

Guiding quality design

Facility planning and design could become a whole lot easier thanks to a new set of guidelines released in Australia. **Jane Carthey** explains.



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AUSTRALASIAN HEALTH Facility Guidelines (HFG) to help ensure projects achieve consistent and acceptable building and design standards were recently launched by the Centre for Health Assets Australasia (CHAA).

CHAA, which is a University of NSW Research Centre within the Faculty of the Built Environment, sponsored by the Health Capital Asset Managers' Consortium (HCAMC) of Australia and New Zealand, released the guidelines late last year for a 12-month period of industry use and review.

The guidelines aim to assist design briefs to enable health facility projects to achieve consistent acceptable standards of

space provision, building services, equipping, fitout and furnishing. Design processes and user group interactions will become streamlined as clients and design teams shift their focus to the development of innovative solutions for project specific requirements rather than battling constantly over accepted design elements (rooms/spaces) that vary minimally from project to project.

NSW Health has been working with CHAA for some time to develop content for the NSW Health Facility Guidelines (NSW HFG), with the intention of contributing this content to the Australasian guidelines.

The NSW HFG originated from

guidelines created by consultant Health Projects International in a database format for the Victorian Department of Human Services for use in the state's private hospital system. The guidelines thus demonstrate a lengthy background of robust collaborative effort. The next release will continue to acknowledge the various sources from which material has been gathered, including earlier versions of Western Australian private hospital guidelines.

Health planning

In 2005/06, in parallel with the development of Australasian Health Facility Guidelines, NSW Health fast-tracked the development of various components of the NSW HFG for its own projects. These include unit-specific sections for high profile Health Planning Units (HPU), including emergency, operating theatres, inpatient units, mental health and ambulatory care. Specific HPU sections such as these have been developed to refer to the other more generic sections of the guidelines applying to all health facilities, for example infection control. Within the HPU sections only specific requirements are noted that add to or amend these due to the special characteristics of a particular unit.

Each HPU section has been developed from and with reference to design requirements (briefs) for current or recent projects and other evidence based literature. A range of key stakeholders, including clinicians, representatives of the

relevant professional colleges/organisations (for example the Australasian College for Emergency Medicine), experienced designers and health service managers have reviewed each guideline. All guideline sections refer to relevant government policies, including accepted models of care for a variety of services. Australian/NZ Standards are cross-referenced, as are Building Code of Australia requirements, which take precedence in all situations.

The Radiation Oncology HPU, also released in late 2006, was developed to respond to the NSW Health *'Optimising Cancer Management – A Cancer Care Model for NSW'* report, published in March 1999. It has also been developed using reference material such as design briefs developed for recent projects of the same type, including a unit at Sir Charles Gairdner Hospital, Western Australia (RDDCP Spowers, Architects, 2004) and for the Mid North Coast Integrated Cancer Care Service, NSW (Rice Daubney Architects, 2004).

What's included?

The HPU has been developed using a standard format and table of contents that applies to all other HPU sections of the

guidelines. Following an Introductory section, the table of contents covers topics such as Planning (Operational Models and Policies, Planning Models, Functional Areas and Relationships), Design (includes Access, Car Parking, Disaster Planning, Infection Control, Environmental Considerations), Components of the Unit (General, Standard and Non-Standard) and Appendices, which contain a generic Schedule of Accommodation, Diagrams, Checklists, References and Further Reading, and sources of Other Information).

CHAA has found that the consistent use of format and headings enables users of the guidelines to quickly become familiar with, and to easily find, the different types of information available for the various units.

The type of information covered in the Radiation Oncology Unit HPU section of the guidelines illustrates the extent, flavour and usefulness of the guidelines as a planning resource for clients and design teams. The introductory 'Preamble' outlines the concept of cancer services, encompassing the management of complex clinical problems and notes that cancer patients may access a wide range of

diagnostic and therapeutic interventions on an inpatient, outpatient, day, or increasingly on a home basis. Disciplines involved are listed and include Radiation Oncology, Medical Oncology, Clinical Haematology and Surgical Oncology. Types of interventions undertaken and the need for varying modes of supportive care area are described, together with the type of staff likely to deliver such care and the settings within which this may be offered.

The HPU continues with definitions of terminology and explanations of the clinical disciplines and the need for differing configurations of physical space to support delivery of the clinical services. Patient characteristics are outlined including the needs of different types of patients. Finally, design criteria for the unit are made explicit, including general requirements such as ensuring accessibility issues are addressed, that the building has plenty of natural lighting in the areas occupied by patients and staff for lengthy periods, and that the building is appropriate to its setting and climate.

Important operational models and policies are noted that affect the design of the unit - in particular the importance of the 'one-stop model' of a purpose-built



facility and the future care trends that should be considered. These include the increasingly multidisciplinary nature of clinics and care, the increasing incidence of home-based therapies and outreach care, and thus the greater complexity of individual treatment plans and indeed greater number of plans per patient that might be prepared. Other issues needing consideration include technological advances in treatment that will improve patient outcomes and the need to cater for the addition of new technologies already being developed, such as the expansion of radio-surgery and image guided radiotherapy.

The Radiation Oncology HPU sets out basic information that should be considered by designers in briefing a unit of this type; this should guide discussions with clinical user groups, managers and those funding construction of the facility.

Spatial requirements for the various functions are discussed and diagrams illustrating the relationships between these provided. In addition, guidance is offered in terms of suitable wall and floor finishes and information is provided regarding general equipment requirements and planning considerations to incorporate into the facility design. Building services needs are discussed to enable the design team to commence discussions with the project engineering consultants and to enable the team to review the engineering services proposals for the facility.

Finally, reference is made to the individual rooms and spaces required and notes whether these are 'standard' or 'non standard' components. Where identified as 'standard' the reader is referred to the general sections of the HFG that define and describe rooms that occur frequently across most health facilities and thus do not need to be developed from scratch for every project. Non-standard components are described in the HPU section in more detail with function, location and relationships, and other design considerations set out for each identified room or space.

Most importantly, it should be noted the design guidelines are intended to offer

a starting point for briefing a facility and are never intended to replace the services or skills offered by a trained and experienced health facility designer or architect.

The guidelines have been developed by a team of experienced health planners and architects with long and varied experience in health facility projects. In addition, they have undergone extensive review and commentary by a wide range of reviewers prior to their issue for further testing and review by industry in use, and will continue to do so.

Ultimately, it is intended that the Australasian Health Facility Guidelines will replace state-based versions of similar guidelines currently in use. A program for this continues to be discussed by the Australasian Steering Committee for the project and information regarding the decisions made is regularly updated on the project website.

For further information visit www.chaa.net.au.

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