

HEALTH PROJECTS INTERNATIONAL



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Health Planning A to Z

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There is a lot more to Health Projects International than its Health Facility Briefing System (HFBS), but it is this tool that immediately captures the attention.

Written by John Boley

HFBS is a web based software system designed to help plan medical facilities that work, straight from the box, and it is gaining popularity not only in Australia but worldwide, getting recognition such as a 2011 Premier's Export Award and a gong at the 49th Australia Unlimited awards for its efforts at spreading the system through other countries.

But HPI is very much an Australian based company, says Robert Martin, Director of Service Planning, Health Planner and Project Director.

Robert is a highly skilled and experienced health service planner with a broad portfolio of achievements extending over twenty years. He has managed or directed a large number of complex and challenging health service and hospital planning projects. Robert is a key member of the HPI development team for the automated HFBS service planning module, and he told us more about what it can do. "HFBS is a significant part of what HPI does," he explains. "It is made up of more than 20 modules including service planning, schedules of accommodation, room data sheets, document management, human resource sched-





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uling, budgeting, recurrent cost modelling, and architectural design support tools.”

HPI is a specialist health planning and design company that focuses on development of health facilities and systems and is based at Milson’s Point in Sydney. “HPI started out as a team of specialist health facility architects in the early nineties,” says Robert, having early success with an impressive list of flagship private hospital projects as well as many public hospitals, “and we have extended our capabilities from health design into health planning,” both with HFBS and particularly the adoption of a systemised approach to health facility planning.

In terms of designing their functionality (as opposed to structural or aesthetic considerations), says Robert, hospitals and medical facilities in general rate as probably the most complex of all buildings. “It is very easy to get into trouble by misspecifying the various facility requirements unless you have a systemised tool to help,” he explains – which is why so many hospitals (especially older ones) are often like mazes or rabbit warrens, with poor traffic flows and departmental locations so it seems, almost at random.

For an efficient layout, first it is necessary to understand the functional needs of the healthcare facility with reference to the health needs of the community; the HFBS Service Planning Module is

a demand-based tool that helps the planner to rapidly assess demographic aspects and estimate current and future demand for health services translated into what Robert calls “Key Planning Units” or KPU’s – such as beds, operating theatres, emergency department cubicles, chemotherapy or renal dialysis chairs, radiotherapy bunkers – which form the basis for determining the scope and size of an asset to be developed.

It is also vital to see how those KPU’s are allocated into departments, functionally related and how they are allocated to optimise patient flow. “We also spend a lot of time considering ‘models of care’ and functional relationships. They are entered into a service statement, or a functional brief that gets handed to facility planners – we have this capability in-house – and they interpret the functional requirements and translate it into a Schedule of Accommodation and Operational Policies.”

This in turn becomes a set of detailed Room Data Sheets and Functional Relationship Diagrams, which is the basis for the architect to go ahead and design the building itself. He or she must ensure that IT, diagnostics and treatment technology fit into the building in a way that is efficient and uses minimum energy, and that the environment in which the patient is cared for is appealing and conducive to healing.

HPI can help in a number of additional ways. “We can direct the



“I have had trades tell me we are the best builder to work for.”

entire project and take it from inception through to commissioning,” says Robert. Often there is a lot of cherry-picking and a project will be shared among a number of contractors in the traditional manner, but “we offer a turnkey solution. If you want it done quickly and efficiently, without losing track of the objectives this is the way to go.”

Perhaps surprisingly, Robert says this approach is more likely to meet with a warm reception overseas than in Australia. There is some conservatism here and the health planning and design community is a close-knit one, especially as the people in it frequently cross from one side of it to the other, from buyer to seller or vice versa. “There are differing views on how to achieve best value and in the Australian context, where we have a relatively small population and a lot of fiscal constraints applied by government, there is fierce competition for projects.” This, Robert adds, is one reason why HPI is active overseas: “we need a much broader stage in order to flourish.”

It is the company’s view that, “the nature of healthcare delivery

into the future is going to be quite different and we believe traditional processes – health services being mainly delivered through the public purse – will change and as healthcare changes, the need to deliver health assets more efficiently and quickly will become greater. The private market will not necessarily tolerate the protracted time frames the public sector often goes through. We have been very successful, particularly in Sydney, with delivering private facilities.” Included in HPI’s planning exercises have been North Shore Private Hospital, Norwest Private Hospital, Macquarie University Hospital, and Campbelltown and Westmead private facilities.

Indeed, “The distinction between public and private service provision is going to blur into the future as the need for efficient structures becomes greater.” Robert points out that growth in demand for healthcare is at an unprecedented level, due to strong population growth but also to the changing nature of the demographics. Over-65s are 3.7 times more likely to need access to health care than younger people, leading to an exponential growth curve that will occur over the next twenty years. Government itself does not have the capacity to keep up. “Meanwhile, the unit price for everything including health facilities and services has been rising steadily. The combined effect is that we may well face a situation where in a decade, the whole of the economy cannot afford sustainable healthcare for all people. To



address a problem of this magnitude, we need to move away from the idea that 'health service' necessarily means a 'Hospital Building' and that building is always a one-off, expensive design and construction starting from fundamentals. In order to maintain affordability and even reduce costs, we need industrial techniques. That means innovation at an industrial scale and adoption by choice, customisation and sharing rather than re-invention and waste. The HFBS is the marketplace of ready-to-use modules that facilitates this industrial scale efficiency."

The private health sector must also step into the breach. "Investors, like governments, are very conservative, but as care becomes standardised, the private sector is able to deliver those standardised packages far more efficiently than the public sector can because it is in a much better position to control and manage costs."

"We strongly promote the concept of healthcare precincts as a future solution, where there is integration of public and private facilities together with streaming of care packages to ensure the efficient delivery of services." HPI actually has a number of prototype hospitals designed along these principles and believes it is the way forward. "We think changing demand and service delivery patterns provide an ideal opportunity to look at delivering healthcare differently from the way it has traditionally been done."

HPI's internationally based company is called TAHPI and has office bases in 10 countries from Australia to Africa including Malaysia, India, and UAE. HPI shares staff with TAHPI, giving it access to up to 250 direct and locally contracted staff. Making a comparison with the Australian model, Robert says overseas clients are often not so directly cost-driven. He cites a current capacity planning





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project for the Dubai Health Authority which, "while mindful of cost, is aware of the need for growth and wants intelligence that will provide it with the quantum of growth they are likely to experience. They are responding positively, as is Hong Kong, where we did four hospital master-plans last year."

The healthcare markets around the world are changing fast, Robert says, they are aware of both costs and the need for growth. "We in Australia tend to be a little more conservative and reliant on traditional processes," with some differences from state to state, admittedly, "and if you speak to clinicians, most would be saying the response to the growth in demand for beds is not being adequately addressed by government." Australia in fact has one of the lowest bed supply rates among OECD countries.

HPI would like to see a change in the rate of healthcare facility development. Robert believes the climate of opinion is moving in the right direction and that, in the foreseeable future, this melding mix of public and private services will continue to catch on, to the benefit of patients as well as investors. ■

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