executive said to me: ‘I need to live with these people, and I need them to understand and feel they had a fair chance and they were not railroaded.’ I believe this is one of the contributing factors – the ability to accept descent and deal with it – that led to that decision being accepted almost universally by the community.

The point I am making, is take a lot of time to have an intelligent discussion about change. Do not run a sales pitch trying to persuade people and sell an idea you have already decided on – which some people may not like. They can smell it a mile off.”

Bruce Wolfe

“There are a lot of different stakeholders involved when we talk about ‘stakeholder engagement.’ There are people that are remote to the project that might have a finger in the pie, there are clinicians that constitute user groups and a number of other groups involved.

When it comes to enhancing stakeholder engagement, there should be a big focus on user groups. The language used in communicating with these user groups is very important – the more real and universally acceptable we can make the language of communication, the better engagement we are going to have.

In healthcare, a lot of people have day jobs and designing and building a new hospital or refurbishing an older hospital may not be their full time focus. As a result, a lot of the time people involved in project teams are not available for full time consultation. It is therefore important to treasure the time project teams have in engaging with each other during the life cycle of a project, as well as with user groups.”

Arch Fortheringham

“Stakeholder engagement starts with thinking about the project, thinking about what needs to be achieved and then listing all the parties that will need to be involved. The next step is to look at those parties – it may be the local community, the nursing staff, the doctors, the architects, the health district – and looking at what they need or want from the project.

For example, some stakeholders may just want to know what the project is going to achieve and how it’s going to happen. Others might want to have decision making power. Others may want to be simply informed so they are empowered to communicate with their teams or staff on what is happening. If you look at the community, often they want to feel they’re engaged. They need the opportunity to walk through the building during its development or in some way be consoled or informed about what is going on each step of the way.

You need to appreciate and understand what it is each of your stakeholders are seeking from you in terms of engagement.”
IN THE SPOTLIGHT:

Developing strong stakeholder relationships at St John of God Hospital Berwick

Lisa Norman, CEO, St John of God Hospital Berwick

Project overview

“The hospital in Berwick has been in place for 75 years. Our vision was to ensure we could build a facility that meets the current needs of our community, which is currently made up of 380,000 people. To cater for our growing population, we needed to at least double the size of our hospital.

Our vision was to create a 300 bed facility to meet the needs of the community, as well as roll-out new services like intensive care and cardiac services. There was also previously a lack of oncology or cancer services in the area, so we also aimed to introduce rehabilitation as a new service. In summary, the project enables us to continue all of our current services, but open up new services on a grander scale.”

Linking elements of design to patient outcomes

“When it comes to hospital design and build, teams often talk about putting patients in an environment that makes them feel comfortable and enables them to heal. We aim to provide patients a space where they feel comfortable, but also in a space that has adequate amount of privacy and natural daylight.

Research shows that if people can look out on a view that is therapeutic, it enables them to feel more positive about their health status and enables them to heal quicker. As a result, we have ensured we have a lot of natural daylight in every patient treatment area so our patients have a great outlook, view and feel more optimistic about healing.”

Linking design to staff engagement

“The staff are one of the major stakeholders involved in the design and build of a facility, as they are the ones who are going to be working in the new spaces and with the new technologies. People do not want to feel like they are working in a dungeon.

We have a wonderful opportunity with the design of our building to bring a lot of daylight for staff, as well as patients. When you’re a surgeon or a nurse working in a very defined area, the ability to put your neck up and look outside and see a nice view makes a world of difference.

We have certainly incorporated therapeutic elements into our design to ensure our doctors and care givers feel comfortable. Happy caregivers will lead to happy patients, so they will deliver great care – that’s our thinking and vision.”

The importance of stakeholder relationships in delivering the project vision

“One of our most important stakeholders is our community, and during the project so far we have run a number of community forums. We’re also engaging with aged care facilities, lifestyle villages and retirement villages and updating them on what we are doing so they remain engaged.

We have found that during these engagement forums, the community actually comes up with fantastic suggestions. For example – what are we doing about car parking? What are we doing in terms of the arrival and the foyer? The community raises questions that sometimes as healthcare professionals we don’t think about. So it is really important to work very closely with the community.

Our other main stakeholders are our staff, our doctors and businesses within the community which we engage with on how we can share and partner for products. Having them involved in the construction site is critical, as well as dealing with education facilities to ensure they are teaching and training the types of people we can employ in our hospital. This helps to build a very strong community that will deliver great healthcare.”

Interested in learning more about the strategies needed to effectively manage and engage stakeholders throughout a project lifecycle? Deborah Latta Project Director, The New Northern Beaches Hospital will be exploring this and more at Health Facilities Design and Development 2016. Click here to find out more

www.austhealthweek.com.au
Identifying the best funding and procurement model in austere times

Bruce Wolfe

“Our organisation has recently been involved in the Sunshine Coast University Hospital. We are on the government side of that project and we did the Masterplan, the reference project and then our role became almost like an advisor to the State.

During that time we saw three bidding teams spend upward of 20 million dollars a pop on bidding for the project. That is 40 million dollars beyond what would normally be expected. The issue is, that money will have to be in some way recouped by the industry because with other parties involved, these things are not going to be done for free.

On a personal note, PPPs are being bank-robbed by finance companies who want to see a 12-14 per cent on their return and governments can really only afford to borrow the money at four or five percent. This is the big challenge of PPPs – there is a difference between who is making the money and who is providing the services.

But the benefits of PPPs are that they bring a lot of innovation to projects which make up for the detriments. But in austere times is important to look for new ways of doing things, optimising the occupation of the buildings that already existing and being innovative in the way you use the space you already have.”

Arch Fotheringham

“We are in an industry of providing health services and therefore the dollars we spend should be targeted to how long we can make those dollars provide health services in an effective way – and the infrastructure then compliments that.

Around different parts of Australia there are various examples of procurement and funding models. There are the straight forward funded infrastructure support from the local health authorises. Or there are the operator led delivery of services at a discount to the public sector compatriot. We’re also now starting to see models along the lines of design, build and maintain.

At this stage I think the ‘maintaining’ part of that model is a challenge for the public sector, as they have traditionally been there to provide the health services, not necessarily the infrastructure. In every case project teams need to question the best value for money they can give the community.”

IN THE SPOTLIGHT:

Keeping up with changing technology procurement

Arch Fotheringham, Director of Health Projects, Brookfield Multiplex

“...to buy or procure medical equipment or theatre equipment –
continue next page...
Building flexibility into infrastructure

Bruce Wolfe

“Flexibility is interesting and it is something that generally costs more money because you’re allowing for change. But while it might not be the cheapest solution initially, it is critically important if we are going to retain that asset or facility over a period of time. Time and time again we find that the people with the money for capital costs aren’t the same people responsible for the maintenance costs. Bringing those two parties together to discuss the whole of life costs is essential to building flexibility.”

Arch Fortheringham

“Within our business we have a design arm as well as the construction arm and we often compare notes with theca other on the topic of flexibility. The flexibility of our designs are solely dependent on the model of care that is being delivered. You can design for flexibility to a limit, but after that you will be spending a lot of money. To quote a colleague of mine ‘it is sought to be the leading edge but not the bleeding edge of what we do.’ If we are going to build flexibility into our design, it’s with consideration but not at excessive costs.”

Learn more about the opportunities and challenges of healthcare procurement and funding at Health Facilities Design and Development 2016 where Allyson Pollock, Professor of Public Health Research and Policy, Queen Mary University of London will be further exploring the hidden cost of public-private partnerships in healthcare infrastructure projects. Click here to find out more.

Learn how The Prince of Wales Hospital Randwick is investing in new technologies to create a flexible facility for the future at Health Facility Design and Development 2016. Click here to learn more.
Preventing for an ageing population and the transition into palliative care

**Bruce Wolfe**

“There are some big moral questions that are going to be asked of our generation when it comes to healthcare and one of them is about the amount of money spent in the last two weeks of life trying to keep people alive. Two thirds of the population state they would not like to die in an acute hospital, but in reality, two thirds of the population do die in there.

As we all get older, the moral question we are going to be faced with, is how much value we place in that last bit of time that costs so much to maintain. Whether it’s on the operating theatre for someone who has a two per cent chance of survival or whether it’s extending someone’s life by two weeks’ who is 98 years old.

We are grappling with those decisions and there are going to be a lot more decisions we have to make in the future, not only if you have chronic bronchitis, because there are pathways from certain disease categories into palliative care which are blocked for other people. We have half a million people living in nursing homes who are facing rather poorly managed deaths and we spend a great deal of money on those poorly managed deaths, often using the hospital IT and the ED departments, which is not very nice for the person dying or their relatives.

In a nutshell, I think we have an important issue to talk about here. Bearing in mind when the BMJ did a survey of British GPs about 18 months ago, about 35 per cent of British practitioners said they were uncomfortable discussing the issue of death with their patients. So that is an issue in itself.”

**Andy Black**

“The issue of an ageing population is an important issue for everyone in the healthcare. In the UK there is a huge disconnect between where people want to die and where they actually die. Two thirds of the population state they would not like to die in an acute hospital, but in reality, two thirds of the population do die in there.

Dying at home is a preference for many people, but it is still quite difficult to stage and it also quite stressful for the other family members involved. Palliative care is another interesting concept. It was a term developed in Sheffield after the war for the management of hospital patients who were acknowledged as untreatable.

But in the UK, it’s developed to be a situation where you can actually have a better quality of death if you have cancer than about palliative care, but how we treat a whole lot of other ailments that may seem to be less than their biological or human in their analysis.

For example, I remember someone said to me ten years ago, when you can get 64 gigabytes of memory on the head of a pin you’re actually in the area of biological memory. I have a memory chip that has 60 gigabytes on something as big as your fingernail. Whether or not we are going to start to use artificial bits and pieces to supplement our own end is another moral question we are going to be faced with.”
“The statistical information about Australia’s ageing population reveals that an avalanche of ageing people is about to start falling on top of us now. From now on and in the next years it is going to be major amount of people.

When it comes to palliative care, I think it is a challenge for us all. We know exactly what the future holds for us, so it is up to us to look at how we can improve the delivery of services for the ageing population.

There are some moves already within the industry for better designed facilities where you have tower buildings above health facilities. This means you’re not relocating people away from family, friends or loved ones and they are only a short commute via an elevator or even just across a passage to get the health services they need.

This is all part of where the future is heading and it has to be done in a way we can afford. Because if half the population is going to be above 60 and the other half is under, that is a lot of money that is being poured into looking after the elderly population and I don’t think we can sustain that.”

Interested in learning more about how the Australian healthcare industry is preparing for the challenges associated with a rapidly ageing population? Australian Healthcare Week 2016 will feature a number of case studies showcasing how health facilities and healthcare professionals are planning for the future, as well as a specific focus day on the topic Healthcare System for an Ageing Society.

Click here to find out more.