

Australasian Health Facility Guidelines (AusHFG) User Survey - New South Wales

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Centre for Health Assets Australasia

Australasian Health Facility Guidelines (AusHFG)
USER SURVEY - New South Wales

Jane Carthey



BUILT ENVIRONMENT

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Produced by the Centre for Health Assets Australasia (CHAA)
The Faculty of the Built Environment, University of New South Wales.

Australasian Health Facility Guidelines (AusHFG) User Survey - New South Wales
Centre for Health Assets Australasia

Author: Jane Carthey

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Jane Carthey

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1. INTRODUCTION

1.1 Background

The Australasian Health Facility Guidelines (AusHFG) are an initiative of the Australasian Health Infrastructure Alliance (AHIA), formerly the Health Capital Asset Managers' Consortium (HCAMC) of Australia and New Zealand which was formed in 2004. The AHIA includes representatives from all State and Territory health jurisdictions in Australia and from the Ministry of Health, New Zealand. One of the purposes of AHIA is to support organisations to better plan, procure and manage their health capital assets. It works across Australia and New Zealand bringing together information, research, knowledge and practical experience about developing and managing health assets and infrastructure.

In 2005, the AHIA commissioned the Centre for Health Assets Australasia (CHAA) at the University of NSW to develop nationally endorsed health design guidelines for the briefing and design of health facilities. These were based on NSW-focused guidelines (NSWHFG) that were in turn developed from web-based guidelines created by the Victorian Department of Health and Human Services in 2001-2002. The AusHFG have been available for use across Australia and New Zealand since December 2006. In mid 2007, NSW adopted the AusHFG as a replacement for the NSW HFG. Victoria continues to use the Design Guidelines for Hospitals and Day Procedure Centres (DGHDP) for health projects in that State.

As the AusHFG have now been in use for more than three years across most Australasian health jurisdictions, this survey will assist in assessing whether they are fulfilling the purpose for which they were developed, and determine how they may be improved as they continue to be reviewed and developed into the future. The results reported herein apply to **New South Wales projects only**, but the survey has also been completed in two other AHIA jurisdictions – South Australia and New Zealand. Notwithstanding this, the conclusions drawn are relevant to most AHIA jurisdictions except perhaps where they refer to the NSW Health Facility Briefing System (HFBS) which is not used across all jurisdictions yet is required to be used on NSW health projects.

1.2 Intent of the Survey

The AusHFG are intended to be used on all Australasian public health projects. They are also applicable to private sector projects but the extent of this use is unknown. Therefore, background information was collected regarding which professional groups are mainly using the AusHFG, on approximately how many projects they have been used; at what stages and on what types of projects (public/private; greenfields/refurbishment) they are being used.

The AusHFG are intended to be easily accessible via a publicly available website and are free to download and use. A peer review process is used in their development. Survey questions were asked to identify user satisfaction with the AusHFG in terms of content, format and delivery method; and potential areas for improvement.

In commissioning the AusHFG, AHIA anticipated a range of benefits from using the AusHFG on their health projects, therefore users were asked to rate their perceptions of how well the AusHFG are performing in terms of these benefits. Finally, users were asked whether they are interested in being

involved with ongoing review and development of the AusHFG into the future. When they answered in the affirmative, they were asked to email their details to the representative identified by the NSW Department of Health. All users were then thanked for their participation in the survey.

1.3 Administration of the Survey

Ethics approval was granted for this research by the University of NSW Built Environment Faculty Human Research Ethics Approval Panel (HREAP) with approval number 105004 dated 24 February 2010.

Specifically targeted at NSW users of the AusHFG, the survey was conducted using an online survey tool (Survey Monkey). A list of NSW-based health facility industry professionals familiar with the use of the AusHFG on NSW health projects was identified by the NSW Department of Health and these people were personally invited by email to participate in the survey. A generic web link was also generated for the survey and participants were asked to forward this to colleagues who may also have wanted to participate.

The questions focused on three main subject areas: 1) profile of users including professional background and extent of use of the AusHFG on NSW projects; 2) satisfaction with the format, content and mode of guideline delivery; and 3) assessment by users as to whether the AusHFG are achieving the benefits anticipated by the project funding bodies when they originally agreed to the initiation of the AusHFG project in 2005. The survey asked 25 questions, all of which required a response for progression through the survey. In addition to closed questions (usually multiple choice), there were opportunities provided for participants to provide additional comments throughout the survey. All responses were kept confidential and consolidated results only were analysed. One hundred and forty people were invited by email to participate in the survey with 79 people (56%) responding to this invitation and another 8 using a generic weblink. However, only 68 people fully completed the survey, with only 55 (37%) answering every question. The respondents invited by email were followed up with regular reminders until they either completed the survey or the survey period expired. The relatively poor completion rate for the survey by those who started it suggests that many of those who responded were either not sufficiently familiar with the subject matter of the survey or did not feel sufficiently qualified to complete all of it.

2. SURVEY RESULTS

2.1 Background of Survey Respondents

79% of respondents (67) indicated that they had used the AusHFG to inform the briefing, design, construction or post occupancy evaluation of NSW hospital projects.

Practice jurisdiction

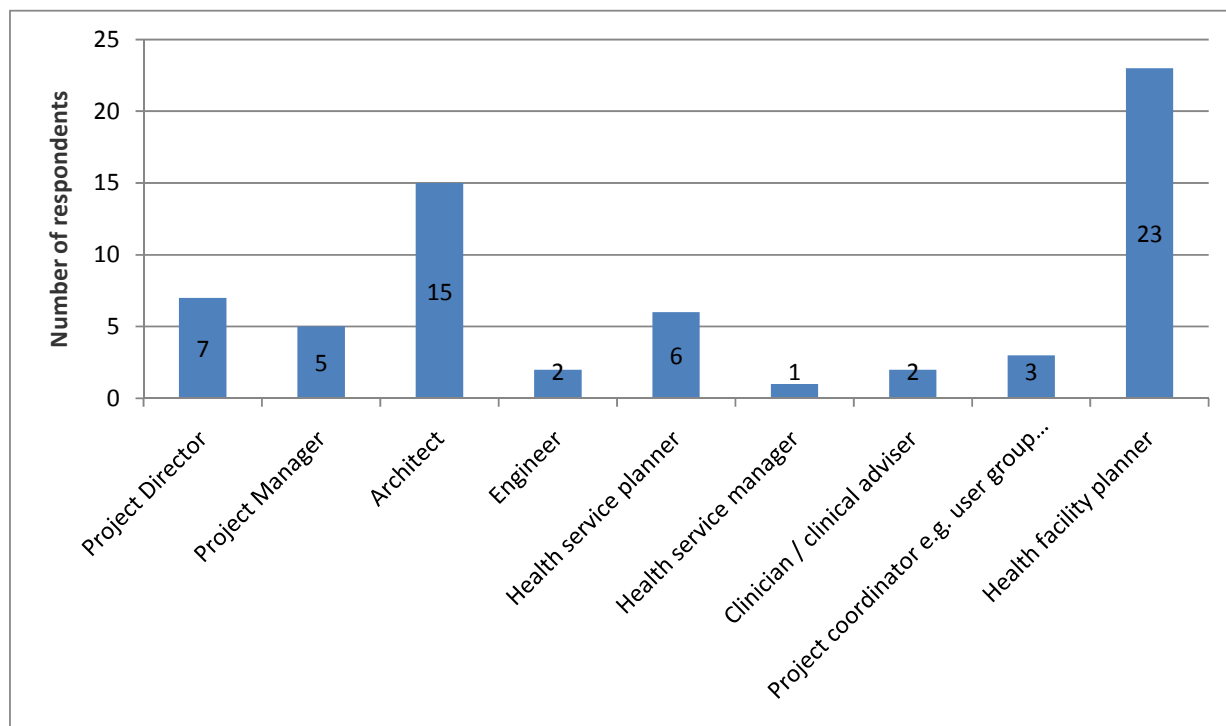
88% of respondents (57) identified that they mainly practice in NSW (question 1.1). Twenty three survey participants skipped this question.

Project role

Participants were asked to indicate their main role on a project (question 1.2). The largest group of respondents identified as health facility planners (34%, 22), followed by architects (23%, 15), Project

Directors (11%, 7). There were small numbers of respondents in the other categories of interest, with the exception of designer/draftspersons or interior designers.

Figure 1: Main role identified on hospital projects (64 responses)



2.2 Use of the AusHFG by respondents

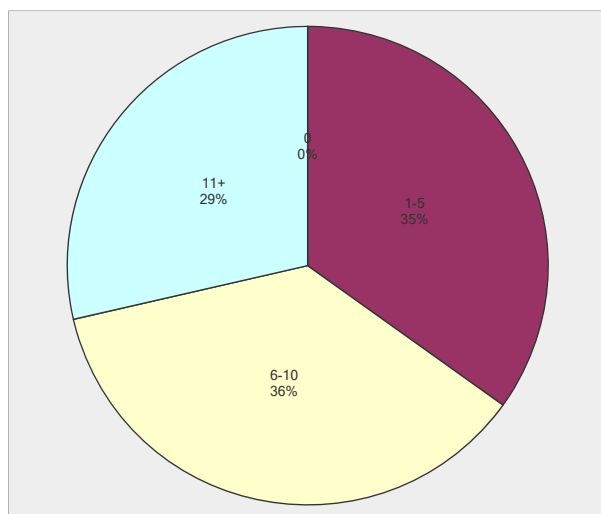
Private and public sector utilisation

96% of respondents (61) have used the AusHFG for public sector hospital projects (question 2.1). 31% of respondents (20) have used the AusHFG for private sector hospital projects.

The survey sought clarification as to whether work was predominantly in the public or private sector. Twenty one of the 25 respondents to this question indicated that they mainly work on public sector projects.

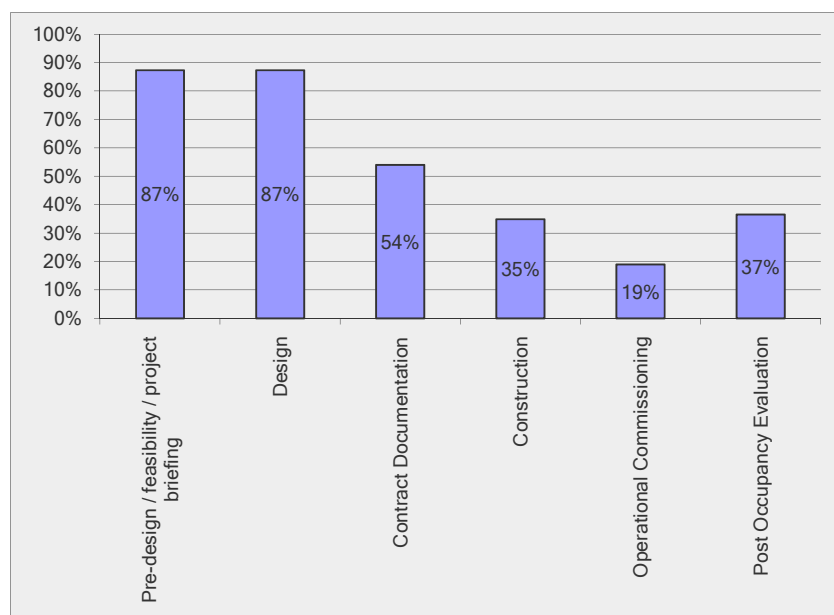
Extent of AusHFG utilisation

The AusHFG were launched in December 2006. Feedback was sought on the extent of utilization of the guidelines since that time (question 3.1). All respondents to this question had used the AusHFG. 35% of respondents (22) had used the AusHFG on between one and five projects. Twenty three people (37%) had used the AusHFG 6 to 10 times and eighteen people (29%) had used the AusHFG in excess of 11 times. For these high volume users, estimates ranged from utilisation on 13 to 43 projects. Overall, the respondents demonstrated high utilisation of the AusHFG as illustrated below.

Figure 2: Number of hospital projects on which respondents have used the AusHFG used since December 2006 (63 responses)

Project stages at which the AusHFG is used

Respondents (63) were asked to indicate all project stages at which they had ever referred to the AusHFG (question 4.1). The AusHFG was most commonly consulted by 87% of respondents (55) at the Pre-design/ Feasibility / Project Briefing stage and the Design stage. It was least likely to be used at Operational Commissioning (12 responses; 19%).

Figure 3: Summary of project stages at which respondents used the AusHFG for hospital projects (63 responses)

The following table reviews utilization of the guidelines for the four roles that respondents most commonly identified themselves as fulfilling on hospital projects. Health Facility Planners were more likely to use the AusHFG at all stages of the project. 100% of Health Facility Planners, Project Directors and Health Service Planners used the AusHFG for the Design phase and recorded high use for the Pre-

design/ Feasibility/ Project Briefing phase. Architects had high utilisation of the AusHFG at Contract Documentation stage. Respondents were least likely to refer to the AusHFG for Operational Commissioning.

Table 1: Utilisation of AusHFG according to the four most commonly identified main roles on hospital projects

Project Stage	Health Facility Planner (23)	Architect (15)	Project Director (7)	Health Service Planner (6)
Pre-design / feasibility / project briefing	100%	87%	100%	100%
Design	91%	100%	72%	100%
Contract Documentation	48%	93%	29%	33%
Construction	43%	40%	29%	0%
Operational Commissioning	33%	0%	0%	17%
Post Occupancy Evaluation	43%	13%	43%	6%

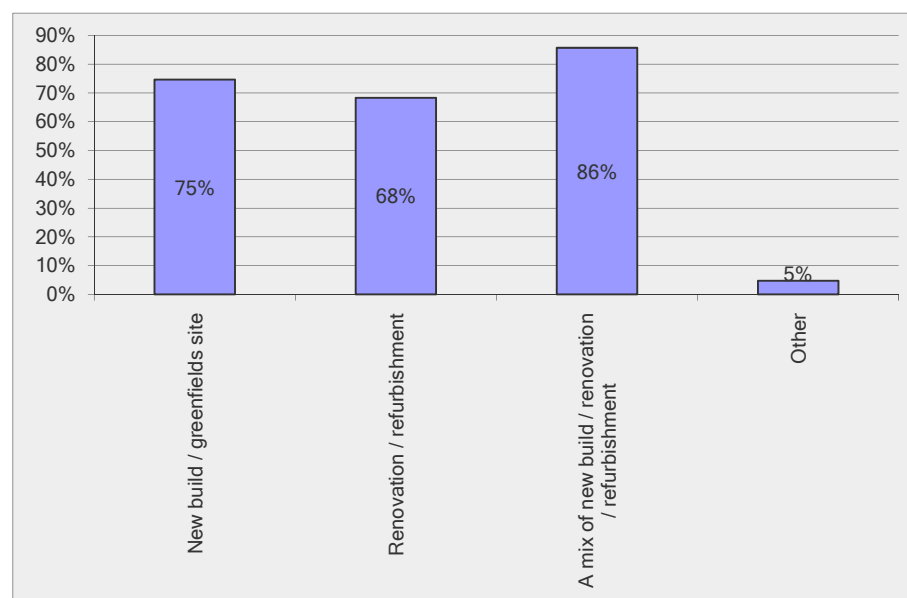
() indicates number of respondents.

Project type

While respondents are most commonly using the AusHFG for projects that are a mix of new build/renovation/refurbishment projects (86%,54), they are also being well used across new build/greenfield projects (75%,47) and renovation/refurbishment projects (68%,43) (question 5.1). The AusHFG have also been applied to heritage and private public partnership projects (3 responses).

It is evident from these responses that application of the AusHFG needs to be sufficiently broad to accommodate the needs of both new build projects as well as projects which incorporate existing buildings.

Figure 4: Types of hospital projects for which the AusHFG have been used (63 responses)



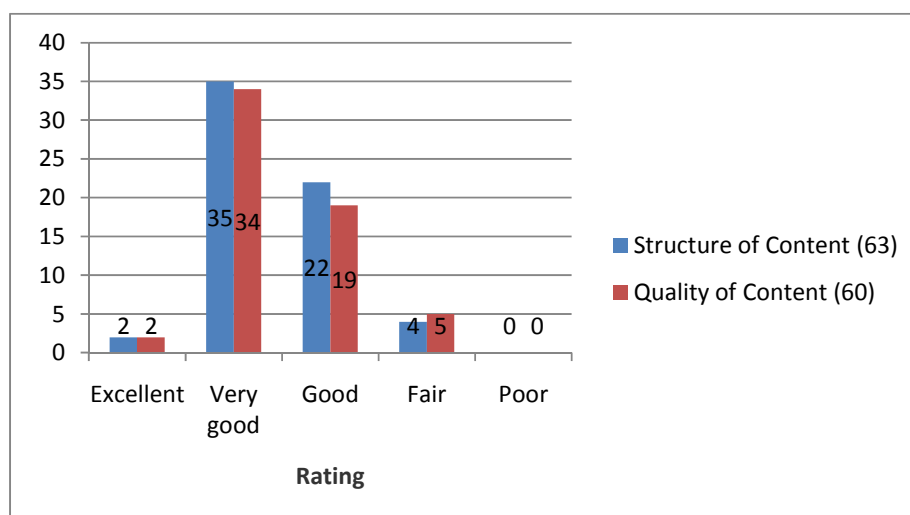
2.3 Satisfaction with the AusHFG

Structure, Organisation and Content

Survey participants were asked to evaluate the overall structure and organization of the AusHFG (question 6.1), as well as the quality of the content in assisting project briefing and design processes (question 7.1). The results are shown in the figure.

Generally the respondents gave similar assessments of the AusHFG structure of content and quality of content. Over 92% of respondents (59, 55) considered the structure and quality of content to be 'good', 'very good' or 'excellent'. Small numbers considered structure and content quality to be 'fair', and no one rated either as 'poor'.

Figure 5: Evaluation of overall structure and quality of content of AusHFG (63,60 responses)



The following comments were made in relation to the structure and organisation of information in the AusHFG:

- *At times the mix of services involved in a project may be different to the configuration provided in the AusHFG requiring "like services/areas" to be considered as equivalents.*
- *The structure is not clear to new users who need to understand that a number of different guidelines need to be read to get a complete understanding of the guidelines applicable to their project. This is most evident at start up meetings where users attempt to familiarise themselves with the guidelines. The Part A, B, C etc system is not particularly a good interface for users - it either requires a reconsideration of making the document more integrated (so that sections are not read out of context) or at least the web page could be made more user friendly, attractive and have the steps and links presented through easier pathways, rather than just drop down menus. It would be good to have links between the separate components to ensure that relevant guidelines are not overlooked*
- *Guidelines themselves are good but website could be more readily searchable. A full web-based system would be much easier rather than having to scroll through large .pdf documents to find*

particular information. Text should be available as word and excel files and in smaller bit sizes. It should be possible to type keywords (e.g. endoscopy) and find the appropriate guideline and associated information. The website interface could be improved to allow for faster access to particular rooms or draft schedules of accommodation without having to get through layers of information. This system would also make it easier to keep the AusHFG current and consistent.

- *A comprehensive index is required to allow easy location of info e.g. circulation allowances.*
- *Some of the cross referencing can be improved between the sections of the whole document. Better 'intuitive' links between the various related sections would be helpful e.g. from Inpatient Unit a link to Security or Infection Control.*
- *There should be enough information in the body text to enable a reasonable understanding of how the Department / Room is used and functions. This information needs to be in the body as most designers have a ridiculously short time table for early responses. External references for information are usually ignored. Most guidelines now approach this level of information. The drawn plans and data sheets are also the first point of call after the schedules of area.*
- *Regular revision so that it is a live document is essential.*
- *HPUs need to be smaller and more generic.*
- *Post Occupancy Evaluation (POE) findings should be available to learn of problems and/or improvements that can inform planning and overcome the significant time lag before such findings can be incorporated in the revision process of an individual HPU.*
- *There needs to be a simple feedback mechanism so that there is the opportunity for comment to be made at any time, not just when a Guideline is reviewed - e.g. a simple email to a specified email address. The onus should then be on CHAA to follow it up.*
- *There is a significant information gap which needs to be bridged. A number of project directors/managers, architects, engineers and health service staff are unaware and/or unfamiliar with the HPUs and are missing out on utilising the valuable information available to inform design that addresses clinical and service objectives.*
- *Further development of room types, e.g. cancer centre bunkers.*
- *Inclusion of access considerations e.g. required door nibs, sliding door options.*
- *Include a description of the room area measurement methodology, e.g. areas are calculated from centre line of shared walls and external walls, external face of corridor walls*
- *It is a very useful document, easy to use, useful information. It is problematic when project teams and area executive use it as the bible to keep cost down when users put forward a reasonable and informed request for improved design.*
- *RLS & RDS be provided as one for each room to save having to compile them each time.*
- *RDS be provided as a word or excel file for ease of our own and user group modification where variation for specific functionality is required. Otherwise we have to prepare our own which increases workload in relation to AusHFG and Health Facility Briefing System (HFBS).*

The following comments were made in relation to the quality of AusHFG content:

- *Often very simplistic in terms of discussions of models of service delivery for some AusHFG. New models of care that require varying facility solutions aren't always captured; keeping up to date is a problem.*

- *Make individual Unit/Departments available as separate downloadable files in word with schedules of accommodation available on excel.*
- *Infection control could have more detail.*
- *Information is slow to be updated and does not reflect current practice as change is happening so quickly, particularly in relation to equipment and services.*
- *More guidelines on costings would be helpful.*
- *In briefing projects, clients require more accurate benchmarking for departmental as well as room types which is not readily provided by AusHFG. The only benchmarking information available in Australia is currently old Victorian Benchmarks which are out of date for current models of care.*
- *AusHFG are getting too specific and push a particular type of model of care e.g. cardiology diagnostics and Cath lab HFG promote an institute type approach. The AusHFG should focus on the common units at all hospitals, not facilities planned at L6 hospitals (e.g. PET, Cath labs etc).*
- *Conflicting views on whether the guidelines are templates or guidance only.*
- *There remains some confusion as to what is a minimum requirement and what is a guide only.*
- *Within the room standards more detail on the background to the requirements would help. i.e. bed spacing related to infection control for circulation of equipment etc.*
- *There is a lack of information regarding building services requirements, particularly for rooms with specialist medical equipment such as MRIs, CT/PET scanners and LINAC. As a technical reviewer on a PPP, it is apparent that there is not enough guidance for engineers who do not normally practice in this space, causing inadequate services to be provided and large variations.*
- *RDS, RLS do not reflect current or best practice. A complete review is required. Room Layout sheets need to reflect issues around access, particularly for DDA compliance and Bariatric requirements.*
- *Room Data Sheets are generic and therefore require amendment for specific sites and health services as part of the design process - however, there is a desperate need for RDS amendments (e.g. deletions or additions) to be clearly flagged in any web based system so that room layout sheets are also amended for individual sites.*
- *Guidelines need to be reviewed against BCA, disabled standards, etc as there are some conflicts e.g. use of sliding doors, bedrooms without windows. New Section J may have impact.*
- *Guidance on compliance with DDA would be useful.*
- *Both the AusHFG and the HFBS are used to complete a project profile and detail the documentation. Inconsistencies between the two sets of guidelines have emerged over time and are getting more pronounced as time passes. For example, frequently the RDSs on the HFBS do not reflect the current HPU and over specification can occur unless RDSs are individually adjusted. A process to cross-reference the two systems needs to be introduced and maintained.*
- *Better coverage of some of the optional components and why these might be considered/rejected.*
- *DS26 is most helpful in getting projects defined in the early stages, especially useful when you start out in the field of facility planning.*
- *Room listing should incorporate pending rooms.*

Content of Part A – Part F

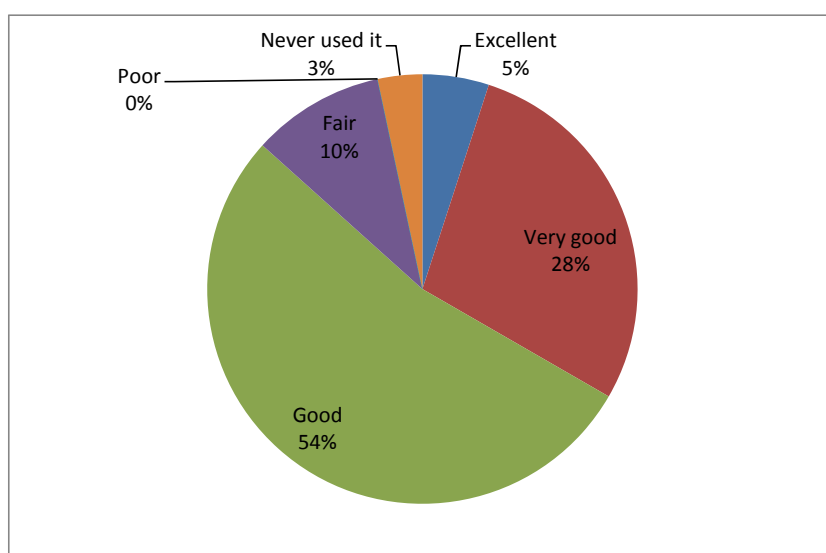
Survey participants were asked to rate the content of the various elements of the guidelines from Part A through Part F (Question 7.2). Figures summarising the responses follow.

Part A – Instructions for Use

Part A contains instructions for use of the AusHFG.

- Twenty respondents (33%) considered the quality of content in Part A to be ‘very good’ or ‘excellent’.
- Thirty two respondents (53%) considered Part A to be ‘good’.
- Six respondents (10%) considered the Part A content to ‘fair’, but no one rated it as ‘poor’.
- Two respondents had never used Part A.

Figure 6: Evaluation of Part A: Instructions for Use (60 responses)

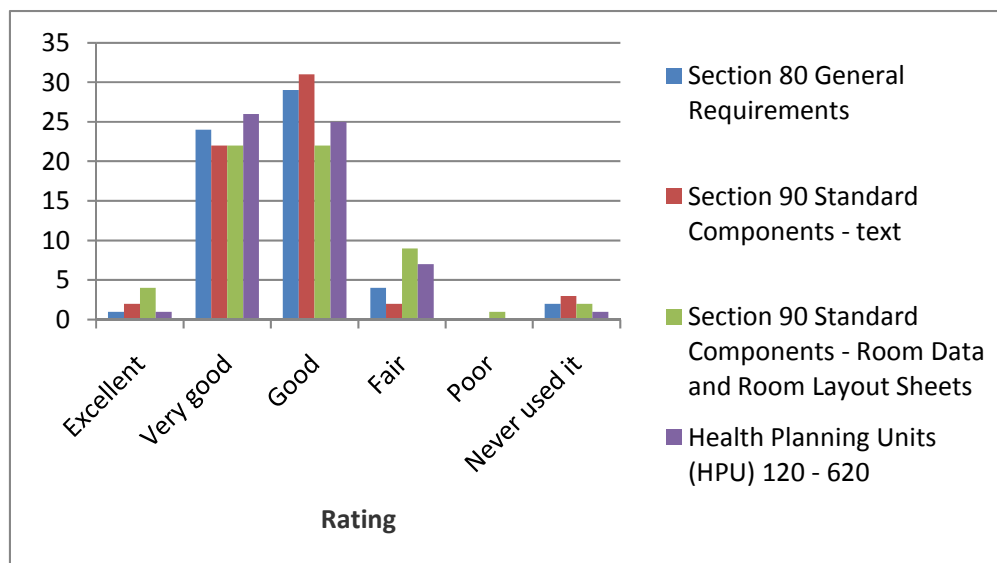


Part B

Part B contains information relating to overall planning principles and operational policies (Section 80), specific HPU information (Sections 120-620) and Standard Components Room Data Sheets (RDS) and Room Layout Sheets (RLS) (Section 90). Key data are:

- All elements of Part B had a rating of ‘excellent’ or ‘very good’ by 40-45% of respondents.
- Ratings for room data sheets and room layout sheets seem to have the largest spread, with four respondents rating them as ‘excellent’ (the highest number of ‘excellent’ ratings) compared with nine respondents who rated them as ‘fair’, and one as ‘poor’ (the highest number of negative ratings).
- HPUs were rated ‘excellent’ or ‘very good’ by 45% (27) of respondents. However, the HPUs were also rated as only ‘fair’ by 12% (7 respondents).
- Each of the elements of Part B had not been used by a small number of respondents.

Figure 7: Evaluation of Part B – General Requirements, Standard Components, Room Data Sheets and Room Layout Sheets, Health Planning Units 120 – 620 (60 responses)

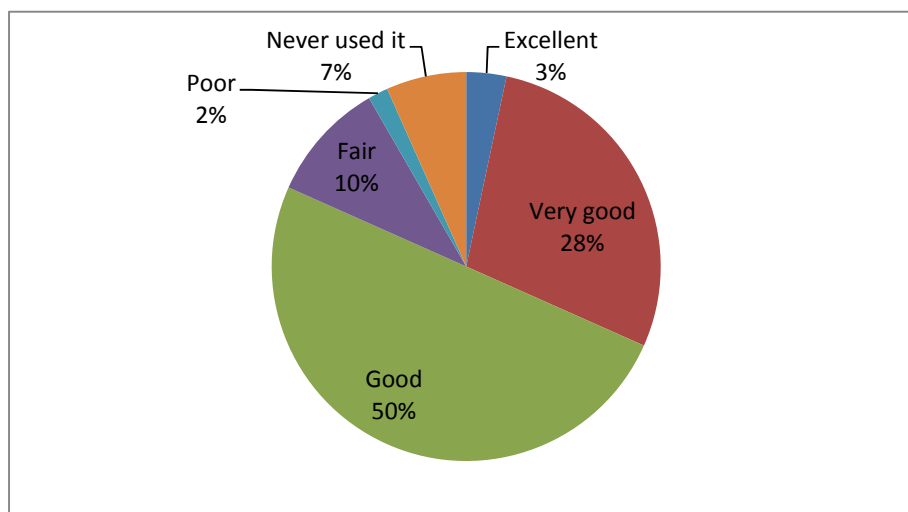


Part C – access, mobility, OHS, and security

Part C contains information on Access, Mobility, OHS and Security.

- Nineteen respondents (31%) rated Part C as 'excellent' or 'very good'.
- Thirty (50%) rated Part C as 'good'.
- Seven (12%) rated Part C as 'fair' or 'poor'.
- Four participants (7%) had not used this section.

Figure 8: Evaluation of Part C – Access, Mobility, OHS, and Security (60 responses)

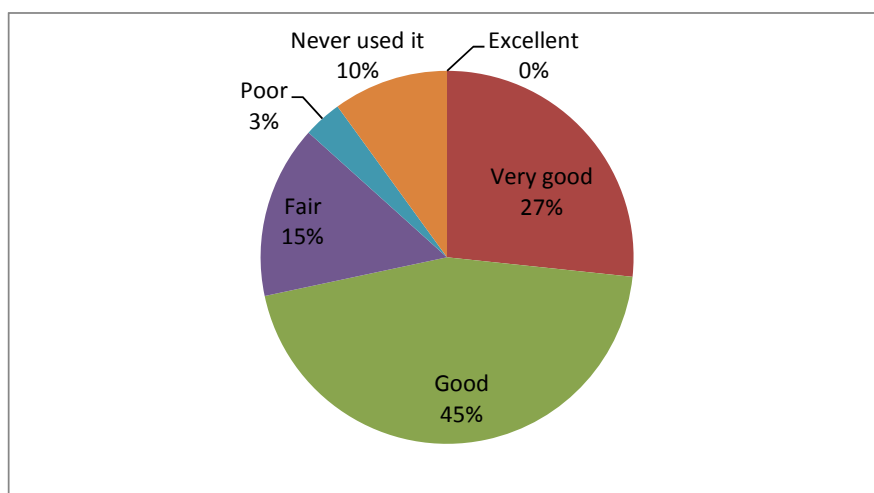


Part D- infection prevention and control

Part D contains information on infection prevention and control.

- No participants rated Part D as 'excellent', the only Part of the AusHFG for which this was the case.
- Forty three people (72%) considered this Part to be 'very good' or 'good'.
- Eleven respondents (18%) considered Part D to be 'fair' or 'poor'.

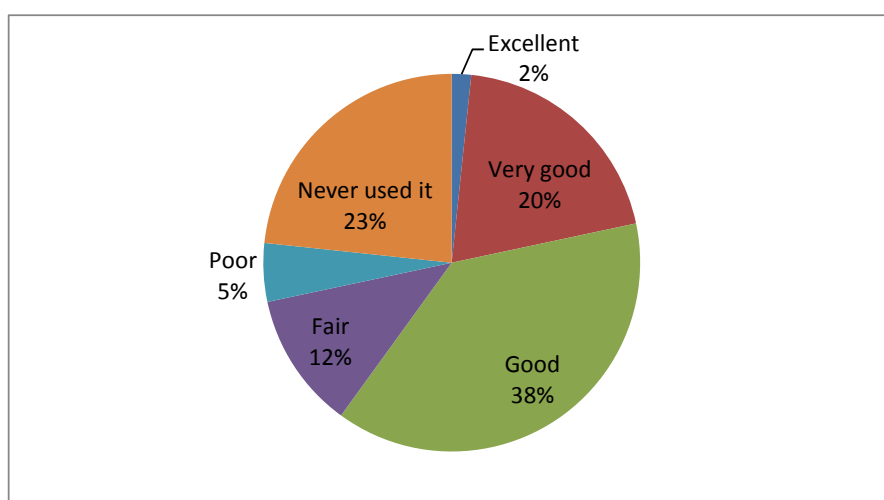
Figure 9: Evaluation of Part D – Infection Prevention and Control (60 responses)



Part E – Engineering services

- Only 77% (46) of participants have used Part E, presumably because of the specialist nature of the information, and alternative sources of information being available in NSW e.g.TS-11.
- Twelve (22%) rated Part E as 'excellent' or 'very good'.
- Ten respondents (17%) rated the content of this section as 'fair' or 'poor'.

Figure 10: Evaluation of Part E – Engineering Services (60 responses)

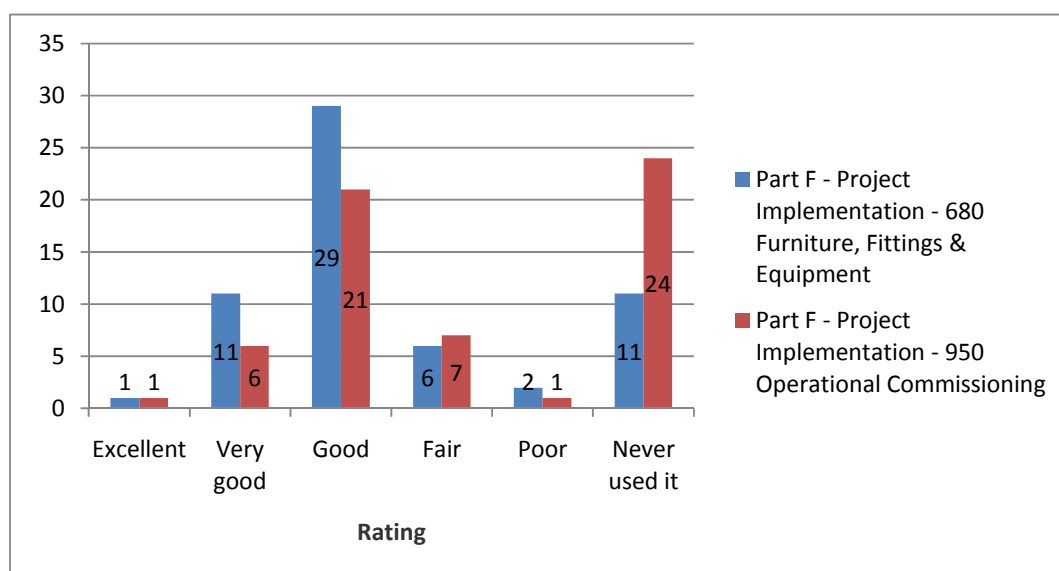


Part F

Sections on Project Implementation (Part F) were poorly utilized by participants. Given that these are NSW-specific sections and provided for information to other AusHFG users, this is perhaps not surprising.

- Twenty four participants (40%) had never used information on Operational Commissioning
- Eleven (18%) had never used information on Furniture, Fittings and Equipment (FFE).
- Of those who have used FFE content, twelve respondents (24%) rated FFE content as 'excellent' or 'very good' and eight (16%) rated it as 'fair' or 'poor'.
- Of those who have used Operational Commissioning content, seven participants (19%) rated Operational Commissioning content as 'excellent' or 'very good', compared with eight (22%) who rated it as 'fair' or 'poor'.

Figure 11: Evaluation of Part F Project Implementation – Furniture, Fittings and Equipment, and Operational Commissioning (60 responses)

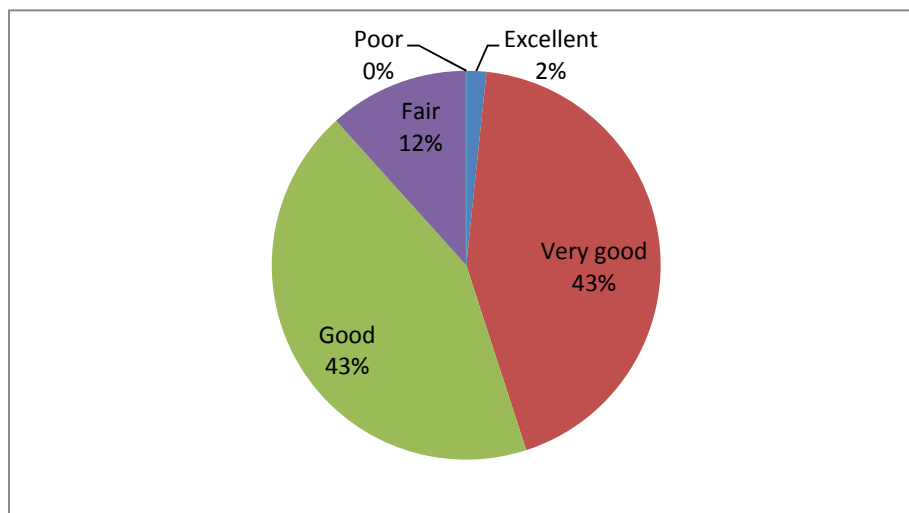


Format

Participants were asked to comment on the format of the documents for ease of reading and understanding the AusHFG (question 8.1).

The format was rated by 43% (26) of participants as 'very good' and 'good' respectively accounting for the majority of respondents answers (86%).

Figure 12: Evaluation of the format for ease of reading and understanding the AusHFG (60 responses)



The following written comments were made in regard to the format in terms of ease of reading and understanding.

- *It may be worthwhile to have a summary of how all the documentation fits together (e.g. AusHFG on a page) which may draw out the relationships between different components.*
- *It can be a cumbersome process to find particular information. In some HPUs word-search does not work, so the whole document must be read to find a particular issue. Suggest inclusion of detailed index with hyperlinks or suitable search function (e.g. OCR text in the documents for text searches).*
- *Being able to open multiple windows would be advantageous to enable on-line comparison of different text, drawings etc. This would also eliminate the frustration of closing Explorer if the close button is accidentally selected rather than the back button.*
- *The partitioning of the AusHFG separates general sections from the specific clinical unit section. This does cause a disconnect when using the guideline in planning individual units/facilities. Given that it is web based, and not paper based, there could be a 'complete' set of guidelines established for each clinical area including HPU, RDS, RLS, relevant infection control sections, corridor widths, basin types etc.*
- *Faster access to relevant information is needed, particularly Room Data & Room layout information, as well as draft schedules of accommodation.*
- *Keep the same format for each Guideline so the same sort of info is in the same relative space.*
- *At times the documents are repetitious and contain too much information.*
- *Space layouts to scale would be beneficial.*
- *I usually go straight to the tables rather than read through the prose as it is easier to gather information quickly.*
- *I find that the HPU's are easy to read - useful references, clarity of information, especially in planning areas that have low familiarity.*
- *POE findings would be a useful adjunct.*

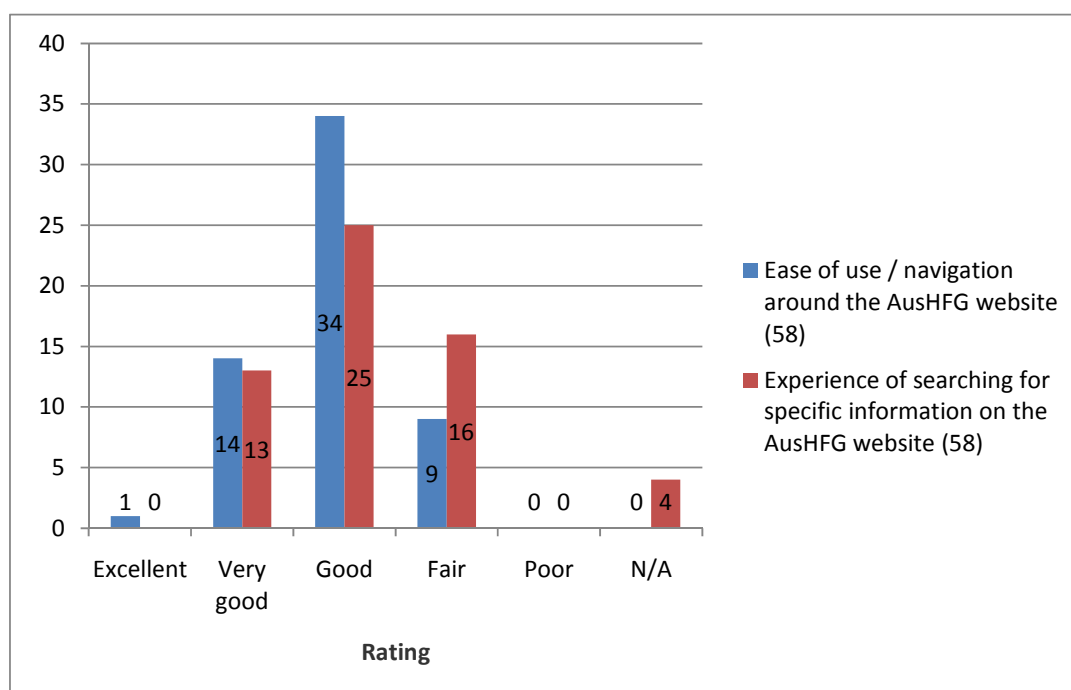
- *Instead of statement of theoretical intention, actually state examples of requirements - e.g. applicable basins and tap ware.*

AusHFG Website

Respondents were asked to comment on the ease of navigation around the AusHFG website as well as the ease of searching for specific information (questions 9.1 and 9.2). These questions have particular significance given the number of written comments that were given throughout the survey about the organisation of the material on the internet and the constraints around searching for information.

Participants rated the ease of use / navigation around the website more highly than the experience of searching for specific information. The combined ratings for these elements were approximately the same for 'excellent' and 'very good' (26% and 22% respectively), however searching for specific information was rated as 'good' by 43% compared to 59% for ease of use/navigation. 28% rated experience of searching for specific information as 'fair'.

Figure 13: Comparison of ratings for ease of use/navigation of AusHFG website and experience of searching for specific information (58 responses)



The following comments were made in relation to navigation around the website:

- *An improved layout and menu is needed. The opening page is just a list of items - there is no hierarchy, no colour coding, no pathways to establish where to click first. It requires a lot of clicking to find your way. There are not enough visual prompts (e.g. icons). It is a relatively unsophisticated web page.*
- *List individual HPUs on the website and possibly provide links into section B standard HPUs.*
- *It would be useful to have 2+ pages open at once rather than always having to move between pages using the back button.*
- *Reports are really good - it would be useful to be able to configure your own.*
- *At times it is difficult to identify which section I need to reference in the AusHFG based on my project needs. It would be handy to have a search option that allowed the user to enter a series of descriptors and then come up with suggested sections that might be relevant.*
- *At times it is hard to find specific things easily e.g. Isolation rooms. More indexing (for each section) or search by keywords, such as 'safety glass' or 'fixtures for mental health' is required.*
- *More direct access to RDS & Room layouts.*
- *The linking between the FF&E library could be improved.*
- *Because I'm familiar with the content I find it easy to navigate but some of my colleagues who aren't as familiar with it find it difficult to navigate, due to layout, terminology and assumed knowledge.*
- *There are a number of items under 'Project News' which relate to 2008, etc. - so who keeps this type of information up to date?*
- *Personally I prefer to use the printed version, so I can find exactly what I want in it instantly. I am less familiar with the website so it takes me longer to get exactly what I want.*

2.4 Effectiveness of the AusHFG in realizing anticipated benefits

Streamlining of project briefing and increasing reliability of estimates

In separate questions respondents were asked their perception of the effectiveness of AusHFG in:

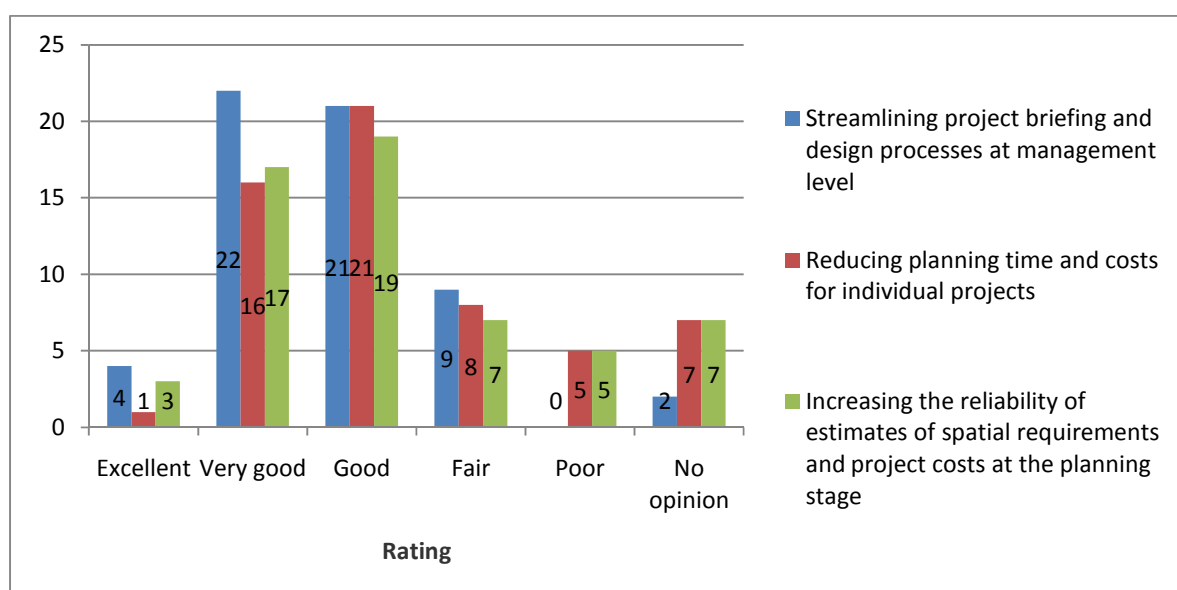
- streamlining project briefing and design processes at management level i.e. for health departments/authorities; capital asset managers; project directors (question 10.1)
- reducing planning time and costs for individual projects (question 10.2)
- increasing the reliability of estimates of spatial requirements and project costs at planning stages of projects (question 11.1).

The following observations can be made in relation to the ratings applied by the respondents:

- 45% (26) indicated that the AusHFG was 'very good' or 'excellent' as a means of streamlining the project briefing and design processes at management level. 15% (9) rated this aspect as 'fair'.
- 29% (18) rated the AusHFG as 'very good' or better in reducing planning time and costs for individual projects. 22% of participants (13) rated the effectiveness of this aspect as 'fair' or 'poor'.

- 34% (20) rated AusHFG as 'very good' or better for increasing the reliability of spatial and cost estimates at planning phase. 21% of participants (12) rated the effectiveness of the AusHFG in achieving greater reliability in this aspect as 'fair' or 'poor'.
- 12% of respondents (7) had no opinion as to whether the AusHFG had been effective in reducing planning time and costs for individual projects or increasing reliability of spatial estimates and project costs at planning stage, compared to 3% of participants (2) who had no opinion on its effectiveness in streamlining project briefing and design processes at management level.

Figure 14: Effectiveness of the AusHFG in: streamlining project briefing and design processes at management level; reducing planning time and costs for individual projects; increasing reliability of spatial and project cost estimates at the planning stage (58 responses)



The following comments were included in response to the effectiveness of the AusHFG in achieving streamlined project briefing and design processes at management level. They have been broadly grouped into positive, mixed and negative comments.

Positive comments regarding effectiveness in streamlining project briefing and design processes:

- *It provides a very good baseline of information to work from, which can be tailored to the specific requirements of a project. It is also a starting point for negotiations about variations.*
- *There currently seems to be a good perspective on the balance between being a guideline and a bible.*
- *The AusHFG is effective in providing common ground for reference and comparison between facilities.*
- *There is a real acceptance by health clients that the AusHFG represents a good body of work that has been researched so clients need good reasons for operating outside the guidelines.*
- *Provides information to often health industry-naïve people which decreases the risk of an inappropriate building being planned, designed and constructed.*
- *Standardisation improves the fit-for-purpose nature of the buildings.*

Mixed comments regarding effectiveness in streamlining project briefing and design processes:

- *Clearly some parts of the AusHFG are better than others and over time people are becoming more familiar with the system. A significant issue is that people see this system as a standard equal to the BCA rather than as guidance, making it difficult to vary from it at all.*
- *Very good for a starting point, but doing initial budget costing based solely on the areas/HPUs produced by the AusHFG is leading to some underestimating. This is particularly true in the rural sector which do not necessarily fit the straight generic models for healthcare. In addition adapting the FF&E budgets and equipment directly from the AusHFG is very misleading and causing some difficulties at present.*
- *Perhaps what is lost, is that it is only a guide, and that local patient, clinical and site specifics will play an important role in its application. As such, there is indeed a limit to how helpful it could be. Perhaps it could link with real built examples of facilities, to show the varied ways that a particular HPU could be applied.*
- *Where I am briefing a service which falls "neatly" into an HPU then the guidelines are generally useful in streamlining planning processes and dealing with arguments from User groups. However, projects which are not "typical" require selective use of the guidelines as a basis for a schedule of accommodation.*
- *There needs to be skilled staff to support the process otherwise there can be issues.*
- *Dependent upon the design team, the AusHFG can make interactions with users simpler, however it can also confuse users into "signing off" on something they don't understand & haven't had the time to gain any understanding of.*
- *There needs to be an understanding by users that these are guidelines and not standards.*
- *In some projects the AusHFG is used as the mandatory requirements rather than a guide. This at times creates controversy as to what is allowable within any given project, taking into consideration hospital policies and guidelines that may affect a department.*
- *Project briefing is still very much project specific and ideally the guidelines should only be a base reference and interpreted for site specific information.*
- *The AusHFG has been used to provide benchmarks for design space for both Users and Hospital Executives. However, the authority of the AusHFG often needs to be emphasised when retrofitting or refurbishing space as ever increasing space demands are often a problem to achieve.*

Negative comments regarding effectiveness in streamlining project briefing and design processes:

- *The system needs to be up to date if this is to be the guide in terms of pricing and planning.*
- *As the AusHFG does not provide ready comparisons for benchmarking, health departments are not able to use the information available for easy comparisons on a hospital wide basis.*
- *There remains little understanding by most clinicians about the importance of the compliance / variation process.*
- *I wish that management kept them as briefing documents and not progressive 'reporting' documents. Too much time is spent updating them. If necessary, make the final layout reporting part of the POE and note the changes wrought during the design & build.*

- *Significant problems can arise because the guidelines and in particular the SOAs are insufficient for Level 6 facilities.*
- *AusHFG is too frequently wielded as a weapon to curtail costs and prevents detailed consideration of project requirements.*
- *The requirements for project variations establishes a benchmark which requires additional work and analysis to justify why the area should be increased or decreased.*
- *Often the layouts do not reflect the requirements of the users particularly if we focus on the "process" of delivery of Health Services. It often hampers the ability to argue for more open planning and better observation because some authorities regard them to be more than guidelines.*
- *A considerable number of people at management level have little understanding of the importance and relevance of the AusHFG - nor of the implications of generic standard room data and room layout sheets being used in Contract documents without modification for site and individual health service requirements to provide 'fit for purpose' functional buildings. What may be suitable for Westmead Hospital is certainly not relevant for a Level 2 Multi Purpose Service - e.g. a standard bedroom in an acute Hospital is far from suitable for an aged care resident!*
- *There are serious problems in using the AusHFG as a "blunt" instrument to determine areas and costs for feasibility studies- as these studies often occur a long time before the development of a detailed model-of-care and are impacted by rapidly changing care philosophies and technologies.*
- *Failure of the AusHFG and the HFBS to reflect each other has resulted in over-specification of several smaller health facilities in the recent past.*

The following suggestions were made in relation to streamlining project briefing and design processes:

- *Has consideration been given to developing updated "benchmarks" of spatial requirements as per the Victorian HFG? This may further streamline the SPP planning phase of a project, although with increasing brownfield works may not be as applicable.*
- *Provision of searchable .pdf documents, and word/excel RDS would further streamline briefing and design processes at management level.*

The following comments were provided in relation to the effectiveness of AusHFG reducing planning time and costs for individual projects. Some comments are positive in their assessment, others do not believe there have been gains, whilst others note advantages and disadvantages of the AusHFG in achieving reduced planning time and costs. They have been broadly grouped along these lines.

Positive comments regarding effectiveness in reducing planning time and costs:

- *The AusHFG is especially effective when used in conjunction with the HFBS.*
- *I found them to be very useful in assisting me to get the best design I could manage in the best time possible.*
- *Most clinicians are unaware of/inexperienced in the facility planning process and the AusHFG provides a useful framework for the planning of a project according to industry benchmarks and standards. Without them it could take a lot longer to project manage.*

- *The standard components are established and the time of clinicians etc is focussed upon the non standard or specific elements - which is a better use of their time.*
- *The AusHFG make it much easier to put together a schedule of accommodation.*
- *Some examples from the AusHFG have been used to develop a Project Information Book to assist User Groups at the commencement of a Project.*
- *Because the guidelines have credibility there is a growing acceptance in the absence of a specifically contested issue.*
- *Standardisation provides a known framework against which all projects can be judged.*
- *It saves reinventing the wheel for every project and is a great reminder for things that need to be considered.*
- *It is a good tool for arguing against cost cuts at project pricing stages.*

Mixed comments regarding effectiveness in reducing planning time and costs:

- *In offices which have a history of health projects, there is no reduction in planning time as the information already exists within the office. There is most likely value to offices with smaller knowledge bases in health planning.*
- *It only reduces planning time in terms of standard components, or easy sites/locations. It does not assist where a particular unit is not a straight forward copy of the HPU or where the HPU is silent or provides opportunities for variation. These issues are still time consuming for the user group to clarify and agree on.*
- *There stills need to be a well developed Model of Care which is time consuming and often missing. The health briefing system is trying to fill this gap, which leads to problems in defining scope and how other systems (e.g. support services such as food) work.*
- *Reducing cost and time in the planning stage are good things but not at the operational cost of the organisation. The Guidelines should not be used to dispense with a detailed and well considered briefing.*
- *Effectiveness in reducing planning time depends on the strength of the facilitator with the user groups. I have been in user group meetings that talk about what goes in a dirty utility room for an hour - which is completely unnecessary.*
- *I think they are good in providing baseline information. However there is at times a perception that they are not contemporary, which means that potential planning time / cost benefits are not fully achieved.*
- *It establishes a benchmark for projects across Australia. However it does not reflect what is happening in other countries and current new benchmarks.*
- *They are a starting point for discussion, but don't really save any time.*
- *RLS and RDS need to be thoroughly reviewed and amended for each project and can't be used as a base for project documentation.*
- *Enables large amounts of information to be generated automatically and quickly but this still needs checking to guide against inappropriate specification.*

Negative comments regarding effectiveness in reducing planning time and costs:

- *Not convinced it actually does reduce planning times & costs - particularly given some of the other poor documentation for projects.*
- *Much time is spent on progressive updates and issues of Room data sheets.*
- *Modification of RDS and RLS on the web based system is time consuming and often not embraced by the design team.*
- *There is no capacity to include 'non-standard' items of FF&FE on the web based system. Costings in this component of the web based system are not always accurate and can skew cost estimates. It is suggested that FF&FE costings should not be included in the system - but that a percentage of the budget should be allocated for FF&FE items.*
- *Too much is being omitted because the guidelines do not provide sufficient information for Level 6 facilities. Nor do they address site specific requirements.*
- *Projects managed by people who do not know fully understand the clinical stream ended up over-briefing the project as they used the AusHFG as the bible instead of as a guideline.*
- *Little impact for private sector refurbishment works.*

The following comments were received in relation to the extent to which the AusHFG has increased the reliability of estimates of spatial requirements and project costs at planning stages of projects.

Positive comments regarding reliability of estimates of spatial requirements and project costs:

- *The HPUs ensure that most of the essential areas are included in the planning.*
- *The reliability of spatial requirements has substantially increased over the time the guidelines have been in place.*
- *The process of estimating space and costs has been streamlined, and industry has benefited from standard definitions and understanding.*

Mixed comments regarding reliability of estimates of spatial requirements and project costs:

- *It is difficult to judge. One assumes that if we get realistic areas then we must improve the costing of projects. Where we sometimes get it wrong is in the 'non spaces' such as corridors. It would be good to come up with a better system to manage these at briefing stages.*
- *I think the level of experience/ ability of the QS/planner using the tools has a significant influence over the outcome.*
- *As estimates and areas are not provided for each unit within the AusHFG. (i.e. room sizes are advised, but not numbers of rooms for each unit), their use is limited for estimating and benchmarking.*
- *Good for spatial estimates - although some contingency in spatial requirements is increasingly seen to be required at planning stage as the guidelines don't fully cover requirements.*
- *In terms of project costs, the spatial requirements are just one component of project costs. There are significant other project and site specific costs which impact on overall project end cost. Not sure of how much the guidelines cross reference capital cost square metre rates and whether*

there are opportunities with Health Infrastructure to benchmark costings for greater robustness in the planning stage. What has been done with contingencies is a sensible approach.

- *Effectiveness depends on the experience of the planner using the tool.*
- *Need to factor in contingency to allow for changes in project scope etc in early stages of planning.*
- *In private sector refurbishments, many of the space estimates are unachievable. This being said, it allows us to work towards 'best practice' design.*

Negative comments regarding reliability of estimates of spatial requirements and project costs:

- *Many spaces need review. Particularly interventional rooms, imaging rooms.*
- *It does not assist with estimating building services costs. The QS always underestimates them.*
- *The growth we have seen in the latest project has been in circulation and engineering plant areas. This is particularly evident when dealing with existing buildings and building structure and site constraints. These parameters often create obstacles and increase the areas of rooms, corridors etc.*
- *I don't really think the information is reliable enough to base project costing on AusHFG information alone.*
- *Project cost estimates are still a variable factor and I do not know if the AusHFG has reduced risks in this area.*

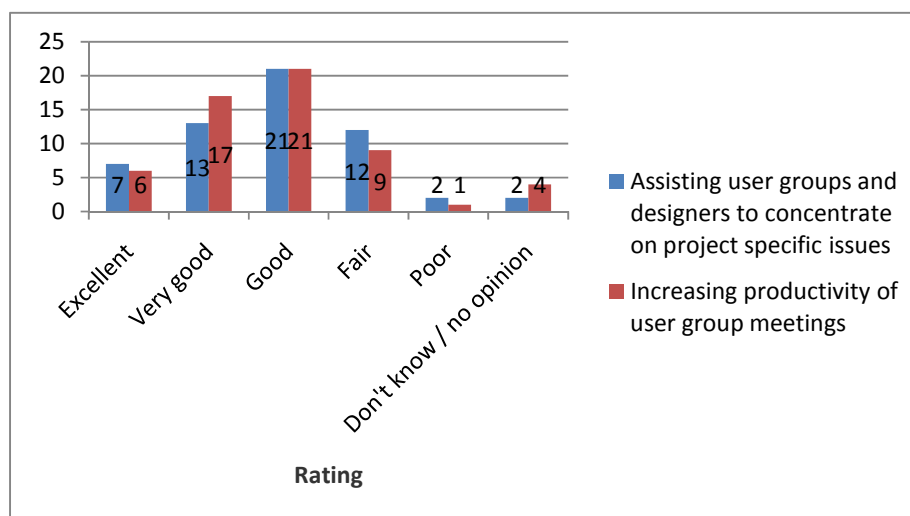
Increasing the effectiveness of user groups

Respondents were asked to rate the effectiveness of the AusHFG in assisting user groups and designers to concentrate their efforts on project-specific issues including design features (question 10.3), as well as increasing the productivity of user group meetings (question 12.3).

Overall these aspects are regarded as strengths of the AusHFG by survey respondents, receiving the largest number of 'excellent' ratings of any of the criteria assessed by the survey.

- 12% (7) rated the AusHFG as 'excellent' in assisting user groups and designers to concentrate on project specific issues. A 'good' or better rating was given by 71% (41). 21% (12) rated the effectiveness as only 'fair'.
- With regard to increasing productivity of user groups, 10% (6) rated the AusHFG as 'excellent'. A 'good' or better rating was given by 76% (44) of respondents. 17% (10) rated this aspect as 'fair' or 'poor'.
- Approximately 37% of respondents (21) rated the AusHFG as 'good' across both of these criteria.
- Small numbers of people did not have an opinion for these criteria.

Figure 15: Respondents' perceptions of the effectiveness of AusHFG in: assisting designers to concentrate efforts on project specific issues (57 responses); increasing the productivity of user group meetings (58 responses)



Participants made the following comments in relation to the effectiveness of the AusHFG in assisting user groups and designers to concentrate on project specific issues.

Positive comments regarding assisting user groups and designers to concentrate on project specific issues:

- *Provides excellent information for rapidly educating and briefing user groups in a standard manner and enables informed decision-making by user groups.*
- *AusHFG has done a lot to unify user groups and stop empire building.*
- *They are good in laying foundations for the process and working through with groups a core set of issues to be resolved in the briefing process.*
- *Lots of ideas can be 'managed' with the use of AusHFG. It reduces the number of 'unique' ideas required by specialist users. The whole picture can often balance the one-off idea.*
- *Most user groups seem to see the 'space sizes' as the project specific issues rather than the broader issues relevant for a particular site. I believe the more we use the system the better this perception will be.*

Mixed comments regarding assisting user groups and designers to concentrate on project specific issues:

- *The HPU provides a quick summary of an area at an early stage of the project, however, it often creates more work in the developing justification for changes and reduces some ability to argue reduction via innovative planning.*
- *AusHFG is effective provided used by experienced teams as a planning tool rather than a shortcut to a planning solution.*
- *I think it assists user groups in understanding space and contents requirements, but the design team has responsibilities in educating the users, broadening their horizons and listening to their particular needs.*

Negative comments regarding assisting user groups and designers to concentrate on project specific issues:

- *The AusHFG is often not up to date with current practice which leads to a lengthy user group process to identify evolving trends and experiences from new facilities.*
- *Many users feel restricted from achieving the model of care that suits their practice by the strictures placed by AusHFG.*
- *Often the user group is still fighting about numbers of Functional Planning Units which should be seen as a given before the process starts.*
- *Often user groups aren't given the appropriate time to understand key issues of design (and influence these as appropriate) despite the fact that they will be using the facility.*
- *I am not sure that the guidelines necessarily give direction on some of the project specific issues, which are influenced by who is on the user group e.g. proportion of single rooms.*
- *There are difficulties / compromises inherent in refitting existing space, which will cause debate in user groups.*

Suggestions:

- *For projects where there is not a consultant architect involved, more detail in RDS e.g. fixtures and services would assist in advising user groups.*
- *Use parametric models for improved user groups understanding.*
- *There are errors particularly between the generic SOA and RLSs. This needs to be rectified. Further, some RLSs in particular have dysfunctional elements that need to be addressed. Refer patient bedrooms, medical imaging etc.*
- *In terms of design features, I wonder whether better linkages may be created between the service driver and the potential design responses to that e.g. bariatric patients.*

Participants made the following comments in relation to the effectiveness of the AusHFG in increasing the productivity of user group interactions /meetings /discussions for hospital project(s).

Positive comments regarding increasing productivity of user groups:

- *Because you have a common reference as a place to start, it's easier to discuss, compare and vary (if required) the spatial needs. It provides a foundation for appropriate planning e.g. a baseline for spatial requirements, a summary of key planning issues, and can be developed to reflect other issues that affect spatial requirements such as site specific issues, OHS, Government policy etc.*
- *It is a good overview - especially when used in conjunction with the Health facility Briefing System.*
- *Discussions can be more controlled with the AusHFG accepted as the guideline.*
- *Room data sheets, proposed FF&E, plan layouts all help as reference documents to ensure we don't just use the 'last amended' ones.*

Mixed comments regarding increasing productivity of user groups:

- *There is certainly a higher level of knowledge amongst user groups in many projects about the existence of the AusHFG but many seek to argue a case for exceptions or variations or disagree with the AusHFG.*
- *User group productivity and interaction is a product of the facilitator's / architect's / project manager's ability, not the initial briefing material he / she provides.*
- *The AusHFG is not necessarily an improvement on the previous NSW HFG, but it is more accessible for user group members being a web based tool.*
- *Many health service personnel are unaware of the AusHFG. They need to be encouraged to access this valuable resource as the AusHFG can be an important change management tool.*
- *AusHFG can increase productivity in consultation process as long as the 'Rules' for changes are in place before the Architects and Engineers are on board.*

Negative comments regarding increasing productivity of user groups:

- *Perhaps many of my projects are "atypical" but the applicability of some guidelines to some projects often creates more debate than it solves!*
- *Mostly seen as too generic and not reflecting the way users practice. Some of this is a change process but some relates to frequency of review and update of AusHFG. Experienced clinicians also question whether the right people have been consulted in the development of the AusHFG. More information on who participated in the development process might be beneficial.*

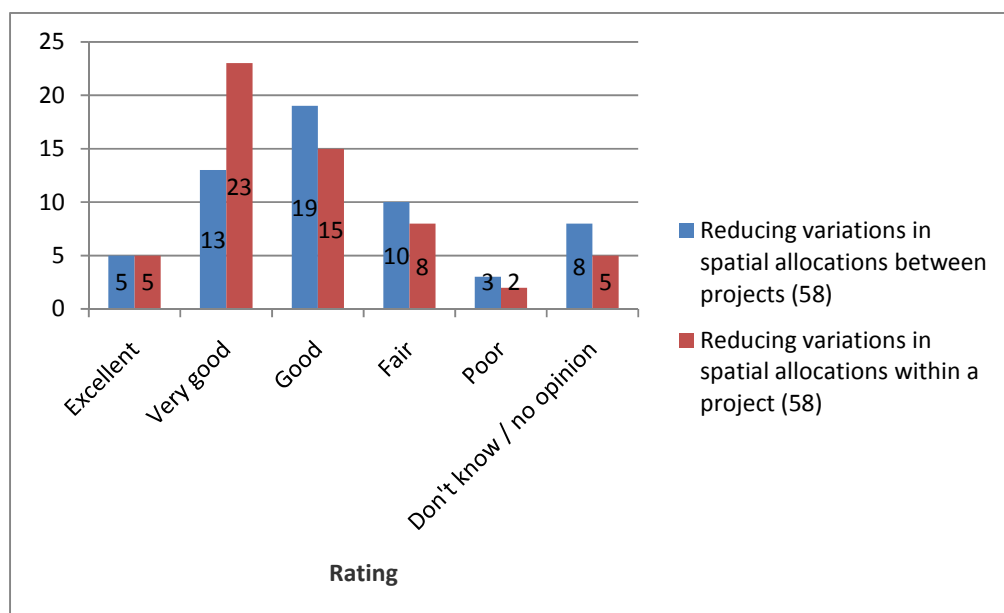
Reducing spatial variation for similar rooms/spaces

Participants were asked to rate the effectiveness of the AusHFG in reducing the variations in spatial allocations between different projects of similar complexity and function (question 11.2), as well as within an individual project (question 11.3).

Overall, participants rated the AusHFG as more effective in reducing variations in spatial allocations within an individual project than between different projects.

- 48% of respondents (28) rated the AusHFG as 'very good' or 'excellent' in regard to reducing variations within an individual project, compared with 17% (10) who rated it 'fair' or 'poor'.
- 31% (18) rated the AusHFG as 'very good' or better in relation to reducing variations in spatial allocations between different projects of similar complexity. 22% (13) of respondents rated the effectiveness of the AusHFG in this regard as 'fair' or 'poor'.
- Some respondents had no opinion on these aspects of the AusHFG's effectiveness.

Figure 16: Respondents' perceptions of the effectiveness of the AusHFG in reducing variations in spatial allocations between different projects and within an individual project (58 responses)



The following comments were made in relation to the effectiveness of the AusHFG in reducing the variations in spatial allocations between different projects of similar complexity and function.

Positive comments regarding reducing variations in spatial allocations between different projects:

- *Standardisation assists in comparison between projects.*
- *The room sizes have been proven to be effective and can be used with confidence. Any variances from the guidelines must be justified which makes people contemplate seriously any claims for additional or different space.*
- *If the users have used the process on other projects, the AusHFG is extremely effective and is often requested as a referral point.*

Mixed comments regarding reducing variations in spatial allocations between different projects:

- *It is effective, except when planning services not covered in the AusHFG and when the local situation requires variations to be submitted.*
- *This still needs to be tested. The HFBS is the one that typically carries the project through to site - it has helped me in the past to control variations.*
- *There needs to be better enforcement of the 'rules of engagement' i.e. The Client/Users have to do the changes, and justify them to NSW Health (or other funding agency), not the consultant.*
- *Having spatial benchmarks for projects is useful in providing baseline data on likely spatial requirement of new projects - however there are many project specific issues which may result in variance from this.*
- *There is ambiguity as to whether the guidelines are just that, or are mandatory. On one hand they are noted as guidelines but there are fairly complex procedures in place where you seek to*

vary from them. I am not sure of the status of the variation process and what constitutes a variation for which documentation must be submitted, but this could be more clearly articulated.

- *Variations are usually driven by model of care and the combining of HPUs to reflect desired practice. This is particularly the case with Level 5/6 projects.*
- *HFGs are guidelines, not prescribed requirements. Each project is unique. The only benefit is that it does enable some consistency of approach and sizing of rooms but these are always debated on a project by project basis.*
- *Comparisons are legitimate when made between like clusters of spaces. Problems arise when 'apples are compared to oranges'!!*

Negative comments regarding reducing variations in spatial allocations between different projects:

- *The way room areas are measured is confusing. It would be more logical to have a consistent approach of measuring Net functional areas, in lieu of centre line of walls and the internal face of external walls.*
- *It is always possible to interpret the number of rooms required for a particular model of care differently for different hospitals.*
- *The downside is that it limits opportunities for changes.*

The following comments were made in relation to the effectiveness of the AusHFG in reducing spatial variations within an individual project:

- *My experience is that standardising across a facility is done as a project policy. Different sized rooms for the same function must be justified or it does not happen. This is not really reliant on the AusHFG.*
- *At the room level the HFG is good at reducing the variation. Issues seem to arise as to what is the right number of rooms etc as opposed to physical dimensions of room size, or what is required where multiple rooms might be merged together and its impact (e.g. storage rooms).*
- *With similar rooms it is better to use a standard room tailored to suit.*
- *It is interesting to note variations between sizes of rooms in services such as Mental Health.*
- *The benefits of standardisation across projects/ between departments is very good, however, the capacity to standardise across an Area Health services is now drastically limited by the AusHFG.*
- *Too many changes happen during construction (especially with Design & Construct or PPP projects).*
- *There are usually 'special' circumstances which cause variations within projects. There is never enough storage allocated as it is 'non-productive' space.*

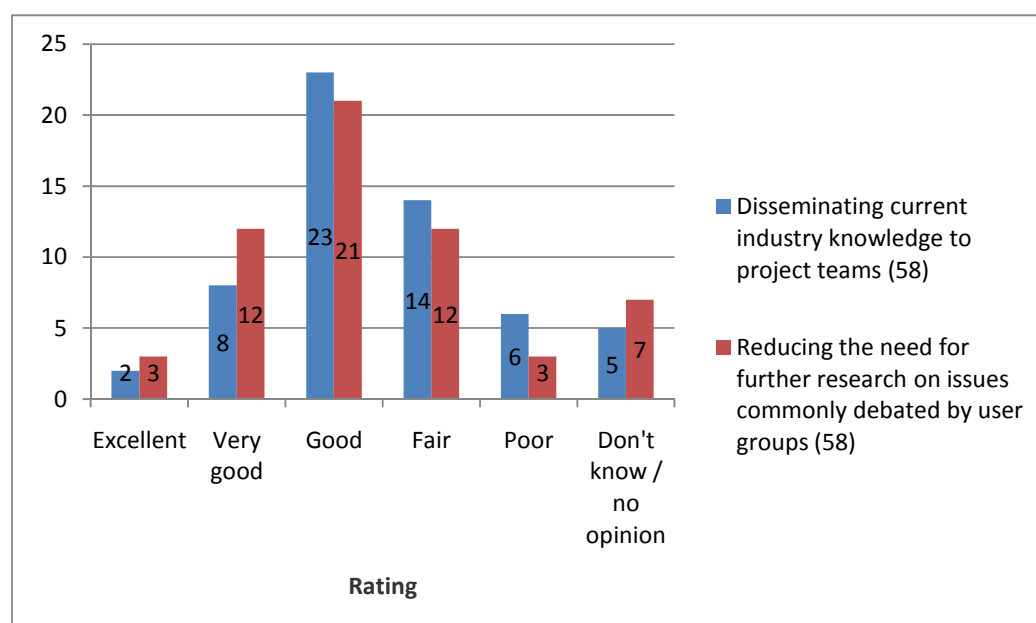
Dissemination of knowledge and reducing the need for project-specific research

Respondents were asked to rate the effectiveness of the AusHFG in disseminating current industry knowledge regarding good health facility design / accepted clinical practice to project design teams (question 12.1) and, separately, the effectiveness of the AusHFG in reducing the need to undertake further research on issues commonly debated by user groups on your hospital projects (question 12.2).

The spread of answers for these effectiveness criteria are generally the same, with respondents indicating achievement of 'good' or better.

- While 17% of respondents (10) rated the AusHFG as 'excellent' or 'very good' in disseminating current industry knowledge to project teams, at the other end of the spectrum 34% (20) gave a rating of 'fair' or 'poor'. Overall, 57% of respondents (33) awarded a rating of 'good' or better for this criterion.
- Fifteen respondents (26%) rated the AusHFG 'excellent' or 'very good' in terms of effectiveness in reducing the need to undertake further research on issues commonly debated by user groups, the same proportion of respondents who rated this criteria as 'fair' or 'poor'. Overall, 62% (36) rated the AusHFG 'good' or better in achieving this goal.

Figure 17: Respondents' perceptions of the effectiveness of the AusHFG in: disseminating current industry knowledge to project teams; and reducing the need for further research on issues commonly debated by user groups (58 responses)



The following comments were received in relation to the effectiveness of the AusHFG in disseminating industry knowledge.

Positive comments regarding dissemination of industry knowledge:

- *Best that it has ever been. Previously the system lagged several years behind changing models of care and evolving service delivery methods. Now AusHFG is regularly updated in response to changing needs.*
- *Information dissemination is a particularly important role of the AusHFG for smaller design practices working on smaller health facilities. There isn't a lot of dissemination outside of the health facility network.*
- *Standardisation has supported flexibility in room types and design which promises to increase the longevity of designs.*

Mixed comments regarding dissemination of industry knowledge

- *AusHFG is effective in disseminating knowledge as long as it is up to date and as long as users read it.*
- *Whilst the revisions are better than they have been, they still need to be more frequent. Practices are changing rapidly but the AusHFG is not changing at the same pace. E.g. The AusHFG continues to support outdated planning models such as 4 bed rooms in in-patient units, when a higher ratio of single rooms is more often indicated to support single sex accommodation, infection control, outliers etc. I wonder if feedback from Post Occupancy Evaluation is fed into the Guidelines?*
- *While information is available on the website etc, I am not sure to what extent the lessons learned from projects / industry best practice are communicated back to project design teams etc. I think this circular process needs to be closed out better.*

Negative comments regarding dissemination of industry knowledge

- *Not all new service types are covered and the AusHFG does not always support alternative models of care.*
- *How is the knowledge disseminated? We as health planners/architects rarely if ever are advised of updates, many of the engineers, even those having done health work, do not seem to know about the existence of the AusHFG, nor the importance of its application e.g. infection control.*
- *Who is providing the industry knowledge, this is not disclosed to Users of the HFGs? How do we know it is industry best practice? Where is the cross consultation between people using the AusHFG regularly. Where is the feedback loop to industry professionals? Comparative data tends to be held by Health and not disseminated. This is frustrating. How do I share my experiences?*
- *Given the demand for benchmarks to be based on Australian and also international best practice, we find that across Europe and America there are differing benchmarks. Therefore each justification needs to be more focused on the services and the process of delivering health care.*
- *Industry doesn't read the AusHFG.*

Suggestions:

- *Effectiveness is very much reliant on how often you log into the website. Possibly an electronic non-reply message when new information is posted on the site. SAI Global sends out these types of emails.*

- *The guidelines do not anticipate changes. Because of the lag between inception and procurement, they work against best practice. The time lag between incorporating POE findings or publishing POE findings is detrimental to updating knowledge. Perhaps a news bulletin circulated to the industry could be of value. Not realistic to expect the industry to routinely check CHAA website.*
- *Industry seminar training advised via RAIA, ACEA, and other groups would be very helpful. I recognise this would be very hard to achieve. Alternatively emails of newsletters through those groups would be advantageous.*
- *If not used by experienced team, can lead to HPU driven operational models rather than model of care driven solutions. Australia has been slow to adopt the integrated Interventional Procedures Platform in part because the AusHFG provided separate HPU's for these services e.g. Operating Unit & Medical Imaging etc and this is the way architects are comfortable planning them.*
- *Examples of types of basins and tap ware variants complying with A/B/C basins etc would be useful as would examples of door and hardware variants that are preferred etc.*
- *Industry update can be improved, sharing of knowledge and experience can be institutionalised via annual workshop.*

The following comments were received about the effectiveness of the AusHFG in reducing the need to undertake further research.

Positive comments regarding reducing the need to undertake further research:

- *User groups will still debate the issues and that is beneficial in getting their buy-in, but it does help to start with something for them to comment on.*
- *Very rarely is there an issue which is not definitively covered in the guidelines (except the height of fences around a Mental Health Facility).*
- *AusHFG is very good for office accommodation and support areas space allocation.*

Mixed comments regarding reducing the need to undertake further research:

- *AusHFG helps resolve a lot of issues that are brought up in user groups and are a helpful tool in gaining consensus.*
- *The latest commentary of single rooms has been useful in the inpatient HPU. However the next major wave of demands will relate to "patient safety" & "clinical governance".*
- *It helps to separate the physical from the functional, however the issues are generally around determining the functional in a physical environment that cannot be envisioned or is different from the existing.*

Negative comments regarding reducing the need to undertake further research:

- *Rapid change in health service delivery demands that each health project team undertakes research to confirm best practice both nationally and internationally and to justify additions and subtractions. The guidelines are only updated every couple of years so cannot capture the most*

up to date current/emerging best practice. Any planner needs to look outside the AusHFG to check out issues and establish benchmarks.

- *On major hospital projects, the need for discussion to ensure effective design responses to particular models of care is not reduced.*
- *A lot of time is still spent visiting other recently built facilities, or obtaining documentation on these projects for comparison.*
- *There is usually no debate, just a direction to change.*
- *User groups do question how contemporary the guidelines are.*

Suggestions:

- *AusHFG should not be a hindrance to ongoing research and discussion. An annual or bi-annual workshop of interested industry group should be organised to develop and exchange experiences.*

2.5 Suggested improvements for the AusHFG

Participants were asked to share their personal ideas on how the AusHFG could be improved (question 13.1). In addition to positive comments on the usefulness of the AusHFG, some detailed suggestions were made for their improvement. These have been grouped and summarized for the purpose of this report. Some of these suggestions were made in response to previous questions, but it is also noted that a plethora of suggestions for improvement have also been recorded in response to other questions.

Improving AusHFG content

- *Guidelines need to be underpinned by transparent and robust research, including domestic and international benchmarking.*
- *Ideally there will be more focus on innovative thinking and not perpetuating the status quo.*
- *Which, how and when particular guidelines are being reviewed needs to be made known. Too much general chatter surrounding so called pending guidelines that have no status.*
- *POE findings need to be fed back to industry and incorporated into AusHFG.*
- *Noting the date of last review on the file would be helpful.*
- *Simplify the HPUs.*
- *Improve the services section. It needs to: be more flexible; include more environmentally friendly options; remind about inclusion of 3 phase power etc*
- *More advice on project costing e.g. square metre costs, ISD costs, how to cost contingencies, costs in the pre planning stage e.g. preparation of a functional brief or business case for instance.*
- *Accurate / current information with appropriate consideration and flexibility for a range of models of care that have flexible space requirements.*
- *Clear benchmarking of unit spatial requirements against a range of real hospital projects throughout Australia & NZ.*
- *Try to benchmark space allocations per Functional Planning Unit like the Victorian work.*

- *Get back to basics. Stop trying to develop HPUs for areas that could be planned using other HPUs (e.g. an IPU HPU can be used to brief units with a LoS of >24 hours) and develop guidelines for areas which are not covered.*
- *The AusHFG is heavily focused on hospital/institutional developments. More needs to be done on other health facilities such as community mental health requirements, Oral health etc.*
- *More of the typical departments need to be included. More Oncology etc.*
- *Hybrid Theatres and more emerging technical spaces should be dealt with, not necessarily in specific details but describing principles behind planning requirements.*
- *Models of Care move much faster than the AusHFG. It is sometimes difficult to reconcile planning units to new models of care, which may lead to less than appropriate facilities.*
- *Standard Room Data Sheets should be developed for briefing and concept design stage only. They need to be generic and kept basic and avoid detailed specification e.g. dimensions of shadow line ceiling trim. A second level can be introduced with this information if they are to be used for documentation.*
- *Room layout sheets are not necessarily the only solution or even good solutions. There is far too much built in furniture. Dysfunctional components of RLSs need to be addressed.*
- *RDS and RLS are in need of routine update to meet new trends and standards. Errors between RLS and SOA need to be resolved.*
- *Robust circulation allowances based in research rather than historical practice need to be developed as they are currently a significant project risk. Moves towards increased single bedrooms require more generous circulation allowances.*
- *Provision for staff amenities, particularly for Level 6 facilities are grossly understated and need to be addressed.*
- *Section on height of mental health courtyard walls is inadequate and not reflective of industry requirements.*
- *More information is needed on requirements for medical imaging rooms, OPA rooms etc.*
- *Anticipate changes in technology and machines.*
- *Issue of minimum/maximum room sizes needs to be addressed.*
- *Make rooms modules of say 300mm to allow for more rational layouts in terms of structure and services; prefabrication techniques, future expansion/adaptation.*
- *Consideration should be given to developing AusHFG for the aged care sector.*
- *Compared to private hospitals, the AusHFG room sizes are larger. Need to be compared and re-assessed.*
- *I would like the opportunity to review new and evolving guidelines, as some industry leaders do not look at the service as part of a whole facility so there is occasionally disparity between departments within the AusHFG. What is acceptable for one HPU is not acceptable in another.*
- *The establishment of clear principles, particularly access to daylight, zoning of rooms etc should be incorporated into the guidelines.*
- *Incorporation of the research undertaken by the NHS and within USA in regard to layouts should form a fundamental approach to the guidelines.*
- *Address generic themes in design planning which are forward looking (e.g. flexibility, adaptability, and patient safety).*

- *Create a summary page illustrating / describing how the components of the AusHFG work together.*
- *Provide examples of how elements of HPU's can be used to provide new integrated service delivery platforms e.g. Interventional Suites, Ambulatory Care Centres.*
- *Comparative project feedback needs to be made available.*
- *Regularly revise the AusHFG to reflect findings from POEs and ensure that POEs occur within an appropriate timeframe. Recent POEs suggest that great care needs to be taken in planning shared facilities both within and between units if functionality and patient /staff safety is not to be compromised.*
- *Change the method of calculation of areas. The method that measures areas from the centre lines of walls, especially 100mm thick walls (rarely seen in public buildings due to acoustic reasons) is dangerous.*
- *The ability to incorporate process mapping for the different clinical streams and the need for modularly and integrated design(Architecture, Health Planning and Engineering) needs further emphasis*
- *Clarify the variation process (what constitutes a major variation requiring forms to be submitted).*

Improving access to / manipulation of the AusHFG

- *Notification via email when new items are posted on the website as access is often intermittent as projects demand.*
- *Make AusHFG available in easier to use formats e.g. word and excel etc.*
- *Being able to access at least two pages at once on the screen would be useful.*
- *Provide the ability to configure your own reports.*
- *It would be useful to have a downloadable excel version of the Schedules of Accommodation. This would reduce transposition errors particularly for large projects.*
- *Ensure layouts are available in CAD formats.*
- *An icon reflecting the FF&FE item would be useful as there are so many items called the same name.*
- *Revamp the web page to be more user friendly, have clearer pathways and links.*
- *Project news on the AusHFG has not been updated for over one year. This should be a dynamic forum for informing stakeholders.*
- *Link the various AusHFG sections so that users can call up a complete set of guidelines to the clinical unit in question, rather than having to search through the various parts.*
- *Fully digital and searchable AusHFG.*
- *The web site could incorporate a forum or blog for discussion from all stakeholders.*

Improving interaction with other reference materials/systems

- *When doing a large tertiary hospital there are many issues that are not always covered by the AusHFG. It would be good if there was an advisory body that could be contacted to at least put you in touch with other clinicians/designers in other states to benchmark ideas against.*
- *The AusHFG should be combined with the HFBS tool. Two systems are not workable The HFBS data base support is very useful in dealing with spatial understanding of a facility – e.g. a very quick Schedule of Accommodation based on real information. The briefing system would be invaluable for the myriad of small projects that are undertaken across the state but the control structure makes this impossible. A mechanism to take it 'off line' or even a modified version that facilitates some discipline would achieve significant improvements in numerous minor works projects that currently proceed in an ad-hoc manner.*
- *Make SPPs and PDPs from approved projects available on line to assist with planning, particularly "atypical" projects.*
- *Inter operability with a number of data base formats including Codebook.*
- *Link data sheets to parametric/3D graphic system.*
- *Would it be possible to create a reference data base for recent state wide projects, listing things such as fire rated lights and anti-ligature fittings used etc, including project contacts?*
- *Having it compatible with other systems or programs to help with ease of updating things like FFE lists*
- *Clear linkage to TS11 would be beneficial.*
- *Discussion papers, research articles, results of POEs could be referenced from HPU briefs to provide guidance to current best practice.*

Improving application of the AusHFG to projects

- *HI, Statewide Services & Project managers (PDPL & PDPr) should engage more with the various Area Health services as constructive partners.*
- *There is a belief in the marketplace that these guidelines are inflexible and not to be altered, despite the need to do so when renovating or reconfiguring in brown built sites. There needs to be a caveat contained within the preface or summary with the guidelines to the effect that they are guidelines and not set in stone. This is particularly the case with some architects who use the data sheets and floor plans.*
- *It is not economical, sensible nor practical to develop the RDSs at the same time as a building is being designed.*
- *Clear articulation to consultants about forward timeframes for updating AusHFG.*

Ongoing participation in development and review of the AusHFG

71% of respondents (39) indicated an interest in participating in ongoing review and development of the AusHFG. They were asked to provide contact details if they replied in the affirmative (Questions 14.1 and 15.1).

Survey respondents were then thanked for their participation and advised that results will be disseminated to them once collated and analysed.

3. CONCLUSIONS

Respondents to this survey of NSW users of the AusHFG have provided a significant volume of commentary on the system's usefulness and effectiveness. Overall participants report that the AusHFG are a very helpful reference, with increasing recognition as a solid "starting point for discussions" amongst users. Commentary was extensive, but a number of themes were especially evident.

The issue of whether the AusHFG are 'standards' or 'guidelines' was raised by several respondents with many expressing frustration at their implied status as 'standards' when used by some clients and contractors, in particular on projects implemented via PPP/PFI or D&C. This suggests that no matter how frequently it is stated in the AusHFG preliminary sections that these are "guidelines not standards", and that they can be varied to suit specific project requirements, such an approach requires active education of project teams by high level client groups as to the real intent behind AusHFG provision and use. Those developing guidelines have no control over or ability to influence their use in practice as at present there is no formal feedback from, or interaction between, these two processes in the procurement of health facilities in any of the Australasian health jurisdictions including NSW.

Accessing the information contained within the AusHFG is often too difficult. The website needs to be more sophisticated to guide effective and efficient information mining; indexing of information needs to improve; documents need to be searchable for specific data; and hyperlinks between related information need to be created. This should become a priority for future development phases of the AusHFG.

Using the information needs to be easier. It was suggested that AusHFG documents need to be made available in more useable formats that can be amended for use in a specific project. For example: schedules of accommodation and FF&E could be provided in excel format; room layout sheets in CAD format. This suggestion clearly conflicts with the current requirements of NSW Health to have clearly identified and NSW DDG endorsed versions of AusHFG documents that can be referred to in the future when reviews of completed projects may be undertaken. For these reasons, to date, the AusHFG documents have been published as PDF documents under a version control regime. These conflicting requirements would need to be addressed before manipulable documents could be provided for the AusHFG as suggested by respondents to this survey.

In NSW, project managers need to interact with the Health Facility Briefing System (HFBS) as well as the AusHFG. These two separate systems need to be better aligned to avoid conflict. Indeed it was suggested by a number of respondents that they be combined. This may make sense for NSW but given that the AusHFG are an Australasian resource such an approach would require agreement by all health jurisdictions before it could reasonably be considered.

A key concern about AusHFG content is its currency and credibility. Many respondents expressed the view that the AusHFG will never completely remove the need for user groups and planners to undertake their own research and this is quite reasonable given that the AusHFG are guidelines that can be adapted to suit project specific requirements. However, in order for the AusHFG to reach their potential for being effective in providing best practice / current trend information to industry, they have to be

updated regularly and need to be informed by the experiences of recent projects (POE) and credible experts in the field. Using the results of recently conducted POE in NSW to inform updates of the AusHFG was mentioned by several respondents as an effective way to ensure that current industry and project knowledge is embedded in future revisions as required.

A number of respondents provided specific examples of content that needs to be remedied or service areas for which HPUs need to be developed. Suggestions were made about facilitating users to provide feedback on the guidelines as issues arise, as well as for alerting users to the new information available within the AusHFG. The scope and reach of the AusHFG was also mentioned by some respondents with some feeling that they should stick to basics and others clearly preferring them to cover more areas of interest as they continue to be developed without veering in to the area of being overly prescriptive.

Some indicators of the AusHFG's effectiveness in realising anticipated benefits were more difficult for users to evaluate e.g. reducing variations in spatial allocations between projects. For other indicators there was a sense that there would always be a limit to the effectiveness of the AusHFG in achieving the anticipated benefit because of the inherent nature of the planning process e.g. reducing the need for further research on issues commonly debated by user groups.

Overall NSW users consider the AusHFG to be a very useful resource and to have been reasonably successful in realising anticipated benefits. It is clear however that there are a variety of ways in which the AusHFG can be improved for content and user friendliness in order to be a more effective tool for health professionals, planners, architects, engineers and project managers.

4. APPENDIX

PROJECT INFORMATION STATEMENT

Date: 3 May, 2010
Project Title: AusHFG User Survey 2010

Approval No.: 105004

THE UNIVERSITY OF
NEW SOUTH WALES



FACULTY OF THE
BUILT ENVIRONMENT

Participant selection and purpose of study

You are invited to participate in a study of user satisfaction with the Australasian Health Facility Guidelines (AusHFG). You have been invited to participate in this study because you were identified by NSW Health as a health facility industry professional experienced in the use of the AusHFG on NSW health projects. At this stage we are only undertaking this study in selected jurisdictions (NZ, SA, NSW) although it may in the future be extended in either its current or amended form to other Australasian Health Infrastructure Alliance (AHIA) jurisdictions.

Description of study

If you decide to participate, you will be asked to indicate that you have read this project information statement as the first question of the web-based survey questionnaire. The questionnaire will then take you through a series of background questions including questions regarding your professional background and the extent of your use of the AusHFG. It will then proceed to questions regarding your satisfaction with the content, format and delivery method of the AusHFG and ask you to indicate any ideas you may have for how the guidelines may be improved. Finally it will ask whether you are interested in being involved with ongoing review and development of the AusHFG on behalf of NSW Health. The questionnaire will take approximately 10 minutes to complete. Results will be analysed and used to assist the AusHFG development team to target areas for improvement in future AusHFG development programs.

We cannot and do not guarantee or promise that you will receive any benefits from this study.

Confidentiality and disclosure of information

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission, or except as required by law. We plan to provide only the aggregated results of the survey to the NSW Health and the Australasian Health Infrastructure Alliance (AHIA) for the purpose of improving the AusHFG during future stages of their review and development. Further studies may also be conducted to investigate in greater depth issues or concerns identified by this survey.

Recompense to participants

There will be no recompense offered to participants for participation in this survey.

Your consent

Your decision whether or not to participate will not prejudice your future relations with The University of New South Wales or other participating organisations.

If you have any questions now or in the future, please contact Associate Professor Jane Carthey, ph: +612 93856016; e: j.carthey@unsw.edu.au who will be happy to answer them.

Associate Professor Jane Carthey