

THE AUSTRALIAN

HOSPITAL HEALTHCARE



BULLETIN SPRING 2015



Hospital Design
A World View on
Patient-Centred Care Design
P.79

Technology
Wearable Devices
in Healthcare
P.102

hospitalhealth.com.au

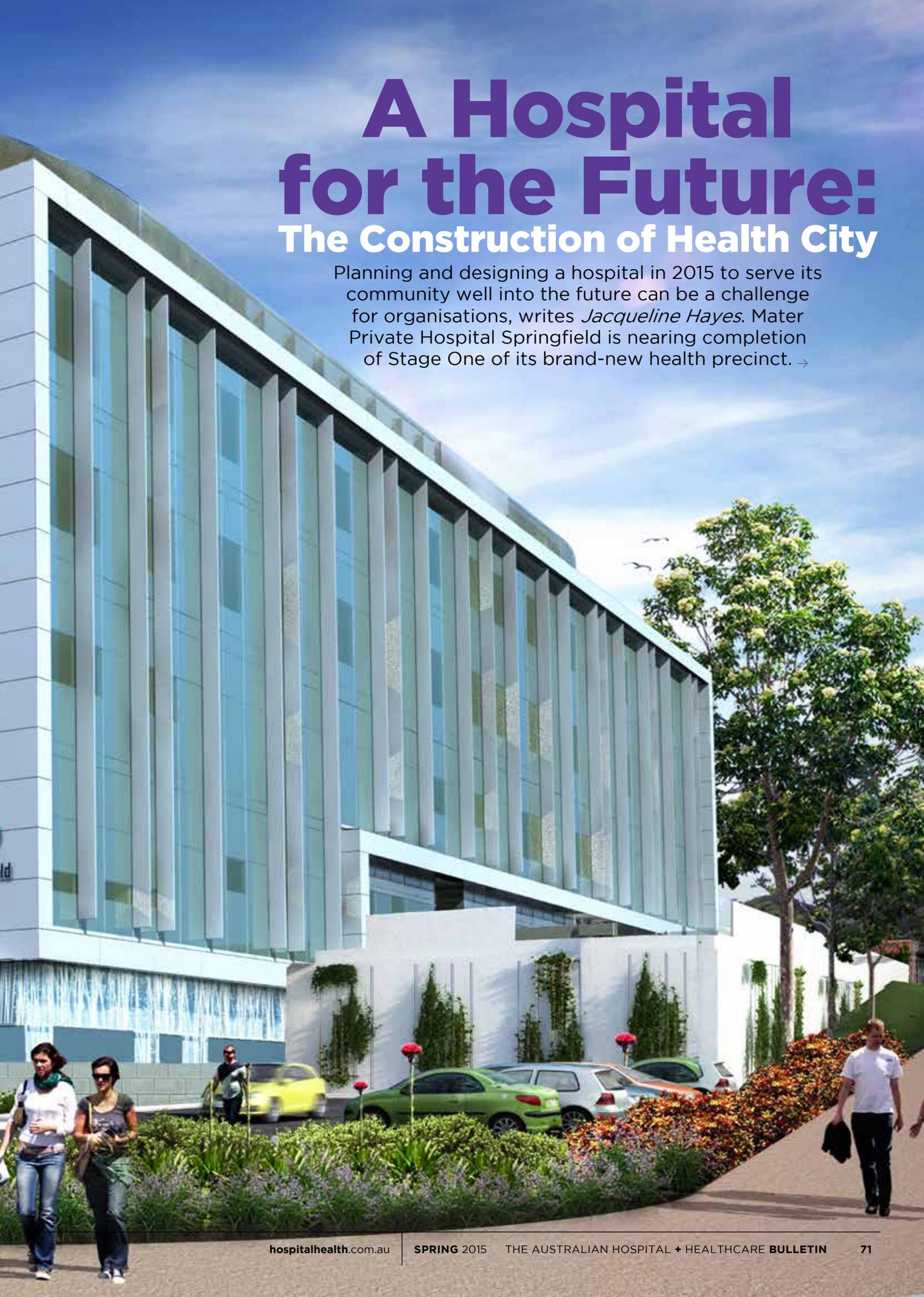
 [/hospitalhealth](https://www.facebook.com/hospitalhealth)

 [hospital_health](https://twitter.com/hospital_health)

AHBB ISSN 2204-3438 PRINT RRP \$11.95 ISSN 2204-3446 DIGITAL







A Hospital for the Future: The Construction of Health City

Planning and designing a hospital in 2015 to serve its community well into the future can be a challenge for organisations, writes *Jacqueline Hayes*. Mater Private Hospital Springfield is nearing completion of Stage One of its brand-new health precinct. →

→ Queensland's Mater Health Services is meeting the growing healthcare needs of the booming population of Springfield between Brisbane and Ipswich by building Mater Private Hospital Springfield (MPHS). The master plan for the hospital precinct within Health City Springfield Central, incorporates a number of expansion stages to be rolled out to meet the demands of the region.

Construction of Stage One, an 80-bed hospital commenced in April 2014 and is scheduled for completion by December this year.

Director Mater Private Hospital Springfield Fritha Mackay believes stage one is an exciting chapter in Springfield's history.

"Patients requiring treatment, especially cancer treatment, will be able to stay close to home instead of travelling to the city," Ms Mackay said.

"Illness requiring ongoing treatment can be immensely stressful for the patient and their loved ones as it disrupts daily routines. Something close to home will hopefully be one less thing to worry about.

"Our initial elective surgical and cancer services are laying a foundation for broader service areas to be incorporated in the future.

"We are committed to progressing Stage Two of the hospital to meet a predicted shortfall in patient beds for the region," she said.

Watpac is the principal contractor on the \$85 million project. Approximately 8.7 hectares of Health City has been allocated for hospital and healthcare

developments with pre-planning approval obtained for up to 1200 hospital beds.

The Mater Cancer Care Centre will be built with \$21.4 million dollars of Australian Government Funding. In partnership with Radiation Oncology Queensland, the Centre will include one linear accelerator (initially) and 15 medical oncology treatment bays to offer a supportive and positive environment for patients and loved ones.

Significant planning has been done to ensure greater patient comfort and the streamlining of check-in procedures.

The interior design was finalised as a result of a consumer engagement process. More than 100 people visited two prototype rooms replicating a patient ward and cancer care treatment pod. Useful feedback was provided on the layout, design and décor of the rooms.

Customised Services for Modern Lives

"Enhancing that care and welfare with modern techniques and technology is what we are working on," said Ms Mackay.

"Room service will be rolled out from opening at Springfield after its success at Mater Private Hospital Brisbane."

"The room service menu is comprehensive and offers patients delicious meal options that cater to every taste, and are clinically suitable to meet individual dietary requirements," she said.

Mater Private Hospital Brisbane is the first private hospital in Australia to offer hotel-like room service to patients. Meals are freshly prepared, ordered at the patient's convenience (between allocated times) and delivered directly to the patient's room within 45 minutes.

The innovative room service initiative has been recognised by the Private Hospitals Association of Queensland (PHAQ) for significantly lowering food wastage and improving patient outcomes.

Ms Mackay explains another first: family members will also be able to sleep in patient rooms.

"It's not just children and babies who need someone close by when you require



treatment," she said.

"Just having someone there can boost your confidence or provide that extra reassurance you might need."

Comfortable fold-away beds are in well-designed cupboards in all rooms.

Flexible visiting hours will also be in place when the hospital opens.

"Life doesn't happen within the strict 9-5 routine anymore," Ms Mackay said.

"No set visiting hours means families and friends will be able to have greater access to patients when it suits them," she said.

Also gone are the days when patients complain about the temperature in their rooms. Integrated Room Controls (IRC) mean patients can adjust not only their air conditioning, but blinds and lighting.

"Being a patient is a very vulnerable position to be in," Ms Mackay said.

"The main purpose of IRC is to enhance the inpatient experience and allow patients to co-manage their environment," she said. "Research shows that the more the patient feels in control, the more positive their health outcomes."

Integrated Room Controls (IRC) manage:

- General lighting within the room including the above-bed downlight, ensuite and reading lights, all with dimming abilities.
- Air conditioning temperature control warmer or cooler from a set point.
- Motorised window blinds with one block-out and one shade blind per room that are able to be operated independently of each other.

The system will be controlled by simple switch panels located at the entrance to the room and beside the bed. These panels will illuminate when a hand comes close and allow patients and staff to easily change the room conditions without having to turn on the lights.

"This is a truly innovative system which can also be controlled from patient's own smart devices like tablets and smartphones commonly known as bring your own

"We are committed to progressing Stage Two of the hospital to meet a predicted shortfall in patient beds for the region"

device (BYOD)," she said.

Innovative technology extends to nursing staff as well. The selected Nurse Call system extends beyond the traditional call bell system. This system will offer the capability to streamline workflows and automate business processes by routing the calls to the right clinical staff and in turn improving response times.

Nurses will also carry an automated nurse presence and real time location services (RTLS) tag. This tag will alert nursing staff when a patient activates the nurse call function and tells them which patient room has activated the request. When nursing staff wearing the RTLS badges enter the patient's room the system will automatically cancel the Nurse Call request. At the same time the corresponding corridor light will illuminate to indicate the nurse has responded and is present in the room.

This technology will leverage off and utilise the high destiny wireless network that will be in place at MPHS. The technology, when implemented, will open the way for further innovation both within Stage 1 and future stages.

The future health of the Springfield region is in good hands with continuous and innovative planning supporting a responsive patient care model. +



Stage one of Mater Private Hospital Springfield will provide:

- Four theatres, two inpatient wards, and medical imaging services.
- A Mater Cancer Care Centre including one linear accelerator and 15 medical oncology treatment bays in partnership with Radiation Oncology Queensland.
- Treatment for 4,800 local public patients each year.



PDT + STH Delivering Transformative Healthcare Design

“The vision for Mater Private Springfield Hospital is to create a benchmark healthcare facility that provides a nurturing, contemporary, non-institutional environment in which patient wellness is the primary focus”

The Mater Private Springfield Hospital is a major and transformative health project as part of the new 52 hectare health and wellness precinct Health City Springfield Central, a new medical and educational campus being developed by Springfield Land Corporation. The new Hospital will be the genesis for the future campus, establishing the architectural language for the future development.

Silver Thomas Hanley (STH) in a Joint Venture with PDT Brisbane (PDT+STH) are delivering the new \$85 million private hospital for Mater Health. PDT+STH completed full master plan services and initial design works for the new private hospital in 2013, developing the layout and functional relationships of the new facility.

The five level, 10,000 m² stage one project, currently in construction, will include 80-beds and provide a range of medical and surgical services to the growing Springfield community including four operating theatres, inpatient wards, a day surgery unit and medical imaging services. In addition, a new Cancer Centre will be operated by Radiation Oncology Queensland, providing 15 medical oncology treatment bays and a linear accelerator, made possible by \$21.4 million of funding from the Australian Government.

The built form is a simple juxtaposition of massing and building elements. The perceived simplicity of the built form is due to adopting a traditional approach to massing, with the main building elevated on a podium, providing a calm and uniform base for the various architectural elements above.

The uncluttered nature of the building massing is expressed through the building elements and materials. A curved metal screen acts as a unifying component and creates a sculptural, noble element that reinforces the civic nature of the building. The translucent nature of the screen is suggestive of form, without appearing solid and overpowering the rest of the building. At the same time, it provides an identifiable marker for the main approach to the hospital and the health precinct. Exterior materials have been specified for their neutral tones to help express simplicity and unity.

The PDT+STH Interior Design for Mater Private Springfield Hospital is based on the concept of “patient centred care”, an approach that acknowledges the patient as an individual who has a unique experience with an illness.

The interior spaces will be comparable to a hotel-like environment, enlivened with colour and texture that interplay with a warm neutral base palette of tones reflective of the brick and stone of historic Mater Brisbane buildings and the sandstone formations of the national parks close to the new hospital. Strong geometric motifs from the historic buildings are juxtaposed with soft ripples and natural elements from the Springfield landscape.

Material selections reflect the colours of the external form and include warm timber (natural and timber look laminate), natural stone, warm whites and charcoal contrasted with deep sea blue and copper tones.

Mater Health and Springfield Land Corporation, through Australian contractor Watpac, commenced construction of the Mater Private Springfield Hospital in April 2014 with a construction completion date scheduled for the end of 2015.



» For more information on STH or PDT

STH www.sth.com.au PDT www.pdt.com.au

» For more information on Mater Private Springfield Hospital

www.mater.org.au