



# **LESSONS LEARNED FROM THREE OF AUSTRALIA'S BIGGEST HOSPITAL PROJECTS**

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**FIONA STANLEY HOSPITAL, THE NEW ROYAL ADELAIDE  
HOSPITAL & GOLD COAST UNIVERSITY HOSPITAL**



Project delays, cost blowouts, poor stakeholder engagement and communication breakdowns are but a few of the problems faced in delivering any large-scale infrastructure project. With careful planning, clear communication, strategic stakeholder engagement initiatives though many of these pitfalls can be avoided.

With this in mind, ahead of the Health Facilities Design and Development Summit and Australian Healthcare Week 2020 we chat to **Hannah Seymour**, Medical Director at Fiona Stanley Hospital in Western Australia, **Paul Lambert**, Executive Director, Activation, New Royal Adelaide Project at the Central Adelaide Local Health Network in South Australia and **Toni Peggrem**, Executive Director of Strategy and Planning at Gold Coast Health.

At 2.3 billion, 2 billion and 1.76 billion respectively these projects exemplify the large-scale, complex healthcare infrastructure being constructed around the country. And with Gold Coast University Hospital operational since 2013, Fiona Stanley operational since 2014 and new Royal Adelaide since 2017, and the kind of wisdom that only comes with hindsight, those involved with the delivery of these projects are ready to share their journey and lessons learned to help aid other Australian projects.



# FIONA STANLEY HOSPITAL

PERTH  
W.A

2014

\$2  
**BILLION**

140,000  
SQ  
**METERS**

783  
**BEDS**

At a cost of \$2 billion, the Fiona Stanley Hospital in Western Australia is the biggest health infrastructure project undertaken in WA. Commencing in 2009, construction of the hospital was completed in 2014.

The project was a large and complex one; requiring the merging of two hospitals – the newly built Fiona Stanley, and neighbouring St John of God Murdoch Hospital. Following a staged opening the hospital faced a number of operational challenges, specifically around ICT and engagement which were well documented by a number of inquiries and in Australian media.

We chat to Hannah Seymour, Medical Director at Fiona Stanely to learn more about these challenges, the strategies harnessed to overcome them, as well as Hannah's lessons learned.



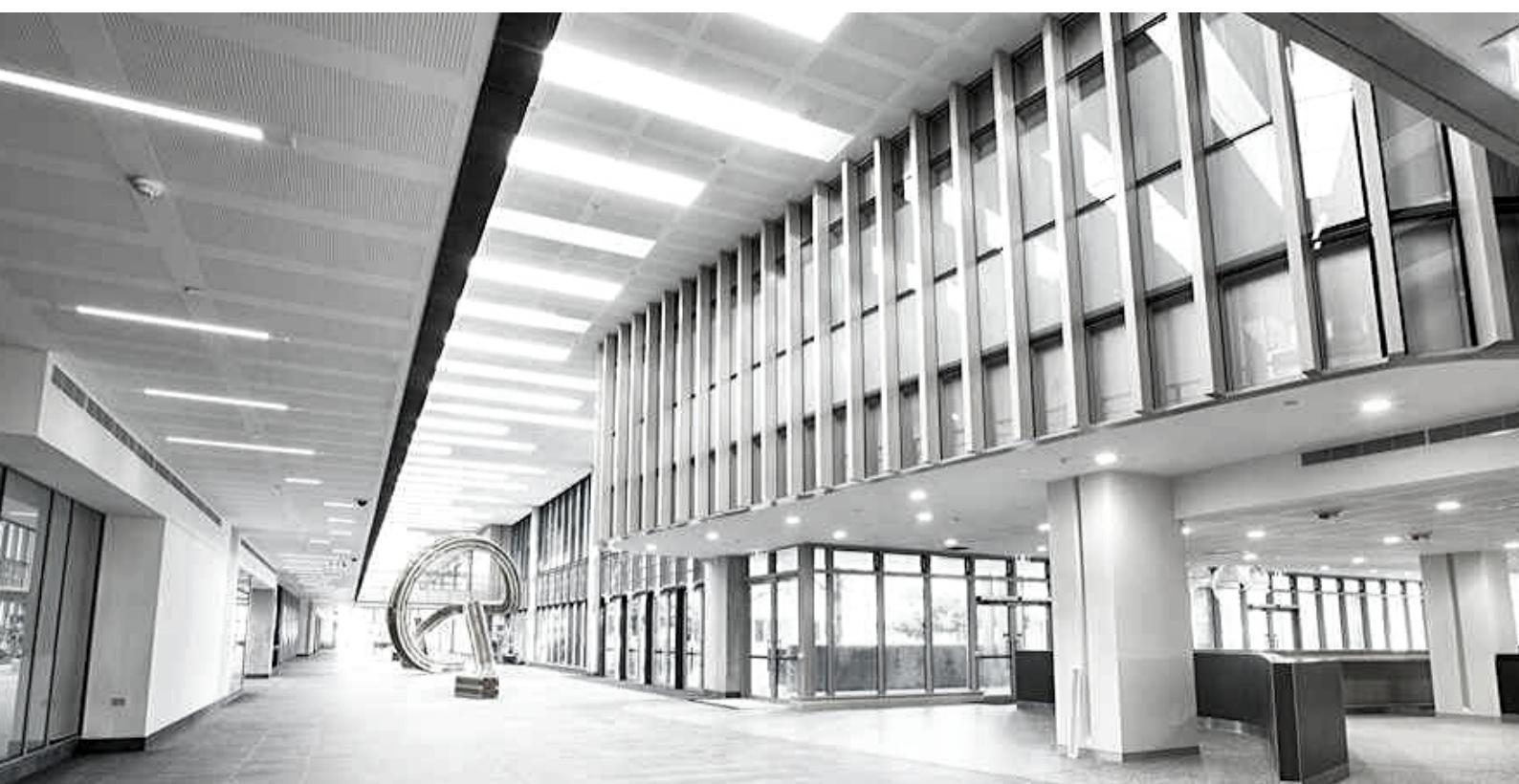
# WHAT CHALLENGES DID THE PROJECT TEAM ENCOUNTER THROUGHOUT THE DELIVERY OF FIONA STANLEY HOSPITAL?

The Fiona Stanley Hospital project was a very large, very complex project that required a four stage go-live process.

The project required us to merge two hospitals, which also required the transfer of patients, and of merging of two operating cultures and teams - so from a HR perspective is was very complex. We couldn't just put people into jobs in a new space; they needed to apply and be selected based on what they already did.

We also faced a number of well documented challenges from an ICT perspective with electronic patient records frequently crashing during the early months after opening due to insufficient IT application support.

We went with a big bang approach to IT implementation in that when you arrived, you had to use all of the new IT. While we of course had training sessions, the transition was obviously quite overwhelming for people, leading to pushback, particularly from people who were not used to using IT applications and typing forms.



# HOW DID YOU WORK TO OVERCOME THESE CHALLENGES?

"We had an informed and engaged senior leadership team which made working around issues much more seamless.

From an ICT perspective I believe the Big Bang approach was the right way to go; the processes

would have become very drawn out otherwise, but we needed greater support for staff in the early days and to establish an ongoing ICT governance model with clear priorities before going live was also needed.

From a support perspective we worked around this challenge by increasing clinician education. We designated resources, floorwalkers, within the organisation who learn how a new system works and then assist in providing support by transferring that knowledge to end users.

In the 12-24 months post opening we also worked to streamline ICT systems that were causing delays and problems for clinicians and patients alike. These included

- Reducing virtual desktop logon times
- Extending timeouts for widely used programs
- Vendor system improvements
- HSS system improvements
- Embedding clear governance structures
- Increasing downward, upward and lateral communication





# **WHAT ARE YOUR BIGGEST LESSONS LEARNED AND WHAT TIPS DO YOU HAVE FOR THOSE JUST COMMENCING THEIR PROJECT?**

In a project the scale and scope of this one there are always going to be lessons learned and things that could be done differently. If you don't think you would do things differently, then you probably are not thinking critically enough about what you've done!

The infrastructure itself it pretty good, we've had only minimal issues with small infrastructure elements – the doors for example, some open one way, others a different way. Some are automated, some manual which is disruptive to flow, but simple enough to work around.

Our biggest lessons learned come from a culture and engagement perspective. Feedback, both initial and continued is imperative to seamless transitions, as is communication that is top -down, bottom-up and lateral.

From the Big Bang approach to ICT we learned that your ICT team working directly with clinicians is key to improved support and training, as is having a comprehensive training model. Stemming from this we also learned that post-implementation support, in a real, live hospital environment for clinicians was key to their confidence and the delivery of exceptional care.

ADELAIDE  
S.A

2017

\$2.3  
BILLION

100,000  
SQ  
METERS

38,000  
SQ GREEN  
ROOM

800  
BEDS

# NEW ROYAL ADELAIDE HOSPITAL

The New Royal Adelaide Hospital (new RAH) is South Australia's flagship hospital, providing a comprehensive range of the most complex clinical care to an estimated 85,000 inpatients and 400,000 outpatients each year. In September 2017, following over 10 years of planning and preparation, the RAH moved 297 patients and over 6,000 staff down the road to its brand new \$2.3 billion home.

As with any major infrastructure project, the planning and settling in period has not been without its challenges. Here Paul Lambert, Executive Director, Activation, New Royal Adelaide Project at the Central Adelaide Local Health Network in South Australia, shares his insights to help inform other Australian Hospital projects.



# WHAT CHALLENGES DID THE PROJECT TEAM ENCOUNTER THROUGHOUT THE DELIVERY OF THE NRAH?

There were a number of key challenges that impacted the seamless delivery of the new RAH, including stakeholder engagement, continuity of staff, a 10 year project lifetime and the rollout of IT systems.

One of our biggest challenges was the project lifetime. From conception to completion the project ran for more than 10 years which meant we experienced high staff turnover - both project and clinical. This led to an overall loss of vision, with those starting the project not there to see it through to the end. With a turnover of leadership and clinical staff, maintaining continuity and consistency of engagement with all our stakeholders - both internal and external - also became a challenge.

From an IT perspective the new hospital features Advanced IT systems to improve patient safety and provide improved clinical and patient information as well as EMR. There was an assumption that EMR would have been completely rolled out at the old Royal Adelaide first and to ease the transition, but for a range of reasons, that didn't occur."

From an actual project delivery perspective, a Public Private Partnership (PPP) was selected as the preferred delivery method. This method, at times, required the cone of silence to descend especially as we went through selection for preferred providers and tenderers. From a stakeholder point of view, this was interpreted by some as 'secret business' when in fact it was just a normal part of a process for a large PPP like this. In retrospect, we could have communicated this better.



# HOW DID YOU WORK/ARE YOU WORKING TO OVERCOME THESE CHALLENGES?

had in the first year have been widely publicised, and that does happen in a single-paper town, but it also happens when you have a very large and expensive piece of health infrastructure; everybody wants to see it working as efficiently as possible from day one, and that's not always easy.

There's work which is ongoing for us around a number of areas, such as the way in which our logistics are supplied, delivered and distributed throughout the hospital, the ways in which our ICT integrates between our PPP provider and our own ICT systems.

The Royal Adelaide Hospital has been functional for just over one year now however we are still very much in the settling in period and trying to implement a more efficient operating model than we are currently in.

Some of the difficulties that we've





# **WHAT ARE YOUR BIGGEST LESSONS LEARNED AND WHAT TIPS DO YOU HAVE FOR THOSE JUST COMMENCING THEIR PROJECT?**

We learned some really important lessons from the new RAH project that we've taken onboard and are harnessing to inform the \$260 million redevelopment at our second district general hospital, The Queen Elizabeth Hospital (QEH), which commenced in late 2018.

Our lessons learned can be summarised as:

- Don't fall into the trap of thinking that new infrastructure will radically and fundamentally change the organisation – that comes through the actions of people, not through the action of builders.
- Ensure that you're picking the right model of delivery, the right contract model for the size of your project. Each of those contractual models bring with them advantages and disadvantages, both financial and in terms of managing other risks.
- People want to see reflected, in the physical form and in new models of care, their own work and their own attempts to incrementally improve and change the services that either they're receiving or that they're part of delivering. By engaging stakeholders early it makes them a part of the journey.

GOLD  
COAST,  
QLD

2013

750  
BEDS

\$1.76  
BILLION

170,000S  
QM

# GOLD COAST UNIVERSITY HOSPITAL

The \$1.76 billion, 750-bed tertiary Gold Coast University Hospital (GCUH) is part of a major expansion of health services for the Gold Coast community. The site covers an area of almost 20 hectares and replaces the existing Gold Coast Hospital, which was built in the 1970s. The hospital is co-located with Griffith University, forming a valuable health and knowledge precinct for the Gold Coast and attracting students to build a lasting workforce.

Opened in September 2013, GCUH aims to provide the South Eastern Queensland and Northern New South Wales region with a facility that espouses wellness - not just treatment – and has been doing just that for almost six years.

Like with any facility though there was, and there continue to be, post-transition challenges and opportunities that no amount of strategic planning and forward thinking could account for. Toni Peggrem, Executive Director of Strategy and Planning at Gold Coast Health discusses post-implementation design challenges at GCUH and shares top tips and lessons learned from the \$1.7 billion project.



"We've had a number of challenges emerge since transitioning into the new GCUH. While these challenges aren't insurmountable, they remain things that we hadn't envisaged at the planning stage, and things that we now need to invest in to update.

Like most hospitals GCUH is similarly on an EMR journey. With a facility less than six years old we assumed the new building wouldn't require any retrofit to accommodate the new medical records. So we thought we had plenty of power points, and we thought we had plenty of data points, and we thought we had sufficient background infrastructure including training rooms - we didn't. Then of course there is all the background infrastructure that goes with that additional capacity. Air conditioning and data racks and the background cabling.

We've also encountered a number of challenges from a spatial and design perspective too. The location of the intraoperative MRI in the depths of the theatre complex for example doesn't allow for flow inside theatre and for multiple uses of the equipment. The operational work arounds now required could have been managed to allow the flow through theatre and maximise the MRI use.

## WHAT CHALLENGES HAVE THE GCUH PROJECT TEAM ENCOUNTERED SINCE OPENING?



# HOW DID YOU WORK/ARE YOU WORKING TO OVERCOME THESE CHALLENGES?

challenges we're working on uplifting and optimising the hospital. To best accommodate EMR roll-out we've gone through and done a significant power and data uplift, as well as an uplift of the background infrastructure associated with that. We've had to work across all of the Gold Coast Health Service facilities over the last year, to have our old and new facilities up to the level where it could support EMR rollout. We thought we'd future-proofed, but we hadn't future-proofed sufficiently.

From a spatial perspective, and to overcome the MRI use challenge the team are now going back and adding elements that were initially value managed out. One of these elements is a \$6 million hybrid theatre will requires additional equipment as well as updates to engineering solutions to support the added load, altered airflow and accommodate control rooms etc inside an existing theatre complex."

"It's not to say that the facility isn't working. We're still delivering great care and supporting the communities we serve, it's just that it's not working as well as we'd like it to.

To overcome the technological limitations, as well as the spatial





# **WHAT ARE YOUR BIGGEST LESSONS LEARNED AND WHAT TIPS DO YOU HAVE FOR THOSE JUST COMMENCING THEIR PROJECT?**

"There were definitely some things we did really well at GCUH. Our stakeholder engagement was great and we've got a lot of clinical goodwill within this facility as staff prepared to move from the old Gold Coast Hospital.. That's probably the first lesson learned; that underlying way of approaching clinician engagement is really critical to get long term ownership of the facility.

From a facility design and development perspective there have also been a number of lessons learned. We've had a lot of feedback around how we use the facility, and some of the design decisions we've made. They've been around the use of single rooms, and the number of single rooms that we put in, and whether or not we've gained the benefits from infection control that we thought we would get, but also in terms of patients comfort. In hindsight I think we would make some different decisions, particularly around the single room space.

We're also finding that our emergency department functionality isn't quite right, and so we are doing lots of work to continually try and modify how we use that emergency department, and there are significant learnings in that space around how we're managing such a big ED moving forward."



## INTERESTED IN LEARNING MORE?

If you're interested in hearing more about how to overcome health infrastructure development challenges, and exploring in more detail best practices strategies and lessons learned from some of Australia's biggest health facility projects, then join us at the Health Facilities Design and Development Summit 2020.

The event, running as part of Australian Healthcare Week 2020 at the ICC in Sydney on the 25th – 26th March brings together over 100 local and international healthcare innovation and facility development experts from the likes of Adelaide BioMed City, Mercy Virtual Care Centre (USA), South Eastern Sydney LHD, Nepean Blue Mountains LHD, Central Adelaide Local Health Network, Health Infrastructure NSW, Bendigo Health and Canberra Health Services.

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To learn more about the event grab a copy of the **event guide** now

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