

## Facility Planning Trendsetters

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# Facility planning trendsetters

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The problems surrounding funding, designing, building and operating healthcare facilities are multi factorial problems and so require multi factorial solutions says **Jane Carthey**.

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ATTENDING a recent seminar in Sydney where alternative UK healthcare facility procurement methods were discussed, I listened to the impassioned debate engaged by the audience of health planners, designers, contractors and managers and concluded that we truly are designing healthcare facilities in a time of turbulent change.

It confirmed my long held opinion that there really is no one simple solution to the issues and we can no more leave it to the architects, the financiers, the clinicians, the consumers, the politicians, the funders or one particular interest group to sort out on their own.

The problems surrounding funding, designing, building and operating healthcare facilities are multi factorial problems and so require multi factorial solutions.

That seminar and recent Centre for Health Assets Australasia (CHAA) research demonstrate the range of themes and issues surrounding the delivery of healthcare facilities generating debate around the world. However, local market pressures, geography and industry players all play a role in ensuring that often very different priorities arise wherever that debate occurs.

But what are the common themes and issues with which we are all grappling wherever we are in the developed world? No matter the priorities, the list must inevitably include:

- Achieving the best value possible for the health dollars we are spending; both in terms of service delivery and in building and operating health facilities.

- Looking toward the future to meet the needs of an ageing population with an increased chronic disease burden, plus the need to be able to respond quickly and appropriately to opportunistic and rapidly spreading 'new' diseases such as SARS, Avian flu, etc. On admission, our patients are increasingly older, sicker and more vulnerable.
- Coping with an ageing workforce, and limited capacity to attract skilled workers into key areas such as nursing and health service management, but also into the more 'commercial' areas of health building design/architecture, project management and procurement.
- The ever increasing availability and impact of technology on staff numbers and skills, facility design and ultimately on health service budgets.
- The increasing emphasis on environmental sustainability in an age of increasing energy costs, plus the need to respond to concerns regarding global warming, pollution and over consumption of natural resources by wealthy nations at the expense of the rest.
- The rise of consumerism and better availability of health information resulting in increasing demands being placed on the health system by those using it.
- More stringent building codes and growing regulatory requirements for patient safety and privacy.

The intent of those moving away from more traditional delivery methods towards 'managing contractor' contracts, PPP/PFI (private finance initiatives), etc, has been to increase the effectiveness of the funds

spent on initial construction and total life-cycle costs of a facility by using a 'market driven' approach. However, whichever procurement method is used, the inevitable tension continues to arise due to 'the volatile and unpredictable nature of service change, the emerging strategies and the more permanent inflexible nature of capital asset investments'. (EuHPN Study, 2004) 1

So at the same time, the other common response has been to focus on more appropriate and flexible facility design that can accommodate changing service needs and also meet increasing consumer expectations. Facility 'hot spots' are the nursing units (inpatient wards), emergency departments, surgery, imaging and ambulatory services. Key directions include:

- A trend toward more flexible inpatient room designs such as 'universal room' designs, or provision of 'acuity adaptable spaces'
- Larger clinical/patient rooms to accommodate anticipated future technology needs
- Ensuring adequate floor to floor heights to enable changed spatial use
- Locating 'soft' spaces such as administration areas near clinical/patient care spaces to allow for future expansion or changing use
- Improving overall amenity levels for patients and their families, e.g. by offering a greater proportion of single (private) rooms and more family support type spaces
- Decentralising nursing stations and care

- Increasing use of information technology, widespread use of automation with information available as close to the patient as possible and accessible from any point in the hospital
- Standardisation of designs to increase staff operational efficiency and patient safety.

The need to increase operational efficiencies through improved design is also receiving greater attention throughout the developed world, especially in terms of staffing ratios and energy use. Even now, benchmarks are being widely developed to assess current facility performance and to predict the future performance of the facilities being designed today. However these benchmarks tend to assume that current health service practices continue albeit with some incremental levels of improvement.

The real challenge lies in forecasting how healthcare delivery will change in the future including its focus and associated work practices. If this challenge is met, 'future proof' facility benchmarks could be agreed and used to assess the performance of healthcare facility projects already being developed.

The other side of this is that more effective cost-benefit analysis of the expenditure of health capital funds may then be possible - and this is likely to positively impact the

future health of our communities. Unfortunately, in spite of many good intentions and some progress achieved to date, we are not there yet in Australia or New Zealand. This seems also to be the case in both Europe and the US, although clearly more work has been done on this to date in both locations.

At present, we continue to struggle with the fact that many of the facility design features intended to achieve flexibility of use and 'future proofing' of facilities are perceived to be mutually incompatible with the operational efficiencies currently regarded as important. This is especially true in the area of staffing ratios. As has always been the case, those funding the delivery and operation of facilities will choose the highest priority for each situation, and this is unlikely to change in the foreseeable future. We must recognise that the priorities chosen may not always be those that others in the industry (such as architects) would choose, and this can and does generate much of the debate that I witnessed at the UK healthcare briefing seminar.

The old axiom that 'design is always the result of a series of compromises' and that the weighting of priorities affects the compromise(s) we choose, continues to hold true even as we try to bring more certainty and standardisation to the design

and delivery of healthcare buildings. We are fortunate that we can look to the US, Europe and the UK for guidance and that we can also trust our own experiences and abilities in choosing how we respond to similar issues and pressures. One of the key lessons to take away from the discussion of UK health care procurement issues is that no one particular type of solution can ever be the answer to every healthcare facility delivery problem. A multi factorial problem will always and inevitably require a multi factorial solution.

1 (Dowdeswell, B., Erksine, J., Heasman, M., Hospital Ward Configuration - Determinants Influencing Single Room Provision, Report for NHS Estates, England by the EU Health Property Network, November 2004.)

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