

## CULTURE AND HEALTH FACILITY DESIGN ANNOTATED BIBLIOGRAPHY

*The organization's environment and therefore its design, can be a crucial enabler of desired behaviours, or it can be a barrier to the desired behaviour and play a powerful role in preventing the intended culture.*

D Kirk Hamilton, Robin Daine Orr in "Improving Healthcare through Better Building Design" Sarah Marberry (ed) ACHE Management Series, Health Administration Press, 2005, p.146.

Culture is the 'lens' through which a person views the world and interprets their experiences and environment. Culture is embedded in both health and design and therefore a basic element for consideration in the design of health facilities. The information set out below is intended to provide health planners, designers, practitioners and academics with an evidence base from the health and design literature, it will assist people to develop an understanding of the area. The document should be considered as a work in progress, it is not compiled as the end word on the topic but as a foundation to start from.

Health facility planning, design and procurement are multidisciplinary activities. The health, medical, architecture, design and building management literature all contributed to this bibliography. A more detailed description of the method used to locate the material in this document is included in Appendix 1.

The material is categorized under the headings of Culture and Space; Design; Indigenous and Case Studies. Many of the citations are multifaceted so the categories are not independent.

It is anticipated that this document will assist people to develop knowledge and design skills that will improve the quality and contribution of health facilities to the health and wellbeing of the people who use them.

### Culture and Space

1. **Norwina Mohd Nawawi**, Dept of Architecture, Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia, [The meaning of spaces in healthcare architecture for urban and rural hospitals in Malaysia - a study of the selected Malaysian Hospitals.](#)

Outline: Discussion of Quality in health care (part one), architecture as the space in which man operates (part two), case studies showing the development of hospitals in Malaysia (part three). "Healthcare Architecture as defined should support the process of healing for both the patient users as well as the care givers who lived in that environment. It is not a treatment in itself but a place and space that converge those who gives treatment, those who receives treatment as well as those who provide the facilities and facilitate the treatment by way of equipping and provision of "suitable, appropriate" environment." (p35)

Comment: Good outline of Quality Health Care, procurement and design processes and discussion of the basis of health/ place/ space relationship.

2. **Laurie M Anderson, Susan C Scrimshaw, Mindy T Fullilove, Jonathan E Fielding, Jacques Normand & the Task Force on Community Preventive Services** Culturally Competent healthcare systems, *American Journal of Preventive Medicine*, April 2003, Vol.24, No.3, Supplement 1, pp.68-79.

Outline: Discusses cultural competence in American context including standards system. Outlines definition of cultural competence (p.68). 5 areas addressed by a culturally competent service are:

- Diverse staff reflecting community demograph
- Access to language proficient providers or interpreters
- CC training for providers
- Signage and instructional literature in client languages consistent with cultural norms
- Culturally specific healthcare settings.

Analytic framework diagram: Intervention → intermediate outcomes → Health Outcomes (p.72).

Comment: Commonly cited definition in the literature. Knowing the demographic, language and signage is identified as important. "Healthcare settings may raise both, linguistics and cultural barriers for ethnic subgroups, particularly recent immigrants with limited acculturation to majority norms and behaviours". Reports very few comparative studies in this area to develop a data base, as a problem. Written from a health service perspective.

3. **Sara O Marberry (ed)**

Improving Healthcare with Better Building Design, *ACHE management series*, Health Administration Press, 2005

Outline: Chpt 2: What patients want: Designing and delivering health services that Respect Personhood, Paul A Clark, May P Malone. Robert Wolosin PhD "Hospitals can maximize their patients perceptions of safety and security by globally attending to the personhood of patients" (p.23). Posits 4 factors that constitute universal human needs that should be taken into account in the design, delivery, and management of any health service (p.23). Cumulatively, respect for personhood represents the definitive answer to the question, "what do patients want?" (p.33-34).

Chpt 3: The environments impact on stress, Roger Ulrich; Craig Zimring; Xiaobo Quan; Anjali Joseph. Social support "The evidence showing benefits of social support across other health contexts is so convincing, however, that it seems justified to suggest that health care design strategies that foster social support should tend to lower stress and improve other outcomes" (p.53).

Chpt 6: Designing a better environment, Jain Malkin. A Culture of Caring - The important element is that the patients are able to feel comfortable and that the setting is non-threatening. A healing environment grows out of a culture of caring in which patient comfort and convenience are priorities (p.112).

Chpt 8: Cultural transformation and design, D Kirk Hamilton, Robin Daine Orr. The physical environment can powerfully support the desired behaviours and discourage undesirable actions. Thus, facility design becomes an important tool for executives planning cultural change (p.146). The symbols of culture appear from the moment one encounters the site... The design of a campus and appearance of each building can be attractive and welcoming, ambiguous and confusing, or simply forbidding (p.146).

Comment: Some of the authors have taken an individualized perspective. The section on organizational or corporate culture is a good example of culture applied in a non-ethnicity/racial context.

#### **4. Lyn Nielson-Bohlman, Alison M Panzer & David A Kindig (ed)**

Health Literacy - a prescription to end confusion, *Committee of Health Literacy, Board of Neuroscience and Behavioural Health, Institute of Medicine.*

Outline - Book summarises the findings of the Committee.

Chpt 2: What is health literacy? (p.31). Health literacy framework diagram link literacy-contexts-individuals-health outcomes through health literacy (p.33). Various Definitions of health literacy stated - selected definition is "the degree to which individuals have the capacity to obtain process and understand basic health information and services needed to make appropriate health decisions." Navigate the health system listed as a skill necessary for health. Hospital wayfinding specifically cited (p.42).

Chpt 4: Culture and Society (p.108) "A conceptual understanding of the interconnections between culture and literacy through the idea of cultural literacy can provide insights into the deeper meaning of how diverse populations... come to know, comprehend, and make informed decisions based on valid data regarding their health." (p.109).

Comment: Health literacy is the technical term for the way people interpret their health environment used particularly in health behaviour and decision making literature.

#### **5. Alan Dilani**

A new paradigm of design and health in hospital planning, *World Hospital Health Services, 2005, Vol.41, No.4, pp.17-21*

Outline: Discussion of health promoting processes and design of health care environments (p.17). The concept of sense of coherence is outlined as the humans overall understanding of life depending on how comprehensible, manageable and meaningful it is to them (p.18). NB this seems to be a combination of culture and health literacy concepts.

“An increase in the consideration of wellness factors should inspire planners to develop design criteria, which stimulate wellness factors within design, could have beneficial effects on well being and health processes thereby creating environments which are not only functionally efficient but also highly psychosocially supportive.” (p.21)

Comment: new concept is promoting wellness (ie health promoting hospitals).

## 6. **G Rumay Alexander**

A mind for multicultural management, *Nursing Management*, Oct 2002; Vol.33, No.10, *ABI/INFORM Global*, p.30.

Outline: Article outlines cultural competence development for health organizations. Cultural assessment core components: Cultural/racial/ethnic identity; language/ communication ability and style; religious beliefs and practices; illness and wellness behaviours; healing beliefs and practices (p.32).

Comment: Cultural assessment core components clearly specified.

## 7. **Calgary Health Region**

[Enhancing Cultural Competency: A Resource Kit for Health Care Professionals](#)

Outline: Training manual on culturally competent health care delivery.

Chpt 2: Cultural competence in health care, Barriers to access (p.7).

Chpt 3: Understanding culture - Importance of culture in health care (p.13).

Chpt 5: World views of culture and illness. Cultural perspectives on Health and Illness; Perceptions of Health and Illness across cultures (p.82).

Comment: This manual has specific information about beliefs of the different immigrant groups in the Calgary region eg healing practices, death rituals etc. Such specific information is useful to assist designer to identify factors that need to be incorporated into the design but cannot be generalised to other sites. Such an approach does not take changing populations and perceptions into account, therefore the need for cultural flexibility and adaptability in designs.

## 8. **Trevor Hancock** Creating health and health promoting hospitals: a worthy challenge for the twenty-first century; *International journal of health care quality assurance*, 1999, Vol. 12, No.2, pp.viii-xix.

Outline: Describes four roles for hospitals; healing environment, healthy place to work, healthy for the environment and contributing to the community (p.viii). Detailed outline of the Ottawa Charter as the defining document for Health promotion (pp.iii-ix). Makes the association between health design, construction and operation. Implications:

- increase active participation of patients and families in care, during stay and after discharge. Patients need to be fully informed, have access to information and decision making process.
- patients learn self-care, medication and health maintenance issues for after care.
- patients have vital relationships with all staff.

Comments: Paper also describes issues contained in a community assessment. Hancock moves beyond patient centred care to relationship centred care ie patient ↔ staff ↔ community. Concentrates on design supporting these processes to improve health outcomes and prevent problems.

**9. Dory Reeves** Planning for Diversity - Planning for diversity in a world of Difference, *Routledge, Taylor and French group, London & New York, 2005*

Outline: This book specifically addresses planning and diversity issues.

Chpt 1: Part 1 - Integrating equality and diversity (p.8); Part 2 - Sustainable Development (p.22), Part 3 - Space and Place (p.28) “the spatial dimension is important when looking to achieve equality. Spatial issues (p.34) relate to the:

- Location of activities
- Interrelationship of activities
- Way in which activities are connected
- Condition of places
- Sustainable development
- Quality of places”

Chpt 7: Outlines cultural competence. Three main areas: 5 habits of cultural competence (follows Bryant’s framework), how can organizations reflect on their need to change, evaluating the approaches adopted (p.182). Equity, Diversity and Interdependence framework - 7 steps for change plotted on two axis - measures for changing and areas for change (Fig 7.2, p.193). Chapter continues using professional culture and education as an example. Table 7.1 Summary of the methods commonly used to achieve and evaluate learning intentions.

Comment: makes the connection between design, diversity and equity. Interesting look at the designer competency, approach does not limit to assumption that culture = ethnicity.

**10. Sherry Blankenship** Outside the centre: Defining who we are, *Design Issues, Winter 2005, Vol.21, No.1*

Outline: paper looks at the involvement culture as essential to sustainable design. History and context are integral to culture and sustainability, thus involvement of the community and an understanding of the community issues is fundamental.

Comment: paper addresses the design process and culture.

**11. Tim Earnshaw** [Culture and Health as Elements of Design](#)

Outline: PowerPoint conference presentation outlines definition and characteristics of culture. Analogy of “lens” through which we see and interpret the world. Links concept to a framework for health. Discusses culture in the context of the design and construct process. Outlines the 5 habit for a culturally competent designer/planner. Finishes with an outline for a Culture, Health and Design website.

Comment: Good references. Useful lens analogy.

### **12. Jeffrey Cohen** [Cultural Responses to Health Care Design](#)

Outline: This PowerPoint presentation look at health care design and how place and space need to respond to the cultural diversity that is our world. A case study looks at what happens at the end of life and how cultural sensitivity in both space and care can reduce dissonance for both clients (patients, family, friends) and providers (medical and other staff).

Comment: Well supported with case study material and references. Good discussion on health space and place (Edward Case).

### **13. Wilbert Gesler & Robin Kearns** Culture, Place and Health, *Routledge 2002*

Outline: Introduction to the concepts of health geography. Strong presentation of Health Sapcee and place.

Chpt 2: Culture matters to health - is an outline of the theory that covers health and human geography. “What people do and believe about illness and its treatment is crucial to an understanding of health” (p.35).

Chpt 6: Cultural difference in health and place - discusses specifics on women, disability, ethnicity and sexual preference (p.96).

Chpt 7: Landscapes of healing - includes discussion on nature, hospitals symbolic places etc (p.120).

Comment: Book is easy to read and introduces some of the theoretical concepts. Does not make the simplification that culture is the same as ethnicity or race. Discussion included about women, disabled, ethnic difference and health effects.

## **Design process**

### **14. Bonnie Aaby-Hines** IBD; Design Research: Cross - Cultural Sensitivities in Design, *Journal of Healthcare Design, Vol.v, p.114*

Outline: Document has in first section nine examples of Nth American Indigenous health facility design examples - 2nd part is a detailed outline of recommended process for designers.

Project preparation (overall): The responsibility of the designer is to incorporate the memories of the past, the wisdom of the present and the hope for the future.

“to imbue a building project with the essence of a culture, the design team must craft it to be a part of the very fabric of the architecture.”

Comment: Excellent article that relates cases to the inclusion of culture in the design process.

**15. John Hutchings** Evaluation planning and implementation for an innovative health centre, *Healthcare Management forum, Fall 2006*

Outline: Detailed description of a planning process including the information gathering categories used. “There is some indication that success of health centres may be hampered by lack of resources and poor space planning. Also co-location of services does not ensure successful integration.” (p.26).

Table 1 interview topics for specific stakeholder groups (p.27).

Table 2 list of documents reviewed and timeframe covered by the documents, detailed description of the planning process, committee membership, development functions (p.28). Business and service delivery models - description of the committees involved (p.29). Strategic planning discussion, recommendations (p.30).

Comment: The aim was to use the redevelopment as an opportunity to develop collaboration and integration of the whole hospital team, discusses the extent of the integration success. Paper emphasises corporate culture goals.

**16. David Grogan, Colin Mercer & David Enwright** The cultural planning handbook: An essential Australian Guide, *Allen and Unwin, 1995*

Outline: Strong community focus targeting a local government area cultural analysis framework.

Culture: Mindset that shapes culture mythologies, beliefs and values which determine people’s way of life: their social customs; methods and content communications; their architecture, streetscapes, and public buildings and their forms of art (p.12). Secondly, there are mediums used to express culture, for example; literature, newspapers, television, architecture, urban design, informal conversation and formal meetings. There are artefacts produced by culture - houses, streetscapes, cooking utensils, books, institutions, sculptures, public buildings etc. All three are intimately connected and related to what we refer to as ‘culture’.

Comment: Practical instruction/guidelines on consultation eg running a SWOT analysis

**17. John G Reiling** Creating a culture of patient safety through innovative hospital design, *Advances in patient safety, Vol 2.*

Outline: Designing an acute hospital around patient safety. Paper used development of a culture of safety to inform design. Methods: learning laboratory involved experts and included a three day retreat to determine best practice (p.427). Table of Culture of Safety goals generated through the learning

Laboratory (p.437). Identified two categories of principles - latent conditions and critical failure events (p.428). Design teams met operating team to brainstorm problems and solutions then report and had input to a design committee (p.431), equipment and technology planning begins day one by developing mock-ups (p.432), design team used a Failure Mode Effects Analysis technique (FMEA - A form of scenario planning) at every stage of the design to examine the consequences of problems and failures (p.432), patients and community were involved early through the use of focus groups to examine mock-ups of rooms and technology. Critical success factors identified (p.437).

Comment: Useful paper with process details particularly on Failure Mode Effects Analysis and use of modelling. One of the few papers with cost benefit discussion. Concluded that cost were able to be contained within the original estimates with monitoring.

**18. Calbert H Douglas & Mary R Douglas** Patient friendly hospital environments: exploring the patients perspective; *Blackwell publishing Ltd, 2004 Health Expectations, Vol.7, pp.61-73*

Outline: Reports patient perceptions through surveys on whether the hospital built environment is "supportive". Patient attitudes and perceptions to the built environment of hospital facilities is related to their perception that the hospital provides a welcoming homely space for themselves and their visitors (p.61). Significant areas - need for personal space, homely welcoming atmosphere, a supportive environment, good physical design, access to external areas and provision of facilities for recreation and leisure (p.61).

Design identified as affecting, sense of personal control and patient choice, communication styles and patterns, corporate culture and image.

**19. Calbert H Douglas & Mary R Douglas** Patient-centred improvements in health-care built environments: perspectives and design indicators, Blackwell Publishing Ltd, *Health Expectations, 2005, Vol.8, pp.264-276*

Outline: Case study of a central hospital unit with 'several' primary care locations (offsite). Project used an 'autophotography' method, expert focus groups to gather information, then analysed data to identify factors. Develops set of internal and external indicators for assessing future patient centred designs. Cultural settings are included in the list but cultural settings are not specified in the paper, emphasis is on patient perceptions of comfort, independence and personal control.

Comment: Good example of multiple methodology in research. Tables of information on internal and external factors indicated from patient perceptions. Emphasis is on individual patient perceptions, 'cultural' factors are mentioned but not specified. Provides evidence for space and patient control contributing to satisfaction and patient quality of service.

**20. Frank Moy Jnr** Facility 'Wellness' - Health Facilities Management, *Facilities, Vol.13, No.9/10, August 1995, p.45-48*

Outline: Wellness checks on hospitals from a facility managers perspective.  
Comment: Useful lists of common services and utility service systems.

**21. Jennifer Bowerman** Designing the primary health care centre of the future: A community experience, *Leadership in health services, 2006, Vol.19, No.4*

Outline: Case study of the community consultation and negotiation for a primary care centre in Edmonton, Alberta, Canada. Descriptions of the consultation process. Includes detailed description of the consultation process, participants, meeting processes using the example of the Primary Care Centre planning. Strong emphasis on community support and adoption of the project.

Comment: Case outlines the discussion of community concerns and prioritizing the issues.

**22. Mark RD Johnson, Deborah Biggerstaff, Jan Birksted, Diane Clay, Adam Hardy & Kip Jones** Creating Culturally Sensitive Healthcare Environments - A Report to NHS Estates (Draft), *Seacole Research Centre/Prasada and the Centre for Evidence in Ethnicity & Diversity at De Montford University and University of Warwick.*

This document is a draft of the wording for the report. It does not contain the graphics and a few of the references are incomplete. Permission has been given to Tim Earnshaw to place the draft on the web by the Author Mark Johnson, because of a delay in the publication.

Outline: The report was commissioned by the NHS to identify issues and address the following questions -

- Art - this may be decorative, but may cause offence or anxiety: should there be more diversity - such as pictures of South Asian scenes or Caribbean themes?
- Should design provide 'recognisable' symbols of cultures, or assist in 'signposting' the function of spaces? How?
- Do people from minority backgrounds have particular views about the landscaping outside hospitals, and what they can see through the windows?
- Space/Layout - there may be questions relating to privacy and gender separation - and, when interpreters are used or language problems arise, in 'reception' areas
- Provision of Prayer (or similar) space is an essential issue, which has been the subject of considerable research and development. Your feedback is still helpful!
- There are specific cultural needs in respect of personal hygiene (including ritual cleanliness) which we are collecting information and advice about.
- Specific Religious/Cultural needs are relevant in catering (food preparation).
- Orientation may be significant - Does it matter which way beds and rooms 'face'.
- Signage and information (electronic screen) provision will need to reflect both a multi-lingual society and be sensitive / capable of responding to, diverse scripts.

- Interpretation and translation may require specific provision (including access to internet or telephone-based systems where phone points are not usually found).

The first section (p.1-32) is an extensive literature review outlining the role of culture in the operation and design of hospitals. Sections include space place, diversity and design, outlines of theories such as Gillespie's work on hospital design reinforcing particular decision making processes that increase the powerlessness of patients (p.6) and Ulrich's 'Theory of supportive design' (p.17).

Thematic analysis (p.32) covers issues that are outlines such as design of prayer rooms, hygiene, food preparation etc.

Comments: Most useful review, theoretical areas covered and practical information contained in the Thematic analysis. Identifies as a failure the issue of ignoring "subjective values in favour of clinical functionality" (p.7). The direction taken in the document is "it is clear that it is possible to create such atmospheres which are supportive to human relations conducive to healing" (p.7).

**23. Department of Planning NSW, [Community engagement in the NSW planning system](#), Department of Planning NSW**

Outline: Presents the context for planning and community consultation in NSW. Contains information and direction on context, process and examples.

Comment: Strongly recommended by people in the community planning sector. Can be used as a guideline on good practice when assessing or briefing community interaction and consultation.

**24. Mary Shaw, Danny Dorling & Richard Mitchell** Health Place and Society; *Pearson Education Ltd, 2002*

Outline: This book discusses examples of the effect of place and space on health and it's determinants. Of particular interest is chapter three covering health mapping and measuring. Chpt 3: Mapping and measuring - Who are people? (p.42), Where do people live? (p.52), What has happened to people? (p.56), data sources, surveys and routine recorded data (p.60), analysing data (p.68), mapping (p.75), conclusion (p.83), further reading (p.83).

Comment: Mapping and measuring chapter is useful in defining content of a community consultation.

**25. Kristen Day & Uriel Cohen** The role of culture in designing environments for people with Dementia: a study of Russian-Jewish Immigrants; *Environment and behaviour, 2000, Vol.32; p.361, Sage Publications*

Outline: This paper addresses culture and design issues for elderly Russian Jewish patients in the USA. The premise for the paper is that culture may be a therapeutic barrier or resource for older people. Accommodating cultural heritage requires spatial organization and appointment of the environment. Areas for

consideration: cultural group history and life experiences, assets, beliefs and values, caregiving practices and activities and preferences. Conceptual framework - culture as barrier, culture as therapy (p.369).

Table - Therapeutic Goals that may be enhanced by Greater Cultural Competence in environments for people with Dementia. Considering culture in design - Key Domains/themes listed. Themes examples reported with greatest frequency or intensity are assumed to hold the greatest significance (*NB except maybe for taboos*) (p.370).

Comment: Given an ageing population this paper has useful design points.

**26. Andrews S, Austin N, Clarke A, Goodman H & Miller J** Promoting Koori Children's Health - An Affirmative Approach, *Health Promotion Journal of Australia* 1998, Vol.8, No.1, pp.29-33

Outline: Discussion of the development of an aboriginal liaison unit in a Victorian hospital. Identification of the history of hospitals as a site for child removal leading to 'intergenerational fear' of hospitals as institutions of dispossession, this affects access issues. Need to increase perceptions of safety and trust, artwork identified as significant to cultural affirmation and developing a non-threatening perception for patients. Use of aboriginal liaison unit as a safe and non-threatening place within the hospital rather than administration only purpose, is discussed.

Comment: Aboriginal consultation is seen as 'vital'.

**27. Fiona Walsh & Paul Mitchell (eds)**, Planning for Country, *Jakurrpa Books*, 2002

Outline: Covers development and participatory planning with traditional aboriginal owners. First section has 15 method based sections while the second half contains 22 case examples. Advice on meetings, communication deciding on decision processes etc.

Comment: Excellent book written in collaboration with aboriginal communities. Good Reference and reading list and well indexed for issues.

**28. NSW Dept of Aboriginal Affairs, NSW Dept of State & Regional Development & NSW Dept Commerce**, [Aboriginal Participation in Construction Guidelines](#)

Outline: "The Guidelines enable government agencies to assess whether particular construction projects can provide employment opportunities for Aboriginal People".

Tender requirements have 3 categories of projects: primarily directed to aboriginal communities; aboriginal community as a key user group; potential to benefit aboriginal community.

Comment: The document mainly outlines tender process, development (including consultation requirement), documentation and assessment.

**29. Timothy Oluseyi Odeyale** Architecture and Myth: Cultural Values and Health Delivery in Africa, *Public Health Group of the International Union of Architects 26<sup>th</sup> International UIA-PHG Seminar, Pretoria, South Africa, August 2006*

Outline: "Health care facilities include consideration of the culture and physical environment, consisting of four variables namely: space, time, meaning and communication. Understanding of all this contextual settings by the average expatriate health worker in Africa will facilitate effective and sustainable health delivery" (p.6). Importance of inclusion of the community in planning and design plus consultation with traditional healers eg midwives and birthing mothers is considered as "vital" (p.16).

Comment: International perspectives, possible application to indigenous health.

**30. Northern Territory Government** [The Public Health Bush Book, Volume 1 Strategies and Resources](#), *Territory Health Services, Public Health Strategy Unit*

Outline: Chapter 5 Towards a Healthy Health Centre, includes sections on a comfortable safe and healthy place to work, Building and grounds (contains a discussion checklist for staff meetings), improving access to health information.

Comment: Both volumes are a practical guide to healthy promotion and public health practice in the Northern Territory. Volume 1 addresses education and resources. Volume 2 addresses issues - Alcohol and Other Drugs, Environmental Health (housing, water etc), food and nutrition.

Comment: Written at the level for practitioners in the field.

**31. Queensland Health** [Guidelines for the Planning, Design and Building of Primary Health Care Facilities in Indigenous Communities](#), *Queensland Government*

Outline: These Guidelines respond to a recognition that well designed, culturally appropriate facilities support the delivery of responsive and effective health care services. There are a variety of challenges associated with delivering effective, primary health care facilities in Indigenous communities.

This document recognises this and presents a range of strategies and guidelines intended to overcome these challenges. In particular, the Guidelines respond to:

- Cultural issues
- Environmental issues (including maintenance)
- Staff retention issues.

The guidelines and strategies presented in this document are intended to provide a framework for undertaking the planning, design and construction activities associated with providing built facilities in Indigenous communities. Particular emphasis is placed on:

- Communicating effectively and appropriately in Indigenous communities
- Facilitating community involvement in planning, design and construction processes
- Ensuring the cultural appropriateness of facilities
- Fostering community ownership of facilities
- Responding to the holistic health needs of Indigenous communities
- Ensuring the environmental suitability, and long term functionality of facilities.

Comment: Very practical information in these guidelines including details of consultation and the decision making processes. Figure 1 Factors affecting Aboriginal and Torres Strait Islander Health, Figure 2 Table of participation (participation type, what does it involve, when should it be used, Techniques), Figure 3 Cultural Cues are outlines of useful information. The guidelines cover the consultation, planning, design, construction and handover maintenance stages.

## Case studies and websites

### 32. Maria Guppy & Linda Corkery A Cultural Plan for the new Children's Hospital at Westmead; *Royal Alexandria Hospital for Children*

Outline: This cultural plan was developed in preparation for the move of the Royal Children's Hospital to Westmead. The project develops a cultural map of the hospital using multiple methodologies including: research literature review, site visits and observation, confidential staff interviews, family surveys, workshops for children and liaison with the design team. Report covers each of these methods with recommendations, including a brief discussion on effective use of the media in relation to the design and development. The report includes specific areas on design such as courtyards and public space, development of an arts program and policy, detailed discussion of children and families in hospitals.

Comment: Demonstrates the use of different methods for informing the design well. The report clearly outlines the needs of children and their families and the need to embed the hospital in the local community. Can be used as a case study to indicate format and way to report a cultural mapping exercise.

### 33. Rosemary Glanville [Responding to Climate and Culture - An Exemplar from Gabon](#), MARU

Outline: Two main sections designing for climate particularly airflow and temperature with Gabon health centre examples plus designing for culture. Describes the caring partnership with clinicians performing treatment functions and family providing hotel, catering, laundry and self care functions. This is part of the "Social Sustainability" of the centre (p.9). Build nothing you cannot maintain locally - environmental sustainability (p.16).

Conclusions: a) climate; create air movement, low maintenance → environmentally sustainable b) culture; harness family support, provide facilities for family → socially sustainable.

Comment: In Gabon social sustainability is essential to the operation of the facility. Social sustainability relies on community acceptance and perceptions of the health facility which is generally applicable.

**34. Marily Cintra** [Evaluating arts and culture programs in Health Care Settings](#), CHAA Website

Outline: PowerPoint presentation that demonstrates the connection contribution art and cultural activities make to the health setting and function. Survey and focus group findings reported. Arts and culture programs from several NSW Hospitals reported.

Comment: Good graphics related to the literature in the field. Tables etc show evaluation criteria.

**35. Matthew Fleming & Charles Joe** Tane Whakapiripiri - a case-study of indigenous cultural input into service delivery design and building design.

Outline: The historical context.

- Failing Psychiatric Mental Health Inpatient Asylums
- Mason Report – a new direction
- Treaty of Waitangi obligations, Ministry of Health, Te Korowai Oranga
- Chaplow (Clinical Director) and Maniapoto (Cultural Advisor)
- Simpson (Clinical Director) and Joe (Cultural Manager)
- Mason Clinic - Te Miro Charter
- Internal consultation process, organizational setup and business case
- Delivery of the building and service
- Maori values and concepts
- Kaupapa Maori Philosophy and Western Medical Model of Care
- Engagement of Architect - via Project Manager
- Design Consultation process
- Built form
- Outcomes and clinical success.

Comment: Excellent presentation well supported with site photos, diagrams and drawings.

Websites:

Centre for Health Assets Australasia [www.fbe.unsw.edu.au/chaa/](http://www.fbe.unsw.edu.au/chaa/)

Centre for Health Design [www.healthdesign.org/](http://www.healthdesign.org/)

Medical Architecture Research Unit [www.lsbu.ac.uk/maru/](http://www.lsbu.ac.uk/maru/)

European health Planning Network [www.euhpn.eu/](http://www.euhpn.eu/)

International Union of Architects Public Health Group [www.uia-public-health-group.org/](http://www.uia-public-health-group.org/)

## Appendix 1

Bibliography and material search strategies. The presentations, articles and books included in this bibliography were located through:

Literature searches on the key words: [culture, health, facilit\* design, health facilit\*, hospital\*] & [culture, health, space, place, design] in varying combinations were performed. Where possible boolean truncations were used.

The main health data bases used were CINHALL, Pubmed (Medline), while the architectural material was located through Science Direct, Ebscohost and Archnet. Assistance from the UNSW library architecture and science research support staff for supplementary searches and locating interlibrary loan materials is gratefully acknowledged.

Material in the University of New South Wales library catalogue was located through a UNSW Library subject index, using the same key words, or author and title searches. Library catalogues linked to the UNSW Library catalogue were also examined.

Using the search word set, Google and Scirus were used to locate organizations, websites and reports. Usually the first 100 search results were examined. The search words were also applied to Google Scholar.

The CHAA website was searched for relevant material and colleagues also provided suggestions of articles and websites they have found useful. Particular appreciation is expressed to Jane Carthey (Director CHAA) and Dr Jeffrey Cohen (Conjoint Fellow, School of Public Health, UNSW) for article and website suggestions.

If you would like to make a suggestion for an inclusion to this material please contact [CHAA](#).