

## UNSW-RAIA Report into Healthcare Designers 2006

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**Publication Date:**

2006

**DOI:**

<https://doi.org/10.26190/unsworks/1182>

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UNSW–RAIA

# Report into Healthcare Designers 2006

*Prepared by*

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## **Acknowledgments**

Thank you to all survey respondents for their contribution to this report.

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## **Publisher**

The Royal Australian Institute of Architects ACN 000 023 012

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Melbourne Vic 3000

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# TABLE OF CONTENTS

<b>Table of Figures</b>	<b>5</b>
<b>Table of Tables</b>	<b>7</b>
<b>Section 1 Key Findings</b>	<b>1</b>
1.1 Profile of Health Care Design Firms	1
1.2 Information Sources Used	2
<b>Section 2 Background</b>	<b>4</b>
2.1 Aims	4
2.2 Objectives	4
2.3 Method	4
<b>Section 3 Summary – Profile Of Respondent Firms</b>	<b>5</b>
3.1 Introduction	5
3.2 Location of Firms	5
3.3 Size of Firms	6
3.4 Size of Firms versus Location	7
3.5 Years in Operation	7
3.6 Number of Projects Undertaken	8
3.7 Location of Projects Undertaken	8
3.8 Firms working in Australia/NZ and/or overseas	9
3.9 Revenue	9
3.10 Healthcare facility design as a key business strategy	14
3.11 Size of Projects	15
3.12 Project Sizes in terms of commissioning process	16
3.13 Sources of Project Funding	16
3.14 Types of Projects	18
3.15 Types of Services Provided	19
3.16 Types of Contracts	20
<b>Section 4 Use of Information Sources – Frequency &amp; Importance</b>	<b>22</b>
4.1 Summary	22
4.2 Information sources: 10 most frequently used	22
4.2.1 Summary	22
4.2.2 Information from previous projects – undertaken by the practice	23
4.2.3 Own original research – Site visits	24
4.2.4 Information from clients	24
4.2.5 Other guidelines/ standards/ policies – Australian/ NZ standards	24
4.2.6 Own original research – Internet research	25
4.2.7 Other guidelines/standards/policies – BCA or NZ equivalent	25
4.2.8 Other consultant/colleague – Your practice	25
4.2.9 Information from previous projects – By others	26
4.2.10 Magazines & journals – Manufacturers promotion literature	26
4.2.11 Other consultants/colleague – Others in industry	26
4.3 Information Sources: 10 Least Used	27
4.3.1 Summary	27
4.3.2 POE study results – Other source	27
4.3.3 International publications – NHS	28
4.3.4 Health Facility Design Guideline – QLD Health	28
4.3.5 Research summaries by others – CHAA website	29
4.3.6 International publications – AIA	30
4.3.7 Health Facility Design Guideline – NZ Ministry of Health	30
4.3.8 Research Summaries by others – University Library	31
4.3.9 Health Facility Design Guideline – WA Health	31

4.3.10	Research summaries by others – ACHSE Library	32
4.3.11	Health Facility Design Guideline – SA Department of Human Services	32
4.4	Information sources: used occasionally	33
4.4.1	Summary	33
4.4.2	Other guidelines/ standards/policies – Other government circulars/policy documents	34
4.4.3	Magazines & journals – Trade journals	34
4.4.4	Magazines & journals – Architecture journals	35
4.4.5	Own original research – Review of academic studies	36
4.4.6	Health Facility Design Guideline – NSW Health	36
4.4.7	CPD/ CPE	37
4.4.8	Own original research – Study tours	38
4.4.9	Other guidelines/ standards/ policies – Faculty/ college guidelines	38
4.4.10	POE study results – Your firm	39
4.4.11	Other guidelines/ standards/ policies – Private Hospital Act	39
4.4.12	Health Facility Design Guideline – VIC Department of Human Services	40
4.5	Importance of Resources – Summary	41
4.6	Additional information sources identified	43
4.6.1	Identification of Additional Resources Used	43
4.6.2	Magazines & journals – Other	43
4.6.3	Other resources (Health Facility Guidelines, Research Summaries and Other)	43
4.6.4	Recommendations re Additional Resources	43
4.6.5	Additional Resources for Development	44
4.7	Preferred methods for accessing resources	45
<b>Section 5</b>	<b>Use of Information Sources by Size of Firm and by Location</b>	<b>46</b>
5.1	Information sources used by size of firms	46
5.1.1	Summary	46
5.2	Information used by firm locations	53
5.2.1	Summary of Findings	53
5.2.2	South Australia (SA)	54
5.2.3	Victoria (VIC)	55
5.2.4	New Zealand (NZ)	56
5.2.5	New South Wales (NSW)	57
5.2.6	Tasmania (TAS)	58
5.2.7	Western Australia (WA)	59
<b>Section 6</b>	<b>Additional Information</b>	<b>60</b>
6.1	Awareness of CHAA	60
6.2	Other Comments	60
6.3	Survey Form	62

## Table of Figures

Figure 1:	Resource categories: most frequently used	2
Figure 2:	Location of firms	5
Figure 3:	Size of firms	6
Figure 4:	Size of firms versus location of firms	7
Figure 5:	Number of years operating in architectural practice	7
Figure 6:	Number of projects undertaken since 2000 in Australia and overseas	8
Figure 7:	Location of projects undertaken	8
Figure 8:	Percentages of firms working only in Australia/NZ, overseas, and both	9
Figure 9:	Gross revenue of firms for 2002-05	9
Figure 10:	Gross revenue in 2002-03 by size of firms	10
Figure 11:	Gross revenue in 2003-04 by size of firms	10
Figure 12:	Gross revenue in 2004-05 by size of firms	11
Figure 13:	Pattern of revenue of firms with 1 staff (sole practitioner) over time	11
Figure 14:	Pattern of revenue of firms with 2 to 5 staff over time	11
Figure 15:	Pattern of revenue of firms with 6 to 10 staff over time	12
Figure 16:	Pattern of revenue of firms with 11 to 25 staff over time	12
Figure 17:	Pattern of revenue of firms with 26 to 50 staff over time	12
Figure 18:	Pattern of revenue of firms with 51+ staff over time	13
Figure 19:	Percentage of revenue of firms generated through health projects	13
Figure 20:	Percentage of firms and firms sizes undertaking healthcare facility design as a key business strategy	14
Figure 21:	Project Size	15
Figure 22:	Project size versus firm size	15
Figure 23:	Project size versus project commission	16
Figure 24:	Number of firms versus sources of project funding	16
Figure 25:	Source of funding versus firm size	17
Figure 26:	Number of firms versus % of projects type	18
Figure 27:	Type of services provided by the firms	19
Figure 28:	Type of services provided by firm size	20
Figure 29:	Types of contract undertaken by firms	20
Figure 30:	Types of contract undertaken by the different firm sizes	21
Figure 31:	Resource categories: most frequently used	22
Figure 32:	Information sources: 10 most frequently used	23
Figure 33:	Information from previous projects – by your practice	23
Figure 34:	Own original research – Site visits	24
Figure 35:	Information from clients	24
Figure 36:	Other guidelines/standards/policies – Aust/NZ Standards	24
Figure 37:	Own original research – Internet research	25
Figure 38:	Other guidelines/standards/policies – BCA or NZ	25
Figure 39:	Other consultant/colleague – Your practice	25
Figure 40:	Information from previous projects – By others	26
Figure 41:	Magazines & journals – Manufacturers' promotion literature	26
Figure 42:	Other consultants/colleague – Others in industry	26
Figure 43:	Information sources: 10 least or rarely used	27
Figure 44:	POE study results – Other source	27
Figure 45:	International publications – NHS	28
Figure 46:	Health Facility Design Guideline – QLD Health	28
Figure 47:	CHAA website	29

Figure 48:	International publications – AIA	30
Figure 49:	Health Facility Design Guideline – NZ MOH	30
Figure 50:	Research summaries by others – University Library	31
Figure 51:	Health Facility Design Guideline – WA Health	31
Figure 52:	Research summaries by others – ACHSE Library	32
Figure 53:	Health Facility Design Guideline – SA Department of Human Services	32
Figure 54:	Other guidelines/stds/policies – Other govt circulars/policy documents	34
Figure 55:	Magazines & journals – Trade journals	34
Figure 56:	Magazines & journals – Architecture journals	35
Figure 57:	Own original research – Review of academic studies	36
Figure 58:	Health Facility Design Guideline – NSW Health	36
Figure 59:	CPD/CPE	37
Figure 60:	Own original research – Study Tours	38
Figure 61:	Other guidelines/standards/policies – Faculty/college guidelines	38
Figure 62:	POE study results – Your firm	39
Figure 63:	Other guidelines/standards/policies – Private Hospital Act	39
Figure 64:	Health Facility Design Guideline – VIC Department of Human Services	40
Figure 65:	Other additional information sources used	43
Figure 66:	Methods of accessing information sources	45
Figure 67:	Frequency of information sources used by firms with sole practitioner (1 staff)	47
Figure 68:	Frequency of information sources used by firms with 2-5 staff	48
Figure 69:	Frequency of information sources used by firms with 6-10 staff	49
Figure 70:	Frequency of information sources used by firms with 11-25 staff	50
Figure 71:	Frequency of information sources used by firms with 26-50 staff	51
Figure 72:	Frequency of information sources used by firms with 51+ staff	52
Figure 73:	Frequency of information sources used by respondents from SA	54
Figure 74:	Frequency of information sources used by respondents from VIC	55
Figure 75:	Frequency of information sources used by respondents from NZ	56
Figure 76:	Frequency of information sources used by respondents from NSW	57
Figure 77:	Frequency of information sources used by respondents from TAS	58
Figure 78:	Frequency of information sources used by respondents from WA	59
Figure 79:	Awareness of CHAA	60
Figure 80:	Awareness of CHAA: source	60

## Table of Tables

Table 1:	Resources – Top 10 by (any) use	2
Table 2:	Reasons for non-use of POE study results – other source	28
Table 3:	Reasons for Non-use of International publications – NHS	28
Table 4:	Reasons for Non-use of Health Facility Guideline – QLD Health	29
Table 5:	Reasons for Non-use of CHAA Website	29
Table 6:	Reasons for Non-use of International publications – AIA	30
Table 7:	Reasons for Non-use of Health Facility Design Guideline – NZ MOH	30
Table 8:	Reasons for Non-use of Research Summaries by others – University Library	31
Table 9:	Reasons for Non-use of Health Facility Guideline – WA Health	31
Table 10:	Reasons for Non-use of Research Summaries by others – ACHSE Library	32
Table 11:	Reasons for Non-use of Health Facility Design Guideline – SA Department of Human Services	32
Table 12:	Information sources used occasionally	33
Table 13:	Reasons for Non-use of other guidelines/stds/policies – Other govt circulars/policy documents	34
Table 14:	Reasons for Non-use of Magazines & journals – Trade journals	35
Table 15:	Reasons for Non-use of Magazines & journals – Architecture journals	35
Table 16:	Reasons for Non-use of Own original research – review of academic studies	36
Table 17:	Reasons for Non-use of Health Facility Guidelines – NSW Health	37
Table 18:	Reasons for Non-use of CPD/CPE	37
Table 19:	Own original research – Study Tours	38
Table 20:	Reasons for Non-use of Other guidelines/standards/policies – Faculty/college guidelines	38
Table 21:	Reasons for Non-use of POE study results – your firm	39
Table 22:	Reasons for Non-use of Other guidelines/standards/policies – Private Hospital Act	40
Table 23:	Reasons for Non-use of Health Facility Design Guideline – VIC Department of Human Services	40
Table 24:	Top-10 information sources used frequently, occasionally, and rarely	41
Table 25:	Resources – Top 10 by (any) use	42
Table 26:	Recommendations re Additional Resources	44



## SECTION 1 KEY FINDINGS

### 1.1 Profile of Health Care Design Firms

- .1 The survey form which formed the basis of this study was distributed to members of the Royal Australian Institute of Architects, the New Zealand Institute of Architects (NZIA), and members of the Centre for Health Assets Australasia (CHAA.net) network through November/December 2005.
- .2 Forty one responses were received, including five from New Zealand. The breakdown by Australian state and territory was: New South Wales – NSW (10), Victoria – VIC (8), Western Australia – WA (7), South Australia – SA (5), Tasmania – TAS (2), Australian Capital Territory – ACT (1), Queensland – QLD (1). (Figure 2)
- .3 The profile of respondent firms (categorised by number of employees) reveals that the most common firm size undertaking healthcare facility design was firms with 11 to 25 staff at 22%, although the breakdown across the firm sizes was reasonably constant. (Figure 3)
- .4 The majority of respondent practices have been operating for longer than 10 years. (Figure 5)
- .5 Eighty three percent of respondents indicated that they undertook project work solely in Australia / New Zealand (NZ), with 20% of the firms indicating that they undertook work overseas, and with 2% indicating that they had only undertaken healthcare facility design work overseas. (Figure 8)
- .6 Most projects were located in NSW, and followed by VIC. (Figure 7)
- .7 Overseas projects were mostly undertaken in South East and North East Asia.
- .8 The study found that designers located in the same state/territory as a particular project were most likely to undertake the design activity, with the exception of NZ where 50% of projects were undertaken by Australian based firms.
- .9 Seventy three percent of respondents nominated healthcare facility design as a key business strategy, with 19% indicated that they undertook health care projects as opportunities arose, and for 7% of respondents it was not a key business strategy. (Figure 20)
- .10 Firms that focus on the public sector tend to concentrate exclusively on that sector for health work; firms that work for the private sector often work for the public sector as well. (Figure 24 and Figure 25)
- .11 The most frequent project types undertaken in order are: (1) aged care residential, (2) general hospitals, (3) medical centres and (4) day facilities. (Figure 26)
- .12 The range of services provided is generally 'traditional architectural' services such as contract documentation, predesign and site analysis, tendering and contract administration. However, many firms also offer additional services such as interior design and project management. (Figure 27)
- .13 Figure 23 suggests that competitive selection (Expression of Interest (EOI)/ Invitation to Bid) still predominates as the most common process for commissioning of all sizes of projects.
- .14 Traditional contracts are still most commonly used. Less than 25% of firms had any experience of non traditional contract types; these were most commonly Design, Document and Construct (DD&C) and Managed Contractor. (Figure 29)

## 1.2 Information Sources Used

- .1 The majority of the information gathered to inform project work was obtained through the firms' own original research obtained primarily through site visits, reviewing the firm's own previous projects, plus collecting information supplied by clients.

Table 1: Resources – Top 10 by (any) use

Rank	Resource	Percentage Usage (frequency)
1	Own original research – Internet search	87
2	Other consultants/colleagues – Other in industry	82
3	Own original research – Site visits	75
4	Info from previous projects – By others	74
5	Information from client	69
6	Other guidelines/standards/policies – BCA or NZ equivalent	67
7	Information from previous projects – By your practice	64
8	Magazines & journals – Manufacturer's promotion literature	62
9	Other guideline/standards/policies – Australian/NZ standards	59
10	Magazines & journals – Architecture journals	59

- .2 Respondents generally indicated that Health Facility (Design) Guidelines were held to be less important and used less often relative to the firm's 'own research'. However when the most frequently used resource categories were analysed as shown in the following table (i.e. aggregated guidelines available from any location e.g. Vic DHS, SA, NZ MOH), guidelines became the 7<sup>th</sup> most frequently used type of resource.

Figure 1: Resource categories: most frequently used

No.	Resource Category (from Survey Form)	No. Firms
1	Information gathered from previous projects	40
2	Own/firm's original research	40
3	Information from client	39
4	Other guidelines	38
5	Other consultants/colleagues	35
6	Magazines and journals	33
7	Health Facility (Design) Guidelines – Australia/NZ	26
8	CPD	25
9	POE (own POE and others)	21
10	Research summaries by others	15

- .3 Overall, the larger firms (with 26-50, and 51+ staff) used the greatest range of resources. See Section 5.1 *Information sources used by size of firms*.
- .4 Less than fifty percent of all firms (most commonly in firms with 11-25 staff) do their own Post-Occupancy Evaluations (POEs) and use the results.

- .5 Forty two percent of firms use the results of Post-Occupancy Evaluations (POEs) undertaken by other firms.
- .6 Twenty two percent of firms use the Australian College of Health Service Executives (ACHSE) Library website. The main reason for non-use of this resource is lack of awareness of its existence.
- .7 Medium to large firms (by employee size: 11-25, 26-50, 51+ in increasing frequency) are more likely to undertake study tours. The great majority of smaller firms, inclusive of sole practitioners, indicated that study tours were often too expensive to undertake.
- .8 The state and territory *Private Hospital Acts* are used mostly by larger firms (with 26 – 50, 51+ staff) because they do more private hospital projects.
- .9 The preferred means of accessing technical resources is via the internet, and paper based technical and research documents. See Figure 66.
- .10 Thirty six percent of respondents use the Centre of Health Assets Australasia (CHAA) website. The most frequent use is by the largest firms, 51+ where 50% use it. Twenty percent of sole practitioners used the website.

## **SECTION 2 BACKGROUND**

### **2.1 Aims**

In late 2005, the Centre for Health Assets Australasia (CHAA), a Research Centre within the Faculty of the Built Environment at the University of NSW, collaborated with the Royal Australian Institute of Architects (RAIA) to conduct a study into the technical information resources used by healthcare facility designers.

There is limited information regarding the involvement of Australian and New Zealand architects in the design of healthcare facilities, including how they are engaged and how they work. This research, to the understanding of the authors, was the first of its type attempting to quantify the range and extent of architects' involvement in the healthcare industry and the information sources used for their design work.

Members of RAIA and of the New Zealand Institute of Architects (NZIA) were invited to participate in the survey. In addition, where appropriate, subscribers to the CHAA.net information network were also asked to complete the survey.

The participation of RAIA and CHAA.net members in the completion and return of the survey was requested in order for CHAA and the RAIA to better target the technical information needs of healthcare facility designers.

The information collected was anonymous and managed confidentially. Only aggregate results are published. Participation in the survey was strictly voluntary and conducted in accordance with the requirements of Ethics Secretariat of The University of New South Wales.

### **2.2 Objectives**

The results of the survey will assist in the deployment of Australasian Health Facility Guidelines by CHAA and its sponsor, the Health Capital Asset Managers' Consortium (HCAMC) of Australia and New Zealand. They will also inform prospective and current healthcare facility architects of the availability of technical information sources, and (over time) provide a longitudinal study of the changing information needs of designers in this field.

In the shorter term, use of the survey results may also assist both CHAA and the RAIA to:

- better target continuing education opportunities (CPD/CPE) for Architects involved in health projects;
- create opportunities for joint research projects between the health industry and architects to further develop and illuminate some of the findings of this research;
- assist healthcare facility clients to improve the quality of 'offer documents' and other information provided for principal design consultants (architects) on healthcare facility projects
- identify additional resources that could be developed to meet industry information needs
- discover how existing information sources may be better promoted or disseminated to increase their use by designers and other consultants on healthcare facility projects.

### **2.3 Method**

A survey form, which formed the basis of the study, was developed jointly by CHAA and RAIA to provide preliminary quantitative data in order to assess current trends in the profile of architectural firms undertaking healthcare facility design work and their use of currently available information sources. With the participant's consent, follow up measures may be undertaken to elaborate further some of the issues illustrated by the data and its analysis.

## SECTION 3 SUMMARY – PROFILE OF RESPONDENT FIRMS

### 3.1 Introduction

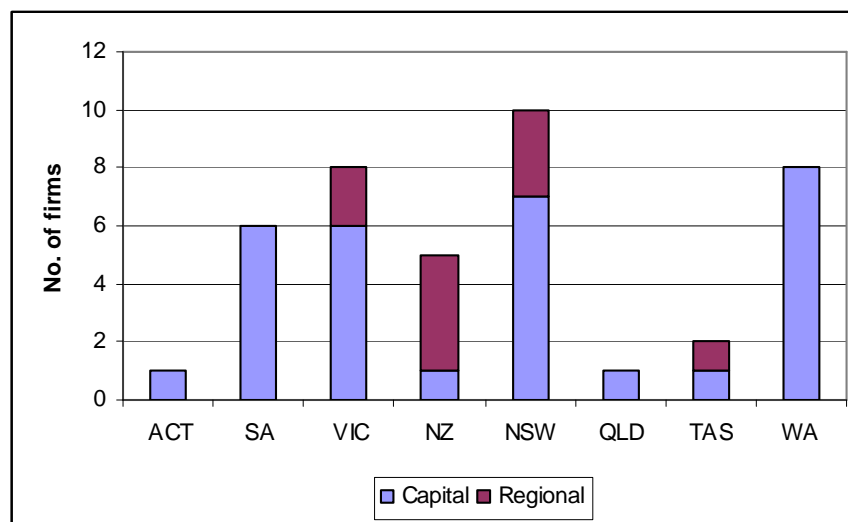
The survey form was distributed by the RAIA to its members and by CHAA to a range of appropriately identified members of its CHAA.net information network, through late November and early December 2005. The final date for receipt of responses was 16 December 2005.

The survey form was distributed to 2291 RAIA individual members (in effect firms), plus 68 'healthcare designers' (architects, health planners and project directors) listed on the CHAA subscriber list. At the request of the RAIA, the survey was also distributed by the New Zealand Institute of Architects to its membership.

A total of 41 responses were received. Given that this was the first occasion a specific survey was undertaken of architects involved in healthcare facility design, and in the absence of other available data, the authors were satisfied that the survey form was available to a significant population of architect firms and in particular architects directly practising in this niche field.

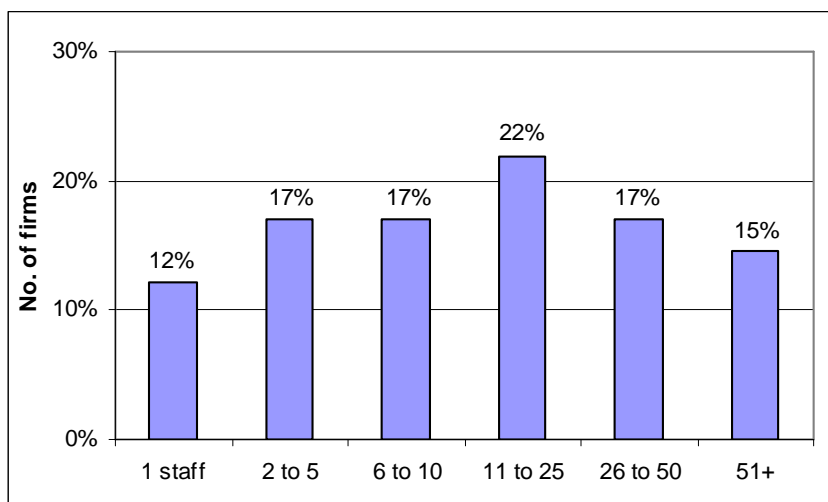
Location of Firms **Figure 2** illustrates the locations of respondents by state/territory as well as respondents located in New Zealand. In turn, the chart illustrates the results by respondents' location as to whether their practice was based in a capital city, or in a regional centre or location.

Figure 2: Location of firms



## 3.2 Size of Firms

Figure 3: Size of firms



**Figure 3** details the size of the respondents' firms by staff member head count, with respondents' distribution spread across all firm sizes. However, the low response from QLD requires further investigation, as this is in an interesting contrast with the RAIA reports for 2003 and 2004 (RAIA, 2003<sup>1</sup>, 19; 2004<sup>2</sup>, 2) representing QLD as the third largest State (after NSW and VIC) in terms of architectural firm population (17% in Exhibit 26, 2003 report and 16% in Chart 1, 2004 report).

This pattern of firm size distribution is consistent with the previous RAIA report (RAIA, 2003, 22) that showed healthcare facility projects represent a larger percentage (17-18%) of the total projects (based on gross income) for firms with 10+ staff members. (Exhibit 32, RAIA 2003).

A greater number of firms with 11 - 25, 26 - 50 and 51+ staff responded to this survey (54% of total responses) than smaller firms (1 - 10 staff: 46% of total responses).

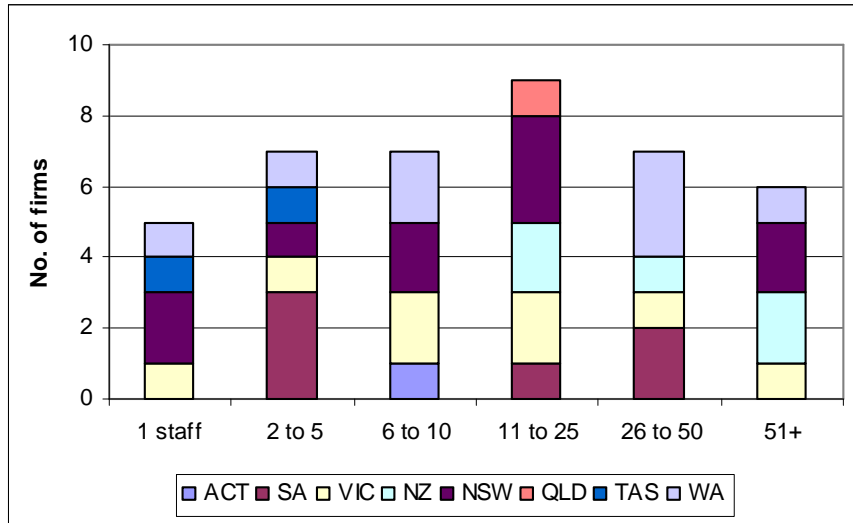
<sup>1</sup> RAIA *Architectural Office Profile and Financial Benchmarking Report No.3* for the financial year 2002 – 2003.

<sup>2</sup> RAIA *2004 Membership Survey Report*

### 3.3 Size of Firms versus Location

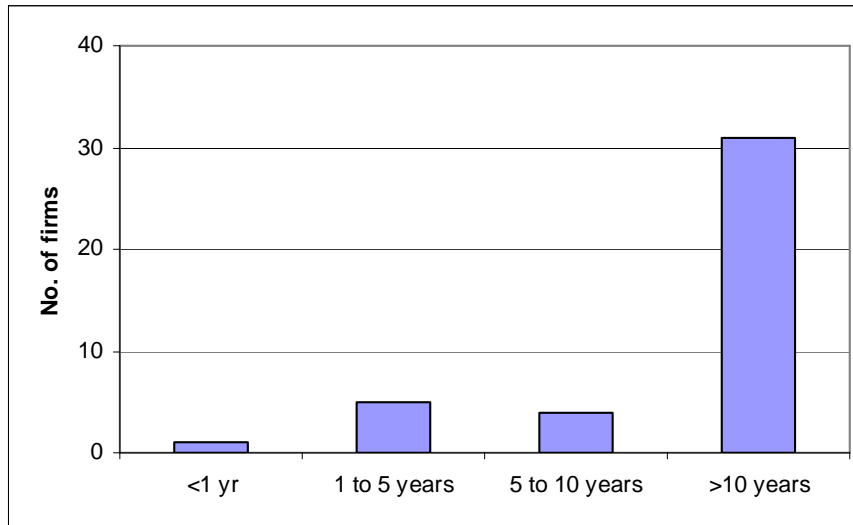
**Figure 4** shows that respondent firms (with 11 to 25, 26 to 50, and 51+ staff) tend to be located in NSW, NZ, VIC, and WA. All NZ firms that responded had at least 11 staff, whereas NSW, VIC and WA had a greater overall range of firm sizes.

Figure 4: Size of firms versus location of firms



### 3.4 Years in Operation

Figure 5: Number of years operating in architectural practice



**Figure 5** indicates that the majority of the surveyed firms have been operating for more than 10 years.

### 3.5 Number of Projects Undertaken

Figure 6: Number of projects undertaken since 2000 in Australia and overseas

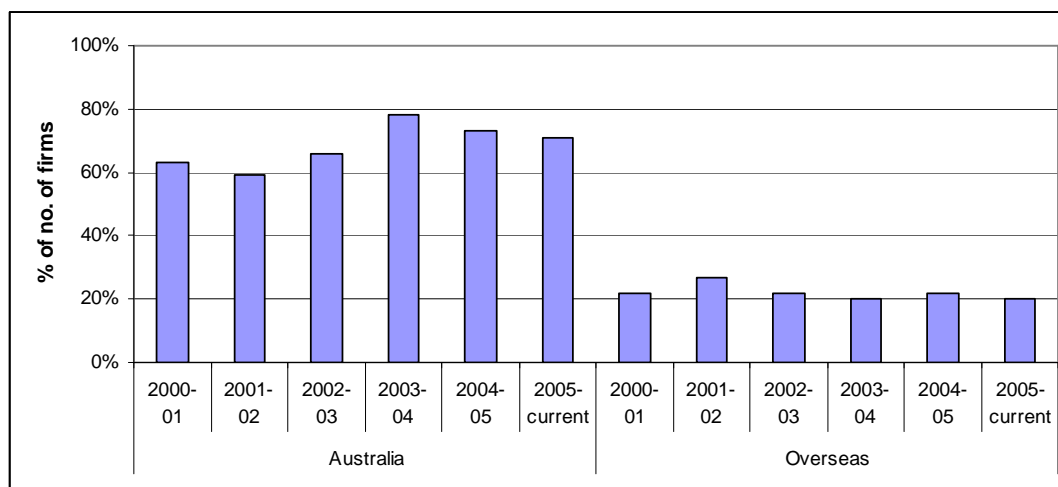


Figure 6 reveals that more than 50% of the respondent firms have been undertaking healthcare facility design projects in Australia since the year 2000, peaking at 80% being active in healthcare facility design in 2003-04. Some 20% of these organisations have also undertaken healthcare design projects overseas (excluding NZ) since the year 2000.

### 3.6 Location of Projects Undertaken

Figure 7: Location of projects undertaken

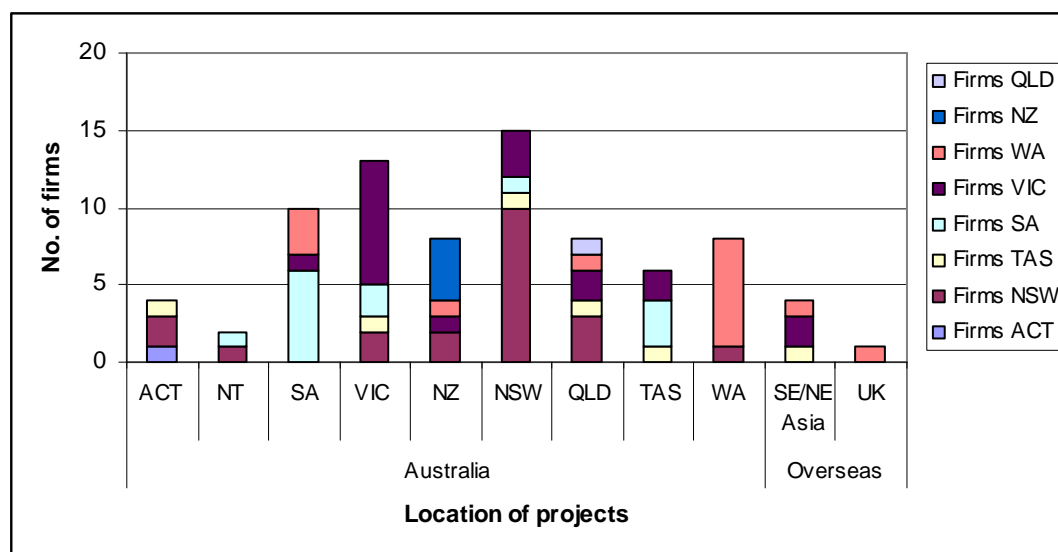


Figure 7 illustrates that the projects undertaken through the surveyed period (2000 to 2005) were predominantly located in NSW and VIC. The number of firms undertaking projects in each State/Territory within Australasia generally correlates to the (State/Territory) population size.

It is important to note that the number shown on the vertical axis refers to the number of firms undertaking projects in each location, and as such, does not refer to the actual number of projects undertaken.

The chart shows that projects in NSW are mainly undertaken by the NSW based firms. A similar pattern can be seen for VIC, SA, and WA. On the other hand, projects in ACT, NT, QLD and TAS

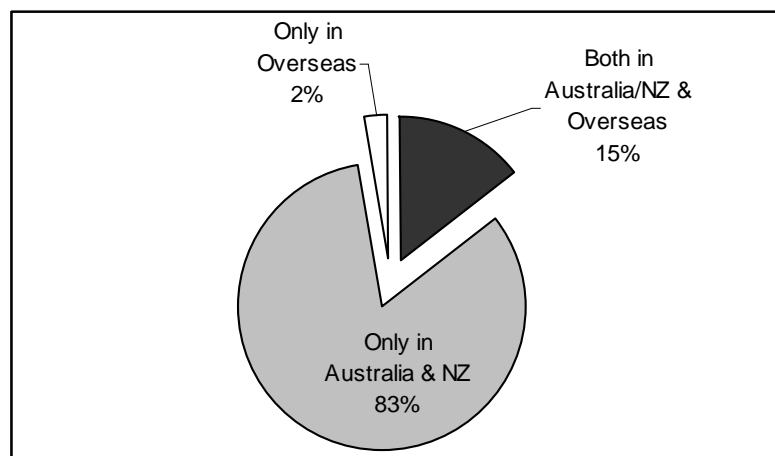


seem to be largely undertaken by interstate firms. Projects in NZ are undertaken by local and interstate firms equally (in terms of number of projects).

The overseas projects (excluding NZ) were undertaken in the main by firms based in NSW, TAS, and WA.

### 3.7 Firms working in Australia/NZ and/or overseas

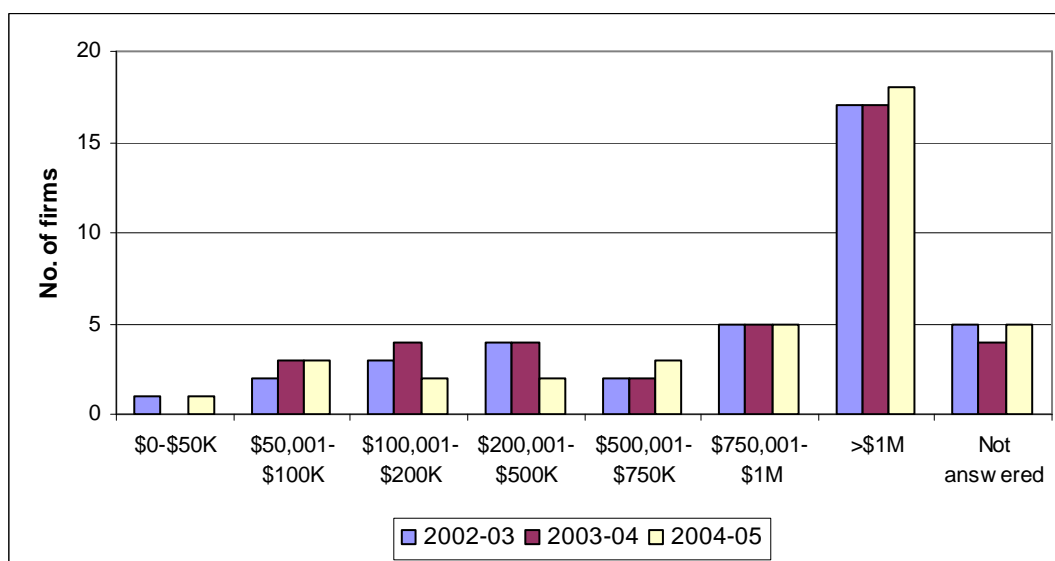
Figure 8: Percentages of firms working only in Australia/NZ, overseas, and both



**Figure 8** shows that the majority of the respondents' firms undertake projects only in Australia and NZ (83%), with another 15% undertaking projects in Australia/NZ, and overseas. Only 2% of the respondent firms work only in overseas locations.

### Revenue

Figure 9: Gross revenue of firms for 2002-05



Revenue

**Figure 9** shows that in 2004-05, the gross revenue (from all project types) for 18 firms i.e. 50% of all firms undertaking healthcare facility projects who responded to this question was more than \$1M. The next most common revenue range was \$750,000-\$1M for five firms (14% of responses). The remaining firms earned less than this range.

**Figures 10, 11 and 12** reveal a general and consistent pattern that the larger the firm by employee number the greater the total revenue generated from healthcare facility design activity.

Figure 10: Gross revenue in 2002-03 by size of firms

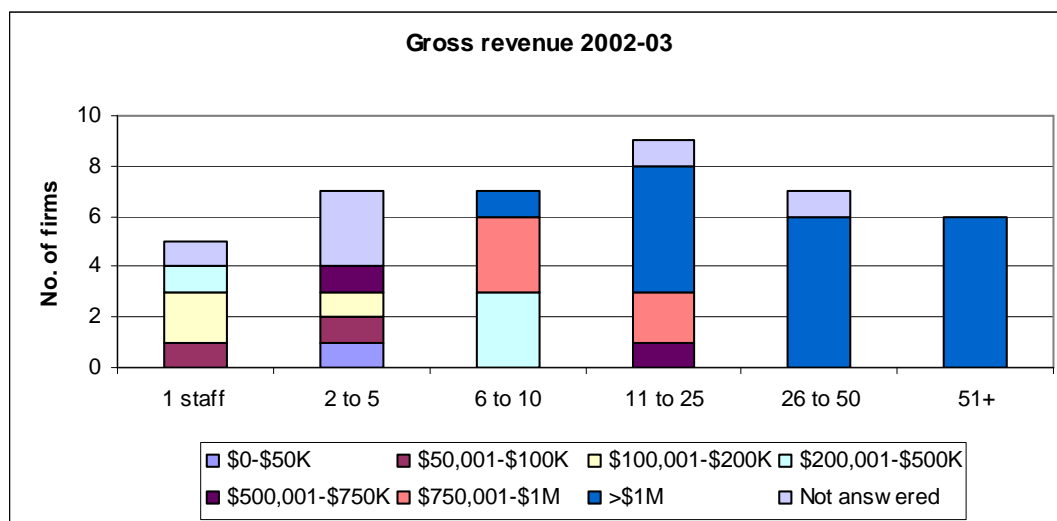


Figure 11: Gross revenue in 2003-04 by size of firms

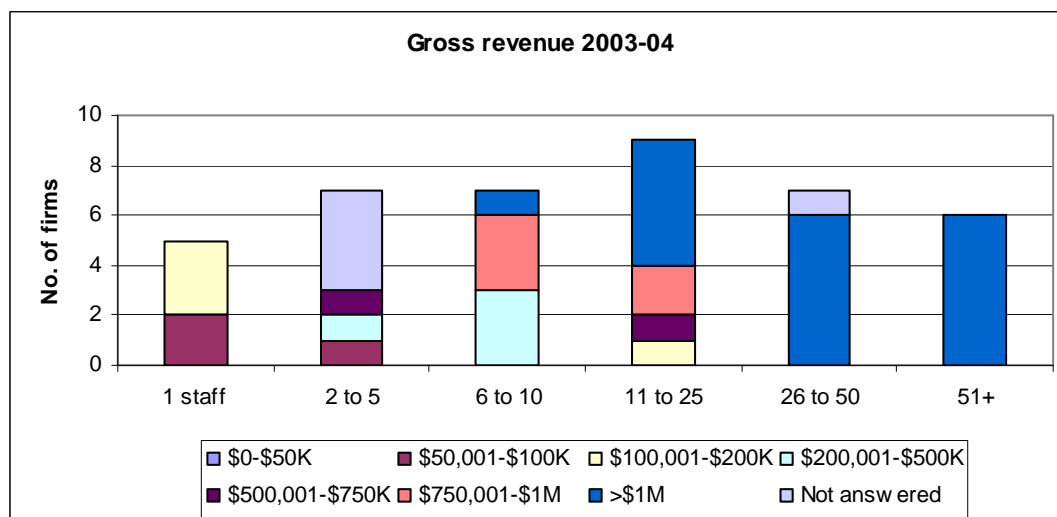


Figure 12: Gross revenue in 2004-05 by size of firms

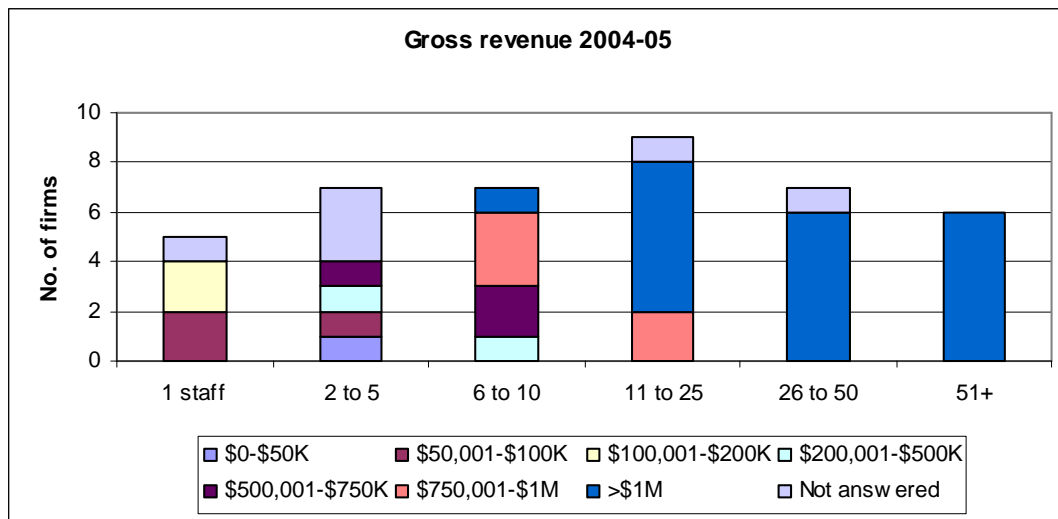


Figure 13: Pattern of revenue of firms with 1 staff (sole practitioner) over time

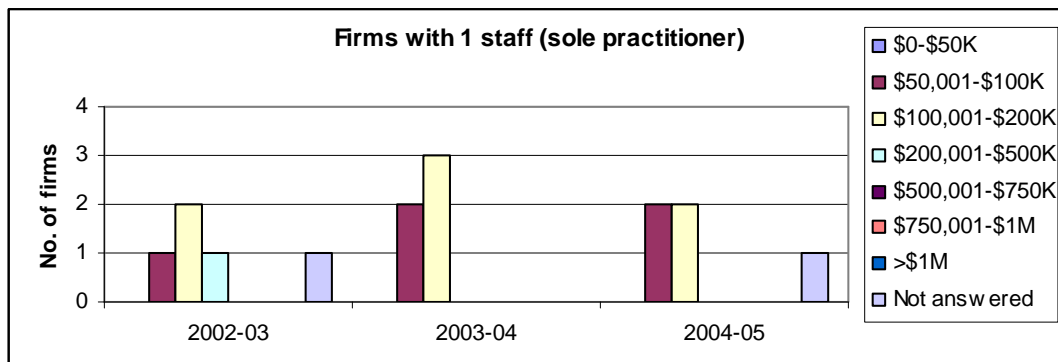


Figure 13 shows a fairly consistent pattern of earnings by sole practitioners ranging from \$50,000-\$500K in 2002-03, to between \$50,000-\$200K in 2003-04 and 2005-05. The small sample size makes it difficult to draw complete conclusions regarding the patterns of earnings over the time surveyed.

Figure 14: Pattern of revenue of firms with 2 to 5 staff over time

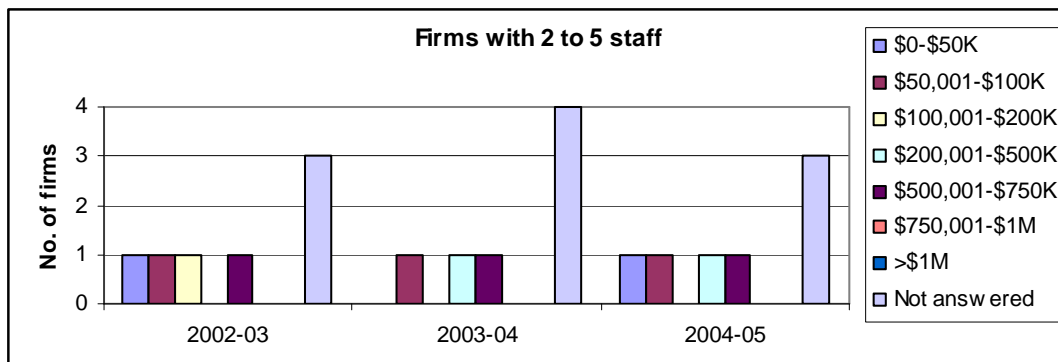


Figure 14 shows that the revenue ranges from \$0 - \$50,000 through to \$500K - \$750K are evenly represented in the revenue earnings of 2 to 5 staff firms. There was a high level of non responses from these firms, up to 50% in 2003-04.

Figure 15: Pattern of revenue of firms with 6 to 10 staff over time

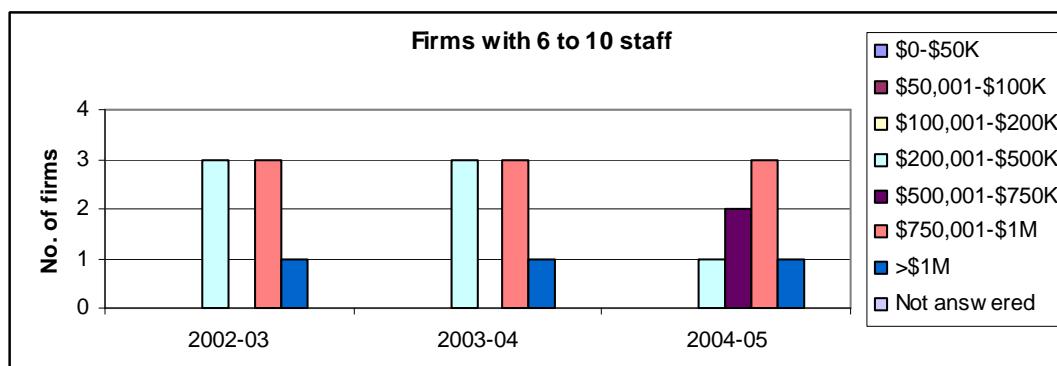


Figure 15 indicates that firms with 6-10 staff tended to achieve higher revenues in 2004-2005 as compared to the earlier survey periods of 2002-03 and 2003-04.

Figure 16: Pattern of revenue of firms with 11 to 25 staff over time

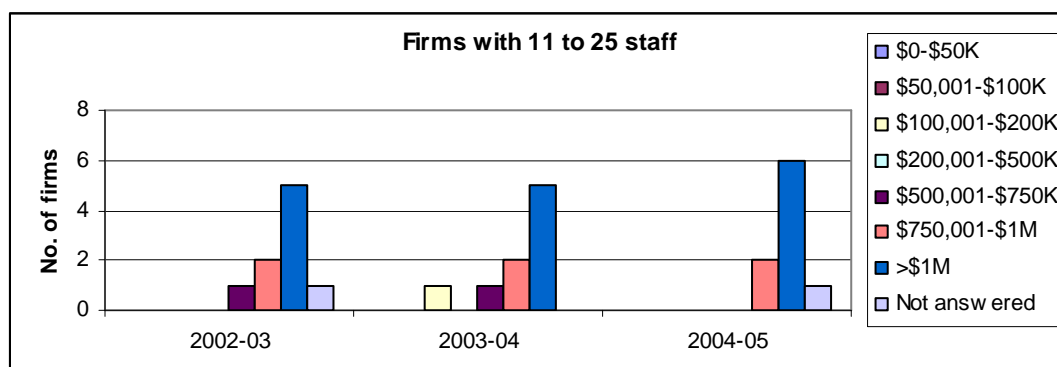


Figure 16 illustrates an increase in the number of firms with between 11 and 25 staff that generated revenue of more than \$1M in 2004-05 compared to the earlier years. This would also have contributed to the increase of revenue with the >\$1M band in 2004-05 shown in Figure 8.

Figures 17 and 18 illustrate that larger firms of 26+ staff consistently received revenue of more than \$1M throughout the period of 2002-05.

Figure 17: Pattern of revenue of firms with 26 to 50 staff over time

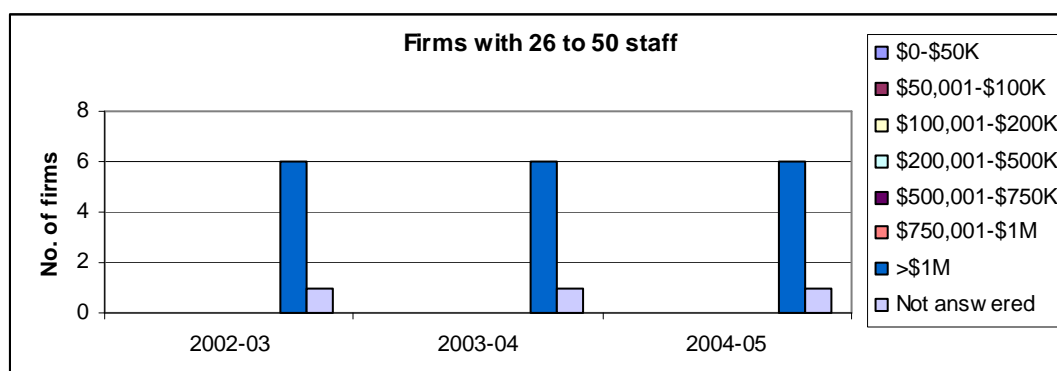


Figure 18: Pattern of revenue of firms with 51+ staff over time

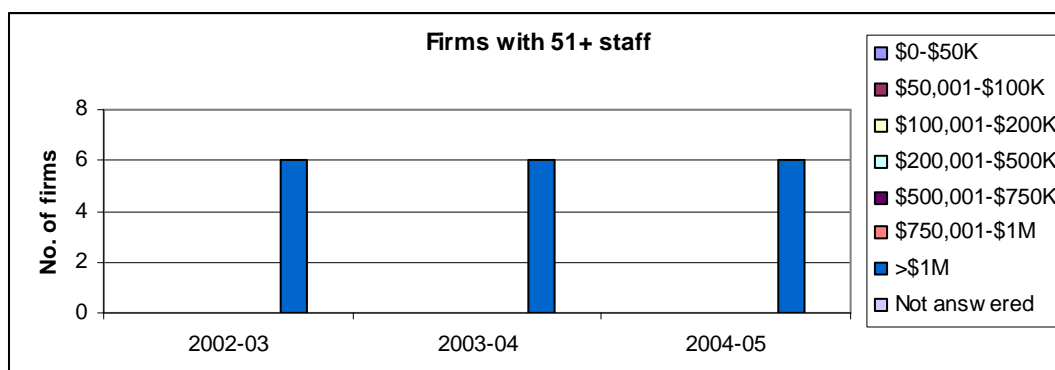


Figure 19: Percentage of revenue of firms generated through health projects

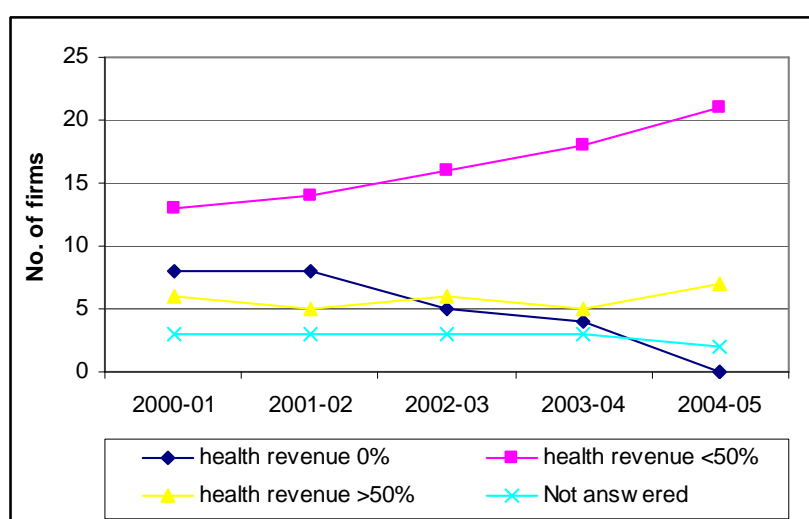
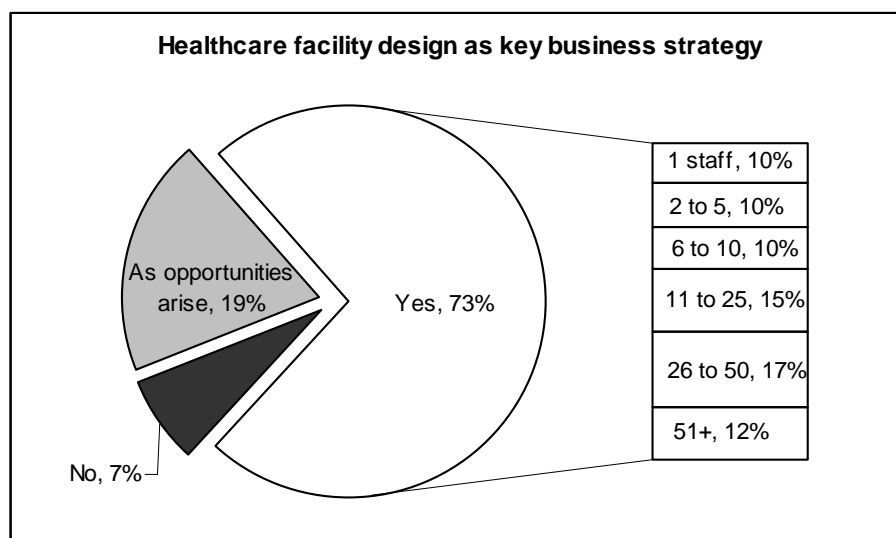


Figure 19 indicates that the respondent firms were increasingly receiving revenue from health projects from the year 2000-01.

The general pattern of % revenue received from health projects for the period 2000-01 to 2004-05 shows an increasing number of firms receiving less than half of their total revenue from health projects. This trend suggests that while health projects were increasingly being undertaken by the firms surveyed, these projects progressively became less likely to represent the bulk (i.e. more than 50% of revenue received) of the firms' project work.

### 3.9 Healthcare facility design as a key business strategy

Figure 20: Percentage of firms and firms sizes undertaking healthcare facility design as a key business strategy

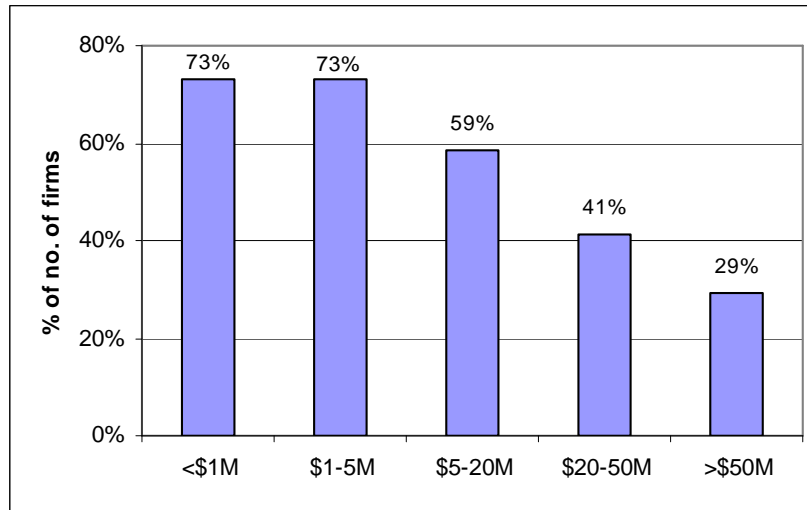


**Figure 20** shows that a majority (73%) of surveyed firms have chosen to pursue healthcare facility design as a key business strategy, even though their income from healthcare may represent less than half of their total revenue. Furthermore, of the 73% of the firms who have nominated healthcare facility design as a key business strategy, more than half are medium and large firms (with staff numbers of 11 to 25, 26 to 50, and 51+).

In considering this result an obvious assumption to make is that firms are willing to undertake healthcare facility design works when the opportunity lends itself.

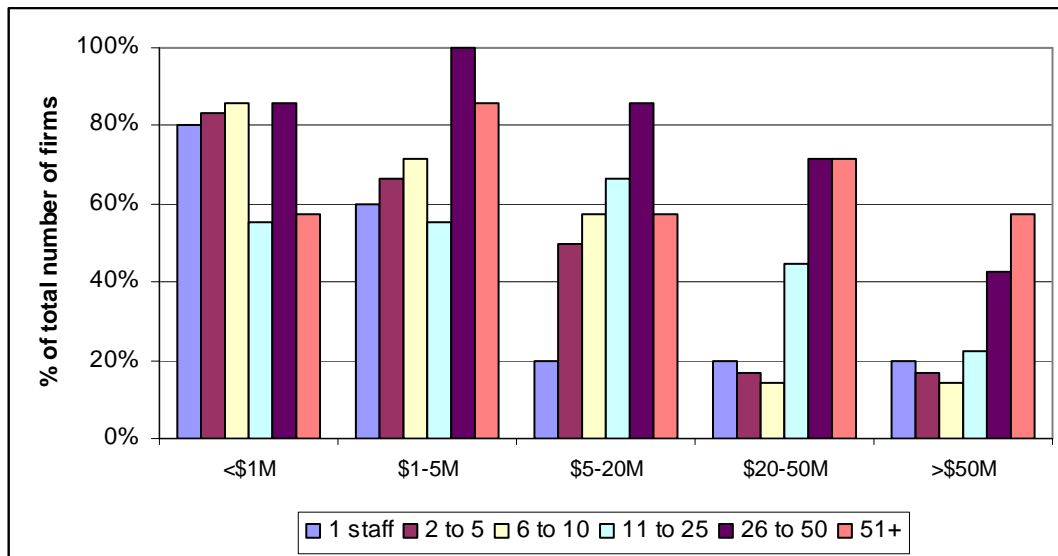
### 3.10 Size of Projects

Figure 21: Project Size



**Figure 21** shows that most firms (73%) undertake small projects up to \$5M; a large number (59%) undertake mid-size projects (\$5-20M); 41% of firms undertake larger projects of \$20 - 50M, with 29% of firms undertaking the large projects of >\$50M.

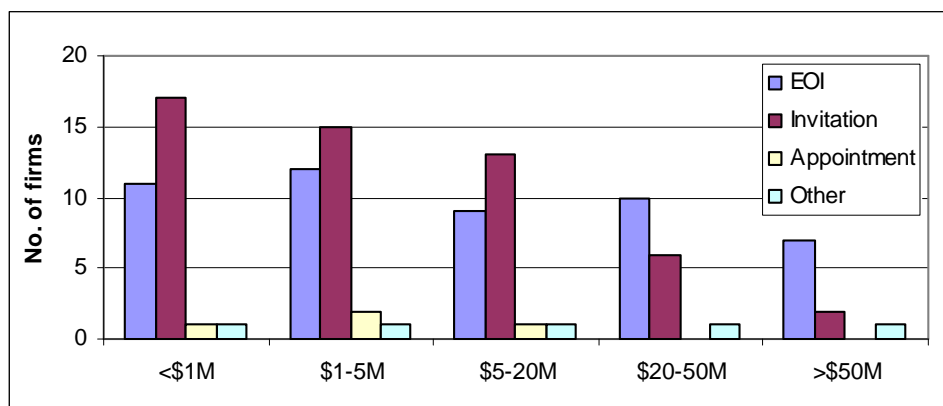
Figure 22: Project size versus firm size



For **Figure 22**, it is important to note that the graph does not take into account the actual *frequency* of projects undertaken by the firms; therefore the individual columns do not total 100% either across and vertically. The chart reveals a general pattern that small firms (1 staff and 2-5 staff) tend to focus on projects costing <\$1M. Medium-sized firms (6-10 and 11-25 staff) tend to focus on projects ranging from <\$1M up to \$20M. Large firms with 51+ staff seem to undertake most projects >\$50M, although Figure 10 also shows that the most frequent projects undertaken by large firms are also those ranging between \$1-5M and \$20-50M. However, among the different sizes of the firms, those with 26-50 staff undertake most projects up to \$50M. It suggests that larger firms undertake more projects overall, and of a greater range of sizes.

### 3.11 Project Sizes in terms of commissioning process

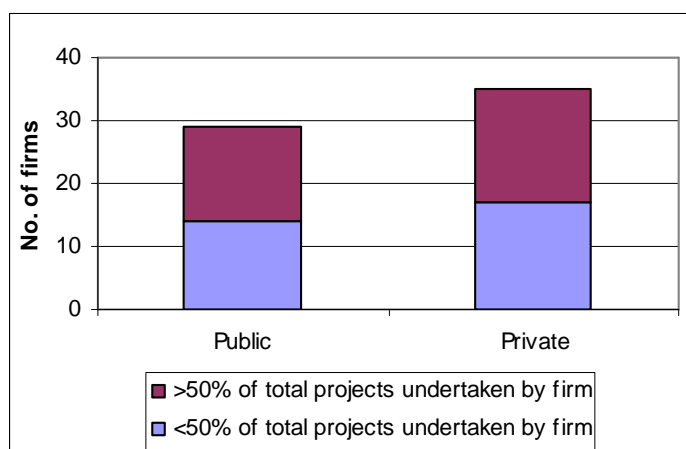
Figure 23: Project size versus project commission



**Figure 23** reveals that smaller projects (up to \$20M) are largely commissioned by an invitation process, although a significant portion are also commissioned by Expression of Interest (EOI). Furthermore, larger projects (>\$20M) tend to adopt the EOI process. It is important to note that in some cases EOI may be followed by an “Invitation to Bid”. The results suggest that competitive selection still predominates as the most common process for commissioning of projects.

### 3.12 Sources of Project Funding

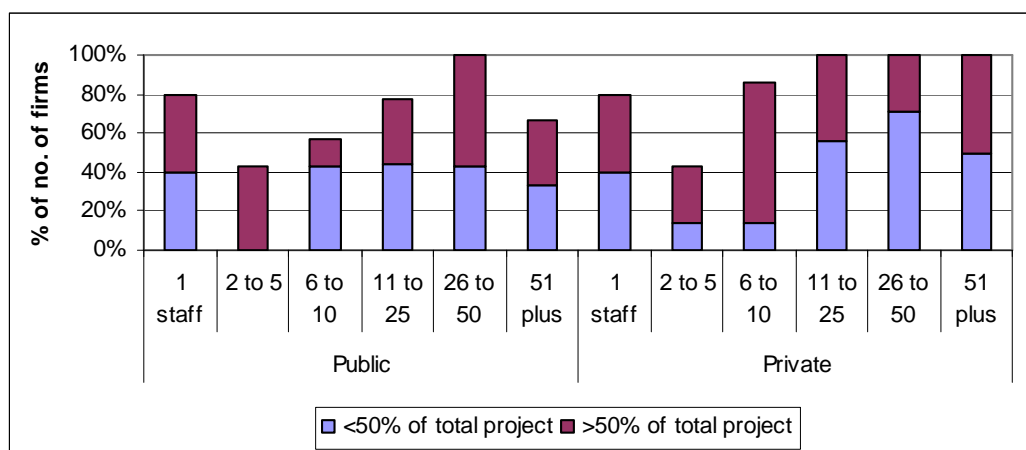
Figure 24: Number of firms versus sources of project funding



For **Figure 24** it should be noted that although data was collected to enable discrimination between different types of privately funded healthcare facility projects (i.e. private-for-profit, private-not-for-profit, etc), the number of responses received for some of the private sources was so small that for the purposes of data analysis, these have been aggregated to reflect public versus private sources of project funding.



Figure 25: Source of funding versus firm size



**Figure 25** above shows the pattern of funding sources (public vs private) for the different firm sizes. It is important to note that the total of firms undertaking the public and private funded works may add to more than 100%, indicating that many firms have no particular focus or preference for a funding source and thus respond opportunistically, accepting the work available from either source.

#### *Sector Focus vs Firm Size:*

The figure shows that the private sector is the focus for medium and large firms (11 to 25 staff, 26 to 50, and 51+), while the public sector tends to be more of a focus for firms with 26-50 staff. For the firms with 26 to 50 staff, public sector works account for more than half of their total projects. Larger firms (51+ staff) tend to undertake more privately funded healthcare facility design projects.

#### *Private Sector Projects:*

Private sector works attract smaller firms (1 staff, 2 to 5, and 6 to 10), accounting for more than half of the total number of projects undertaken by these firms. For the larger firms, private sector healthcare facility design works mainly comprise less than 50% of their total projects, suggesting that the large firms have a more diverse design focus.

#### *Public Sector Projects:*

Similarly, the public sector attracts small firms (1 staff and 2 to 5) and provides more than half of the total number of projects for these firms. It is interesting to note that the public sector also attracts firms with 26-50 staff and, for the majority of these firms, the publicly funded healthcare facility design works comprise more than half of their total projects.

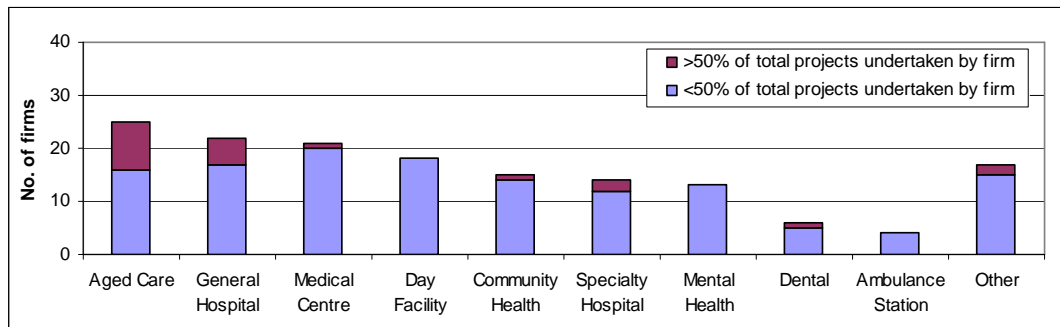
#### *Sector vs majority/minority of projects undertaken:*

Where public sector projects are undertaken by firms of any size these are as likely to account for either a minority or a majority of total projects. This suggests that the public sector attracts a variety of firm sizes dedicated to undertaking its projects, perhaps due to the greater range of project sizes available.

The private-for-profit sector seems to engage larger firms but accounts for less than 50% of the larger firms' total projects. Where small firms work in this sector, these projects tend to make up more than 50% of the firms' total projects. This suggests a greater consistency in the size of projects in this sector.

### 3.13 Types of Projects

Figure 26: Number of firms versus % of projects type



**Figure 26** shows that the most common project types undertaken by the firms are aged care residential, general hospitals, medical centres, and day facilities. This reflects the fact that overall there are more of these types of facilities.

Other types of projects identified by respondent firms are medical research centres, testing and teaching laboratories, blood bank, blood donor centres, carparks, prison hospital, vet clinic, group homes, disabled group homes, and special units. Community health facilities, specialty hospitals, and mental health facilities are also undertaken by a number of the firms.

Only a small number of respondent firms undertake dental facilities or ambulance stations. This contrasts to aged care residential, general hospitals, and specialty hospitals that account for more than half of the total projects of some firms.

### 3.14 Types of Services Provided

Figure 27: Type of services provided by the firms

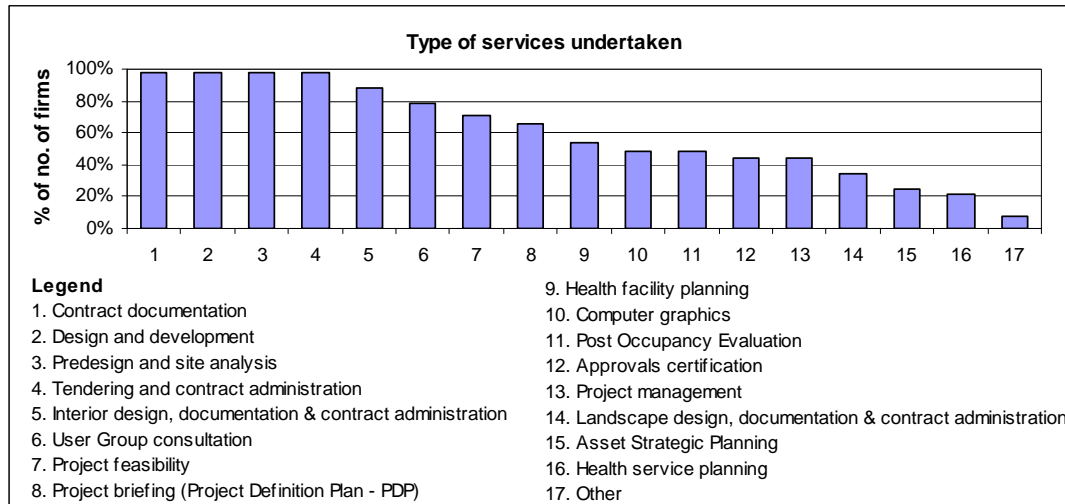


Figure 27 shows that a majority of the firms (98%) undertake contract documentation, design development, predesign & site analysis and tendering & contract administration. These service types are the 'traditional services' provided by architects (as reflected in the RAIA workplans, and client-architect agreements).

Many of the firms also provide additional non-traditional services, such as interior design – this may perhaps reflect a tendency towards incorporating these specialist practitioners (who may or may not also be architects) into the firm as a kind of 'one stop shop'.

User group consultations, project feasibility, and project briefing (PDP) are also offered by a majority of the respondent firms, with percentages of 78%, 71%, and 66% respectively. Many architects regard these as a simple extension of 'traditional services'. However there is also a growing trend for clients to employ 'expert' consultants to deliver these services perhaps as a stand alone commission prior to entering into a more traditional relationship with a design firm or architect to deliver the building itself.

Services provided by less than fifty percent of firms include computer graphics, post occupancy evaluation, approvals certification, project management, landscape design documentation, asset strategic planning and health services planning.

Figure 28: Type of services provided by firm size

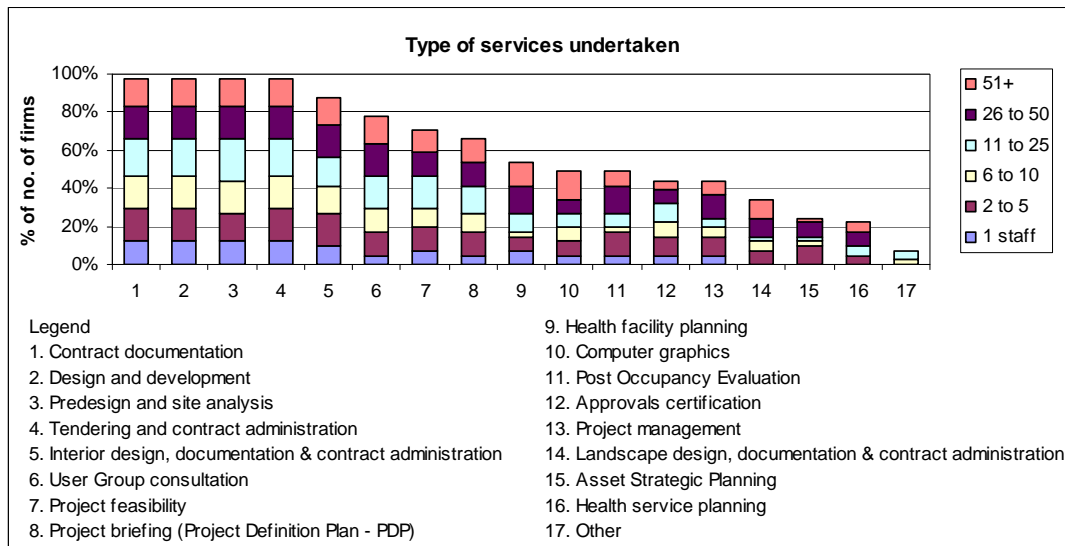


Figure 28 suggests that the size of firm does not influence the types of services provided. As noted previously almost all firms (98%) offer the traditional range of services (Legend items 1 through to 4) but there appears to be no direct correlation between firm size and the offering of less traditional architectural services.

### 3.15 Types of Contracts

Figure 29: Types of contract undertaken by firms

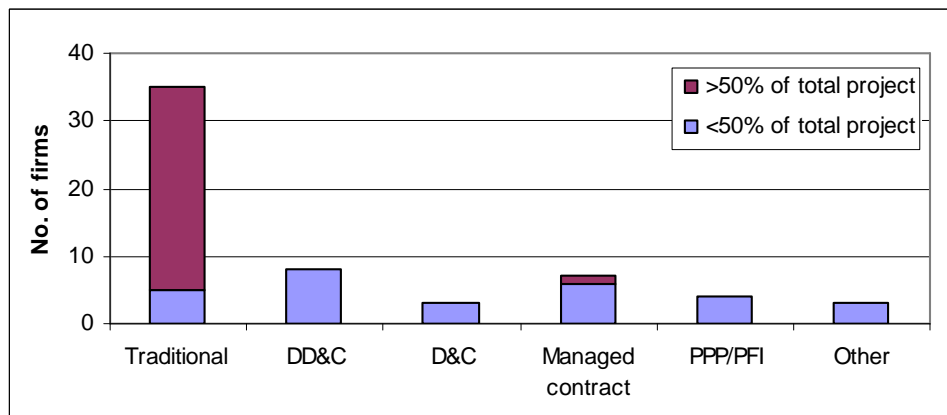
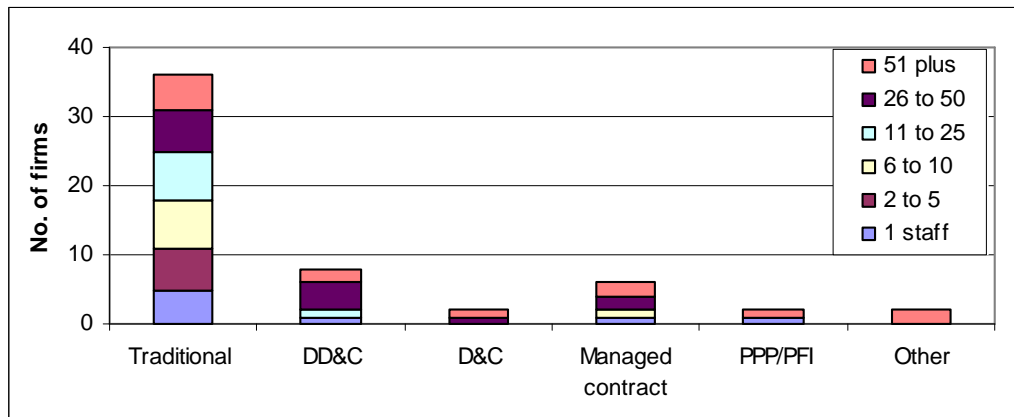


Figure 29 reveals that most projects undertaken by the firms continue to be acquired using traditional procurement strategies. Indeed, a majority of the firms use this type of procurement strategy for more than 50% of their healthcare facility projects. Only very few firms have any experience of other forms of contracts or procurement methods, with the most commonly used of these being Design, Document and Construct (DD&C) and Managed Contracts.

Figure 30: Types of contract undertaken by the different firm sizes



**Figure 30** illustrates that the majority of firms undertake 'traditional' type contracts regardless of the firm size. The Design, Document and Construct (DD&C) type of contract and the Design and Construct (D&C) seem to be largely undertaken by larger firms with 26-50 staff and 51+ staff.

The survey did not investigate the *extent* of the role undertaken by the architectural firms throughout a particular type of contract. For example one-person firms may be employed in an advisory or 'expert' role on a PPP/PFI project and a larger firm also employed to undertake the majority of the 'architectural' work associated with that commission. This would effectively double count the number of firms that worked on that project.

## SECTION 4 USE OF INFORMATION SOURCES – FREQUENCY & IMPORTANCE

### 4.1 Summary

In the second part of the survey, respondents were asked to nominate from a range of information sources those that they or their practice used, and to rank those sources in the order of importance of their use to the firm.

It was found that respondents use multiple information sources as indicated in **Figure 31**. In terms of grouping of types of information utilised by categories, respondents frequently use information gathered from previous projects and their firms' original research. Information from clients is also used widely. Designers also use information sources such as the Australian and New Zealand standards. This is further elaborated in Figure 32 which lists the top-10 information sources used.

**Figure 43**, reveals that information from Health Facility (Design) Guidelines, CPD, POE (undertaken by other than their own firm), and others' research summaries are less widely used.

**Figure 31: Resource categories: most frequently used**

No.	Resource Category Usage	No. Firms
1	Information gathered from previous projects	40
2	Own/firm's original research	40
3	Information from client	39
4	Other guidelines	38
5	Other consultants/colleagues	35
6	Magazines and journals	33
7	Health Facility (Design) Guidelines – Australia/NZ	26
8	CPD	25
9	POE (own POE and others)	21
10	Research summaries by others	15

### 4.2 Information Sources: 10 Most Frequently Used

#### 4.2.1 Summary

The resources most frequently used by designers are those resulting from their own and their firm's previous project experiences. In addition, site visits in relation to the project being undertaken are equally important, closely followed by information from the client.

Other frequently used sources of information used include internet research and legislated codes, standards and guidelines including the Australian/NZ standards and the Building Code of Australia (BCA).

The next most popular resources are consultation with consultants/colleagues within the respondent firm, and projects undertaken by other firms. Manufacturers' promotional literature is widely used, as is information from other colleagues/consultants within the same industry (from other firms).

Figure 32: Information sources: 10 most frequently used

No.	Information Source	No. firms
1	Information gathered from previous projects – Undertaken by your practice	40
2	Own/firm's original research – Site visits	40
3	Information from client	39
4	Other guidelines – Australian/NZ standards	38
5	Own/firm's original research – Internet research	38
6	Other guidelines – BCA	37
7	Other consultants/colleagues – Your practice	35
8	Information gathered from previous projects – Undertaken by others	33
9	Magazines and journals – Manufacturers' promotional literature	33
10	Other consultants / colleagues – Others in the same/related industry	32

#### 4.2.2 Information from previous projects – undertaken by the practice

The following section looks at each of the top 10 information sources used in terms of the firm size and location.

In this section, the graphs include information about the firms' locations. The States of ACT, QLD, and TAS are excluded from these graphs because the low response rate.

Figure 33: Information from previous projects – by your practice

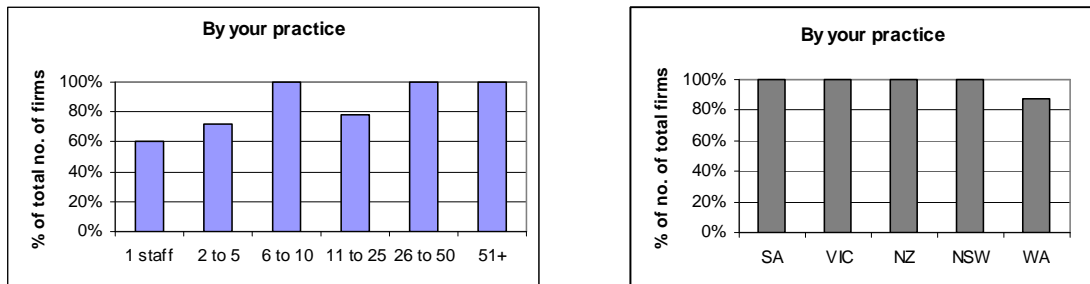
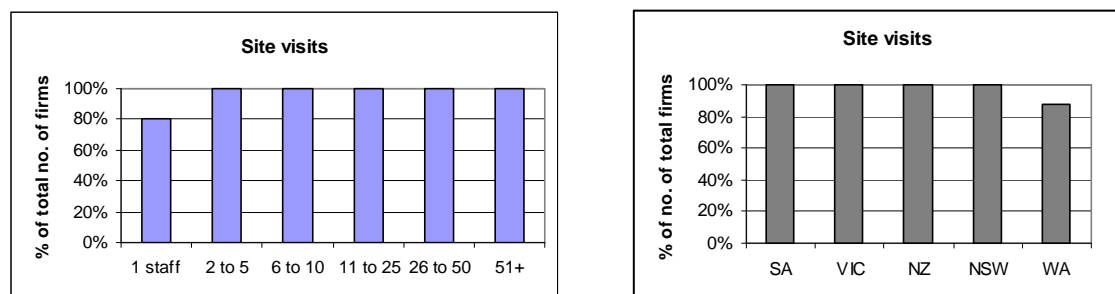


Figure 33 shows that all firms use information from previous projects but medium (6-10 staff) and larger (26+) firms in particular most frequently use information from their previous projects for their current design works. With the exception of WA, there is little variation as a result of firm location.

#### 4.2.3 Own original research – Site visits

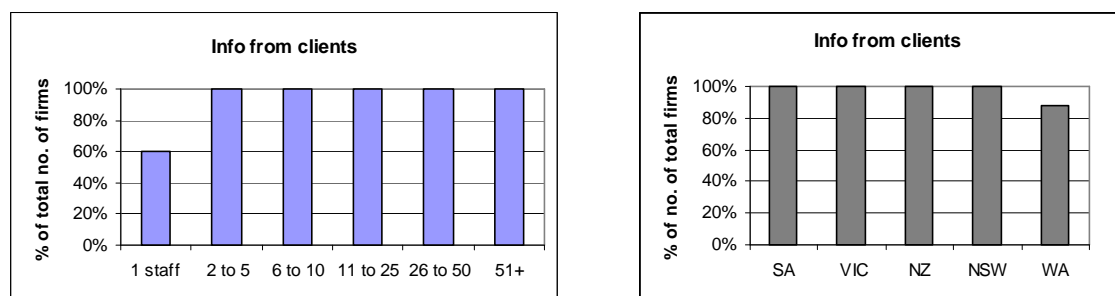
Figure 34: Own original research – Site visits



It can be seen from **Figure 34** that firms conduct their own site visits regardless of their size and location, although WA based firms undertake slightly fewer site visits than those from other States. This may be a factor of distance in regard to project locations in that state. Sole practitioners also undertake fewer site visits.

#### 4.2.4 Information from clients

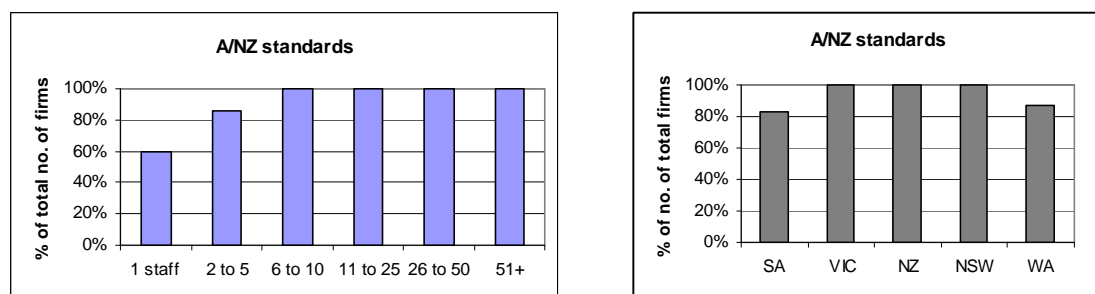
Figure 35: Information from clients



Information from clients is shown to be an important source of information for all firms regardless of their size and location.

#### 4.2.5 Other guidelines/standards/policies – Australian/NZ standards

Figure 36: Other guidelines/standards/policies – Aust/NZ Standards



Similar to the above source ('Information from clients'), the Australian/NZ standards are used as a resource by most firms (regardless of their size), with an identifiable exception being smaller firms – sole practitioners and firms with 2 to 5 staff. These smaller firms may be involved at earlier stages of projects (feasibility or briefing) where the use of Standards is not as widely required as say during detail design or contract documentation. This anomaly in the use of standards may be subject to further investigation in future surveys.



#### 4.2.6 Own original research – Internet research

Figure 37: Own original research – Internet research

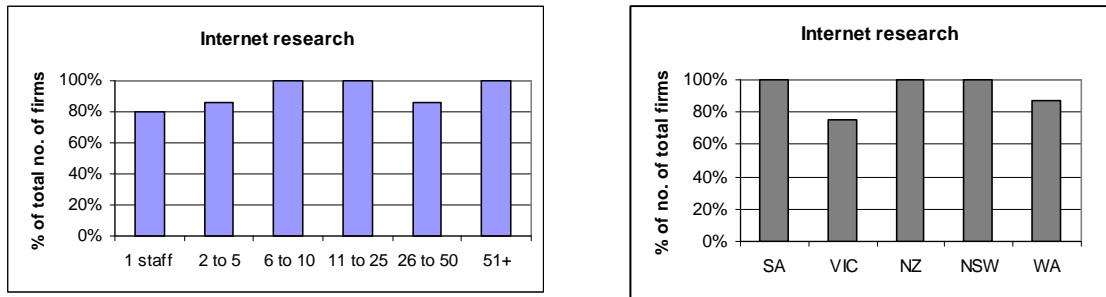
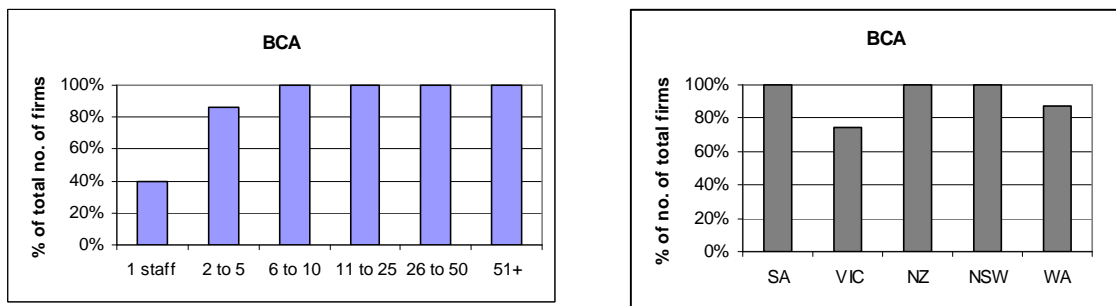


Figure 37 reveals that information obtained through internet research is widely used by most firms regardless of their size and location. However, given the sometimes questionable quality of some information available from this source (e.g. in terms of accuracy or reliability) further investigation of this result may be warranted in future surveys.

#### 4.2.7 Other guidelines/standards/policies – BCA or NZ equivalent

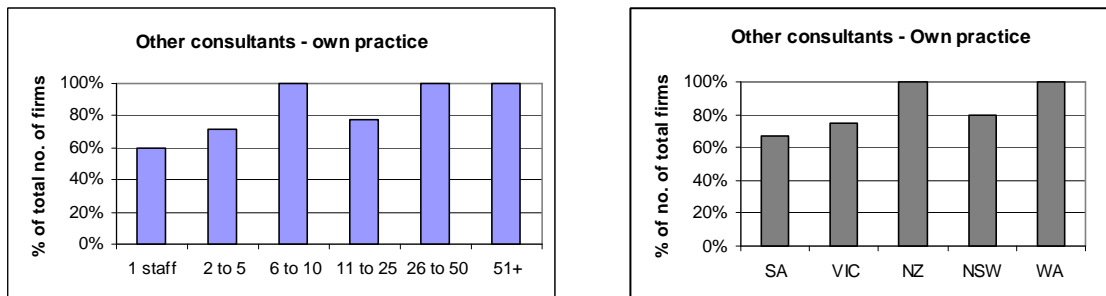
Figure 38: Other guidelines/standards/policies – BCA or NZ



Results suggest that sole practitioners are not utilising the BCA or its NZ equivalent as frequently as other firms. This may perhaps reflect a concentration on certain project stages (e.g. early or strategic planning) as noted for the use of Australian/NZ standards above.

#### 4.2.8 Other consultant/colleague – Your practice

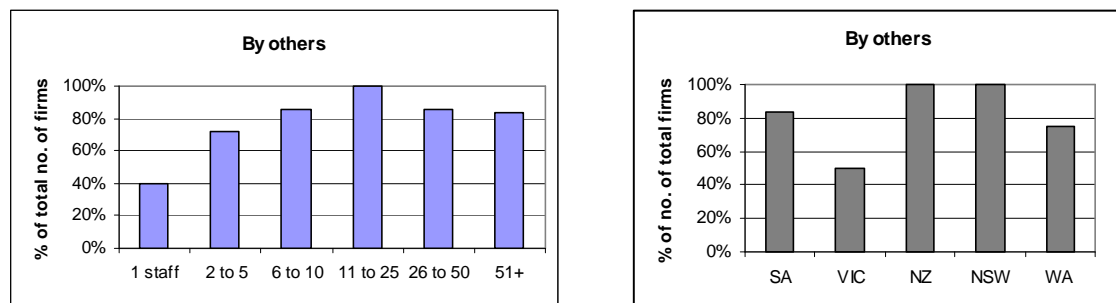
Figure 39: Other consultant/colleague – Your practice



Architects frequently utilise the intellectual capital of other staff members. This suggests that if an individual does not possess the required knowledge, they first consult with a colleague within their firm before attempting to obtain information from external sources.

#### 4.2.9 Information from previous projects – By others

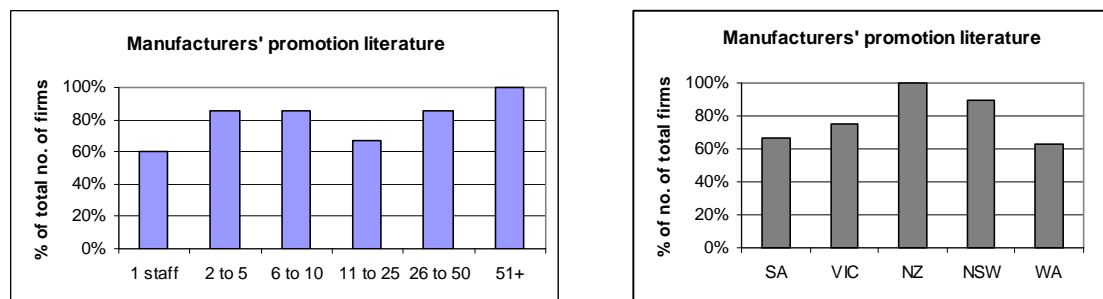
Figure 40: Information from previous projects – By others



Firms with 11 to 25 staff all indicated that they used information obtained from past projects undertaken by other firms.

#### 4.2.10 Magazines & journals – Manufacturers promotion literature

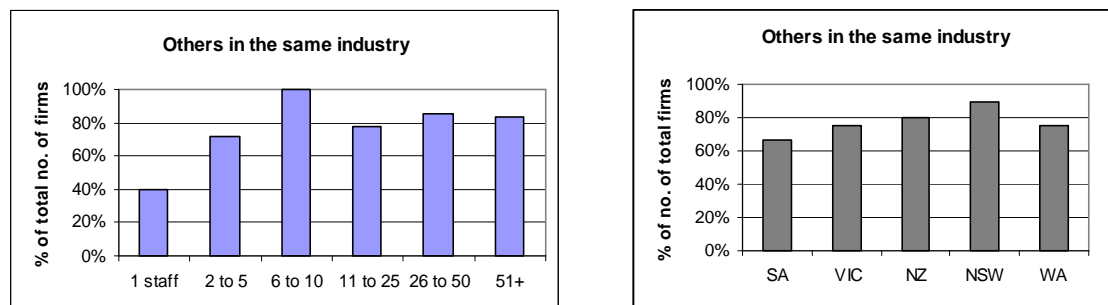
Figure 41: Magazines & journals – Manufacturers' promotion literature



While information gathered from manufacturers' promotional materials is a relatively important source for all firms, it is most commonly used in large firms with 51+ staff. Sole practitioners and firms with 11 to 25 staff use this resource less frequently. Firms in NZ and NSW have the highest use of this resource with relatively lower rates in WA, SA and VIC.

#### 4.2.11 Other consultants/colleague – Others in industry

Figure 42: Other consultants/colleague – Others in industry



While firms with 11 to 25 staff are previously shown to commonly use information from the past projects of other firms (see Figure 40), they seem to be less frequently using (more personally obtained) information from other consultants or colleagues in the industry. The highest use of this information source occurs in NSW (90%) and the lowest in SA (67%). This suggests that informal and formal information exchange networks between firms are an important resource in industry.

## 4.3 Information Sources: 10 Least Used

### 4.3.1 Summary

The least frequently used resources nominated by respondents are listed in **Figure 43** below. By category, these are mostly Health Facility (Design) Guidelines produced by various Australian and New Zealand Health Departments and from overseas (AIA and NHS). As a category however (all sources of these guidelines combined) the use of these guidelines scored 7<sup>th</sup> overall with 63% of firms indicating that this information resource was used.

Other resources that are less frequently used include Post-Occupancy Evaluation (POE) undertaken by other firms and research summaries from various sources such as the CHAA website, university library and ACHSE Library (a specialist health planning library supported by NSW Health).

Figure 43: Information sources: 10 least or rarely used

Information Source Usage	No. firms
POE – Other source i.e. undertaken by other than own firm	18
Health Facility (Design) Guidelines – International – NHS	17
Health Facility (Design) Guidelines – Australia/NZ – QLD Health	16
Research summaries by others – CHAA website	15
Health Facility (Design) Guidelines – International – AIA	14
Health Facility (Design) Guidelines – Australia/NZ – NZ Ministry of Health	12
Research summaries by others – University Library	11
Health Facility (Design) Guidelines – Australia/NZ – WA Health	10
Research summaries by others – ACHSE Library	10
Health Facility (Design) Guidelines – Australia/NZ – SA DHS	8

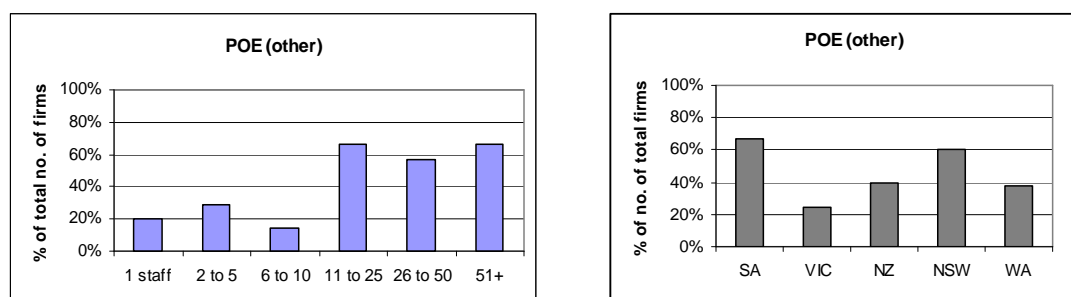
The following section investigates each of the 10 least used information resources in terms of the sizes and locations of firms that do use them.

The graphs include information about the firms' locations only for the larger Australian States (with the exception of QLD) and for NZ. Results for the ACT, QLD, and TAS are not reported owing to the low response rate.

For each resource, a table is then provided that sets out the reasons indicated for their non-use by the remaining survey respondents.

### 4.3.2 POE study results – Other source

Figure 44: POE study results – Other source



The low use of this type of information may reflect the lack of access to POE results undertaken by others, and perhaps even the awareness that such information exists. The greater use by larger firms suggests that these firms have more industry connections / knowledge of previous POE studies undertaken by others. Clients may also have a role in dissemination of such information from their previous projects – although this issue was not tested in this study.

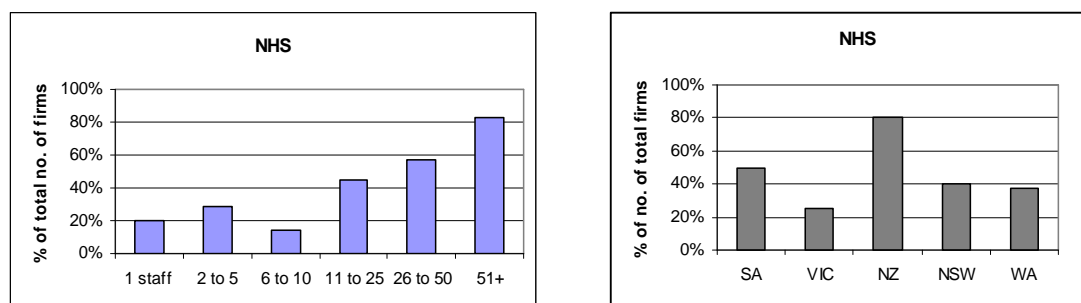
Table 2: Reasons for non-use of POE study results – Other source

Resource	Unaware	Not available	Unreliable	Too expensive	Other
POE (other)	2	5	0	0	1

The most common reason for non-use appears to be that this information is not available which suggests that there is not a commonly available source of this information for designers to access.

#### 4.3.3 International publications – NHS

Figure 45: International publications – NHS



The use of the NHS documents tends to be by larger firms and those based in New Zealand.

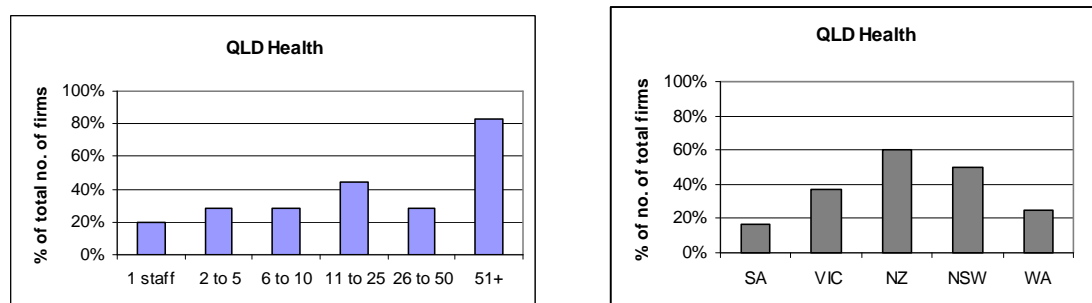
Table 3: Reasons for Non-use of International publications – NHS

Resource	Unaware	Not available	Unreliable	Too expensive	Other
NHS	9	1	0	0	3

The reason for limited use of NHS publications appears to be lack of general awareness of their availability.

#### 4.3.4 Health Facility Design Guideline – QLD Health

Figure 46: Health Facility Design Guideline – QLD Health



The figure shows a relatively low usage of QLD Health Facility Design Guidelines other than by large firms. As noted previously, unless firms actually undertake projects in Queensland they are unlikely to need to use this resource as the information may often be available in more current guidelines from other locations. The largest firms (51+) and New Zealand firms use this resource more than other respondents, perhaps suggesting a greater knowledge of available resources or lack of useful locally developed resources.

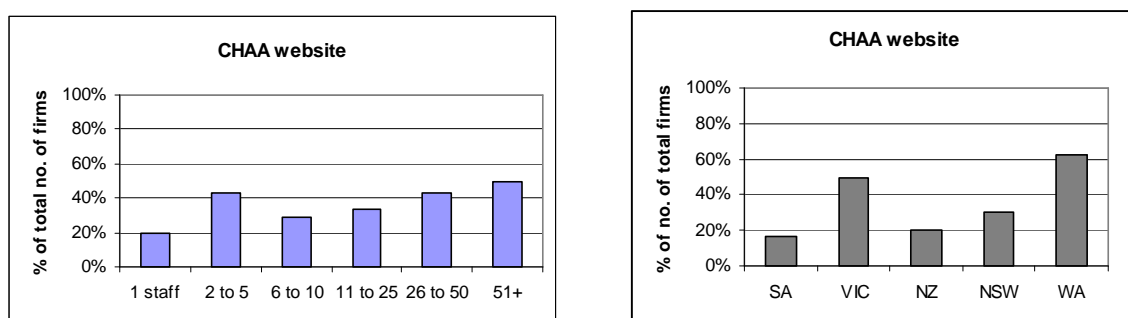
**Table 4: Reasons for Non-use of Health Facility Guideline – QLD Health**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
QLD Health	7	2	0	0	8

The most common reason for lack of use is not being aware of the availability of this resource, although 'other' reasons were also given, without additional detail offered.

#### 4.3.5 Research summaries by others – CHAA website

**Figure 47: CHAA website**



The CHAA website is used by between 20 and 50% of firms, regardless of firm size, and most commonly by firms in WA. As a relatively new resource (approximately 6 months old at the time of the survey), marketing initiatives are yet to take effect. As the resource is currently being further developed and marketed, future surveys will indicate whether the effectiveness and usefulness of the resource is increasing for designers.

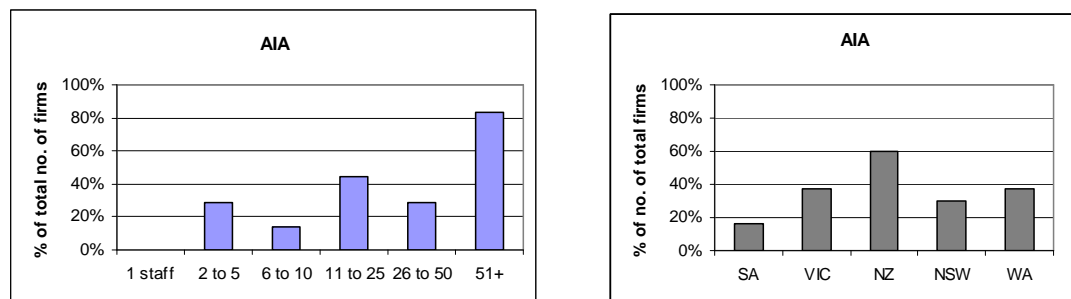
**Table 5: Reasons for Non-use of CHAA Website**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
CHAA website	18	2	1	0	0

The major reason for non use of the CHAA website is lack of awareness followed by a much lower number indicating perceived unavailability and unreliability.

#### 4.3.6 International publications – AIA

Figure 48: International publications – AIA



The use of AIA (American Institute of Architects) publications (in this instance, design guidelines) is relatively rare other than by large firms (51+). In terms of location, NZ firms are also more likely to use this resource than those from other locations.

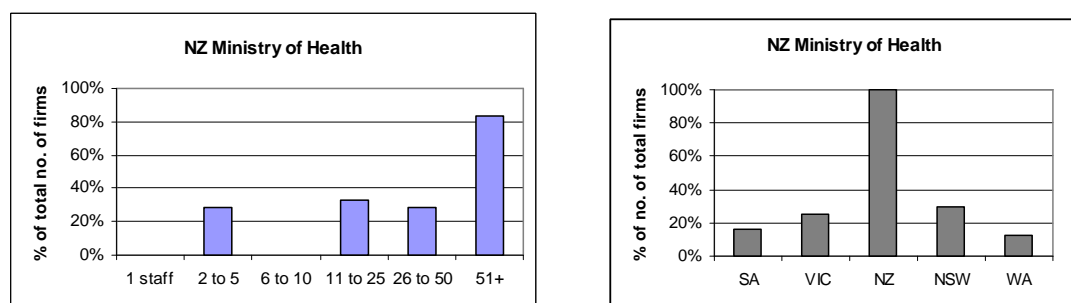
Table 6: Reasons for Non-use of International publications – AIA

Resource	Unaware	Not available	Unreliable	Too expensive	Other
AIA	12	5	0	0	5

The most common reason for non-use given is lack of awareness, followed by unavailability and 'other' reasons.

#### 4.3.7 Health Facility Design Guideline – NZ Ministry of Health

Figure 49: Health Facility Design Guideline – NZ MOH



This resource is mostly used by the largest firms (51+) and by those located in New Zealand. This suggests that, other than firms that work in or are based in New Zealand, very few other firms that participated in this survey were aware of this particular resource.

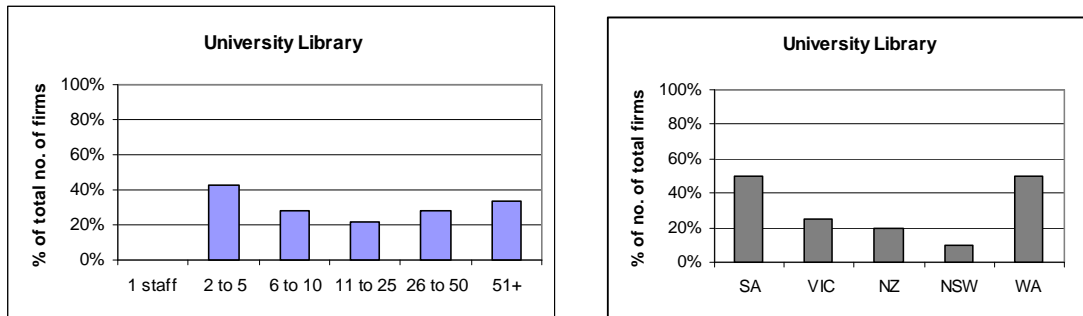
Table 7: Reasons for Non-use of Health Facility Design Guideline – NZ MOH

Resource	Unaware	Not available	Unreliable	Too expensive	Other
NZ Ministry of Health	12	1	0	0	10

The main reason for non-use is lack of awareness which supports the findings above. A large number of 'other' reasons were also cited, but detailed comments from respondents were not offered for this question.

#### 4.3.8 Research Summaries by others – University Library

Figure 50: Research summaries by others – University Library



University library research is used by very few firms especially in NSW. The most use is by firms in WA and SA.

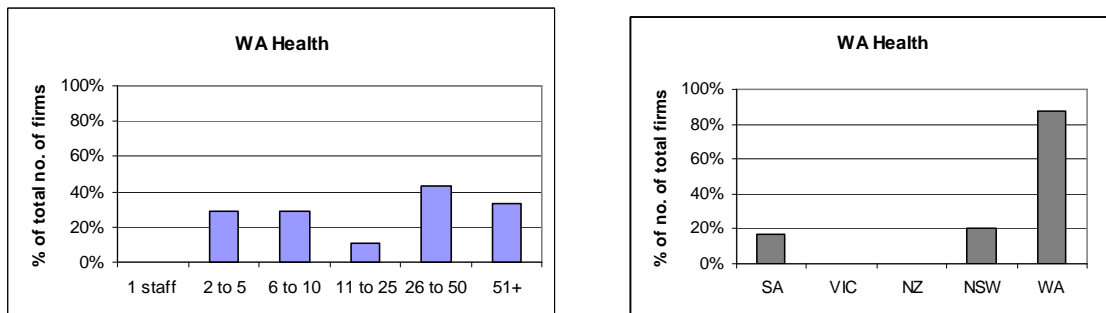
Table 8: Reasons for Non-use of Research Summaries by others – University Library

Resource	Unaware	Not available	Unreliable	Too expensive	Other
University Library	9	5	1	0	6

The reasons for non-use are lack of awareness, unavailability and 'other' reasons.

#### 4.3.9 Health Facility Design Guideline – WA Health

Figure 51: Health Facility Design Guideline – WA Health



This resource is also used by very few firms although slightly more by larger firms rather than smaller firms. It is also used predominantly by firms from WA suggesting local awareness of the resource.

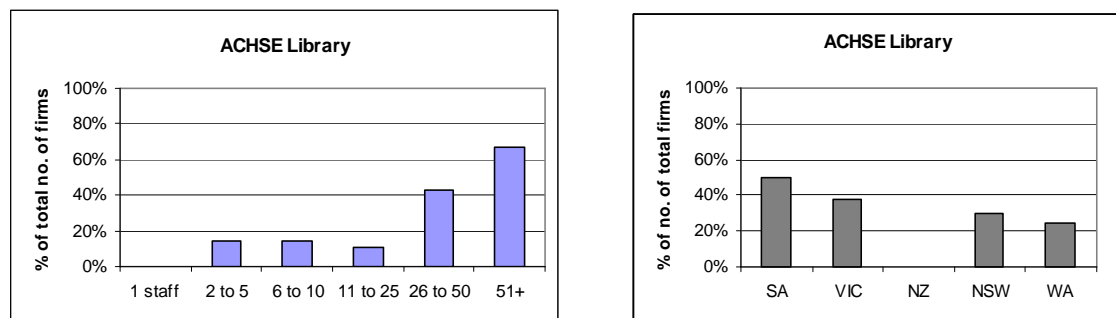
Table 9: Reasons for Non-use of Health Facility Guideline – WA Health

Resource	Unaware	Not available	Unreliable	Too expensive	Other
WA Health	8	2	0	0	7

As would be expected lack of awareness is the major reason for not using this resource, with lack of availability and 'other' reasons also noted.

#### 4.3.10 Research summaries by others – ACHSE Library

Figure 52: Research summaries by others – ACHSE Library



Although overall use is low, the firms that use this resource tend to be the larger firms and Australia based. There was no use of this resource by NZ based firms suggesting lack of awareness of its existence.

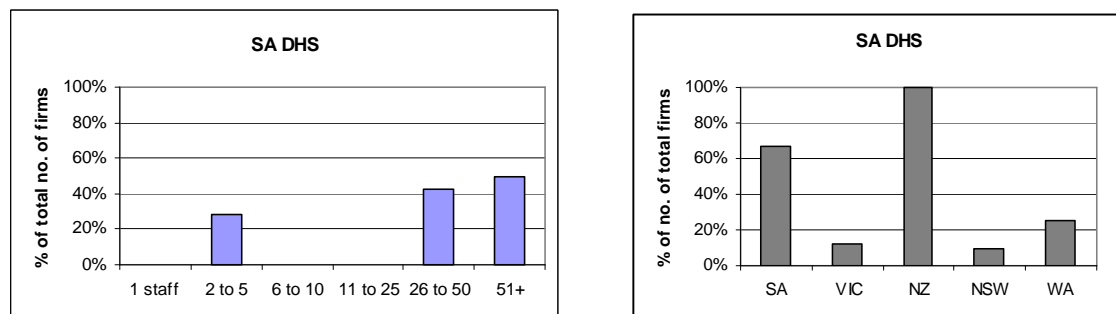
Table 10: Reasons for Non-use of Research Summaries by others – ACHSE Library

Resource	Unaware	Not available	Unreliable	Too expensive	Other
ACHSE Library	19	1	0	0	4

As noted above, lack of awareness is the major reason for non-use of this resource suggesting that the Library may need to 'market' its existence to increase the use of its resources by healthcare facility designers.

#### 4.3.11 Health Facility Design Guideline – SA Department of Human Services

Figure 53: Health Facility Design Guideline – SA Department of Human Services



SA Health Facility Design Guidelines are used mainly by larger firms and by New Zealand and South Australian firms.

Table 11: Reasons for Non-use of Health Facility Design Guideline – SA Department of Human Services

Resource	Unaware	Not available	Unreliable	Too expensive	Other
SA DHS	10	3	0	0	9

Non-use is due to lack of awareness, 'other' reasons and unavailability of the resource.



## 4.4 Information sources: used occasionally

### 4.4.1 Summary

The following section examines the remaining resources which were generally seen to be ‘useful’ but were used less frequently by the survey respondents. In general there was a mixed response to the use of these information sources, depending on the location of the firm and the types of healthcare facility projects that they undertook.

Assessment of these by category of resource (reflecting the grouping on the survey form) and summarized in Figure 31: Resource categories: most frequently used is likely to be a more accurate reflection of the importance of each of these types of resources. For example, as a category ‘Health Facility (Design) Guidelines – Australia/NZ’ was ranked within the top ten for the resources most commonly used, but individual sets of guidelines produced by various States e.g. NSW, VIC were not so highly ranked. This suggests that the use of these resources relates to the location of individual firms and their projects because locally produced resources will be more highly used than those from other locations, which will thus be less important or not often consulted. This seems to be borne out in the analysis of the use of locally produced resources in other sections of this report.

Table 12: Information sources used occasionally

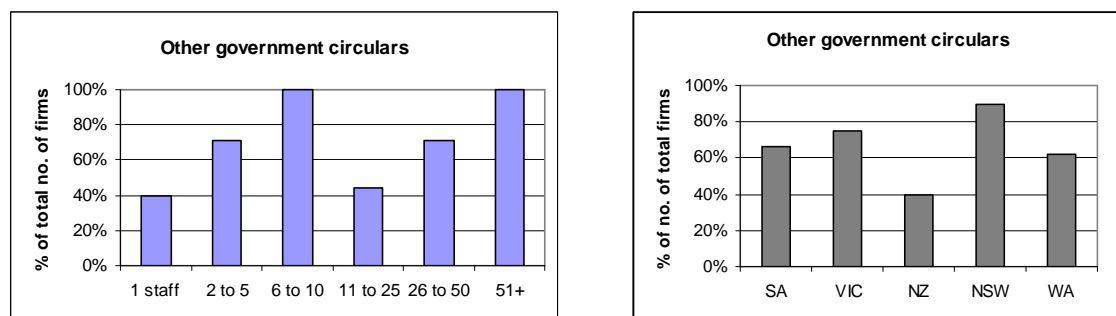
Information Source Usage	No. firms
Other guidelines/standards/policies – Other government circulars	29
Magazines & journals – Trade journals	29
Magazines & journals – Architecture journals	28
Own original research – Review academic studies	27
Health Facility Design Guidelines – NSW Health	26
CPD/CPE	25
Own original research – Study tours	25
Other guidelines/standards/policies – Faculty/college guidelines	23
POE study results – your firm	21
Other guidelines/ standards/policies – Private Hospital Act	20
Health Facility Design Guidelines – VIC DHS	19

As for the previous section, the graphs include information about the respondent firm’s location only for the larger Australian States and for NZ. The States of ACT, QLD, and TAS are excluded from these graphs because the low response rate.

For each resource, a table is then provided that sets out the reasons indicated for their non-use by the remaining survey respondents.

#### 4.4.2 Other guidelines/standards/policies – Other government circulars/policy documents

Figure 54: Other guidelines/stds/policies – Other govt circulars/policy documents



The above figure shows an interesting pattern in that information from government circulars/policy documents seem to be most commonly used only by firms with 6 to 10 staff and 51+ staff. Other small, medium, and large-sized firms do not seem to be using this information as frequently although at least 40% of firms of all sizes use this resource.

The use of this resource is highest in NSW and VIC, perhaps reflecting a situation where more of these types of document are issued in these States than elsewhere. Elsewhere, similar information may be disseminated via other sources.

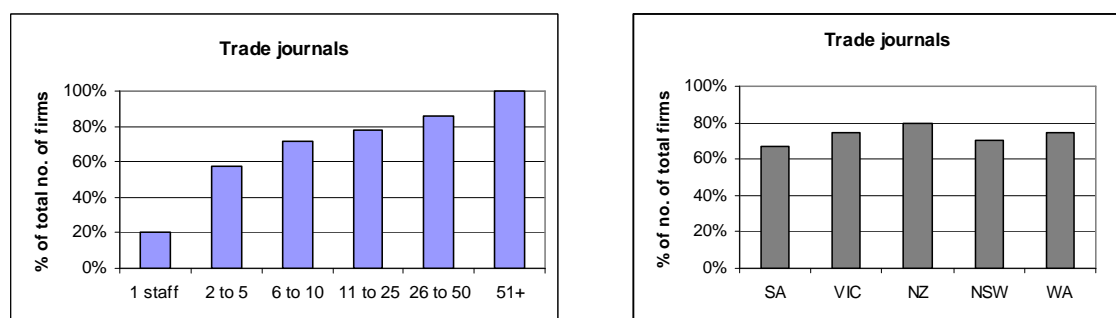
Table 13: Reasons for Non-use of other guidelines/stds/policies – Other govt circulars/policy documents

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Other gov't circulars	5	1	0	0	1

The most common reason that the resource is not used in lack of awareness of its existence.

#### 4.4.3 Magazines & journals – Trade journals

Figure 55: Magazines & journals – Trade journals



As with architecture journals, the use of this resource increases with the size of the respondent firm. This suggests that larger firms may have the resources to obtain and catalogue these resources (e.g. in an in-house library) and as a result there may be greater dissemination and use of these within the firm.

The pattern of usage is relatively consistent in terms of the locations of the firms that use this resource.

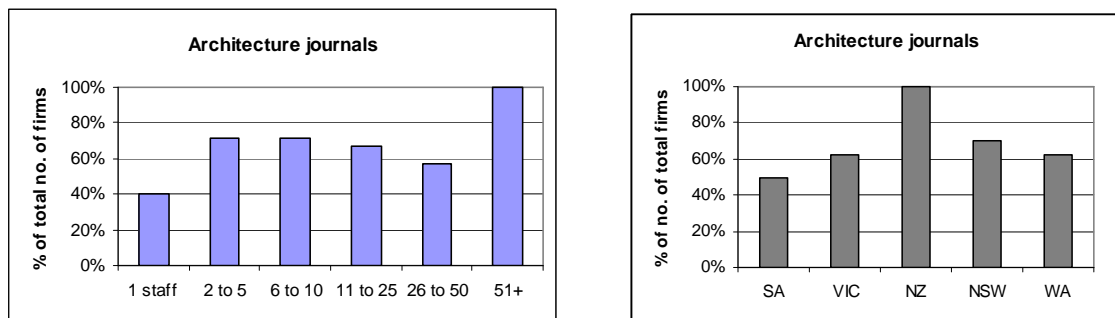
Table 14: Reasons for Non-use of Magazines & journals – Trade journals

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Trade journals	7	2	1	1	1

The lack of awareness of such journals is noted to be the common reason for non-use. The issue of unavailability is also noted.

#### 4.4.4 Magazines & journals – Architecture journals

Figure 56: Magazines & journals – Architecture journals



Large firms with 51+ staff commonly use information from architecture journals. This may perhaps be due to the expense of purchasing such journals, which may be more significant for smaller firms.

Firms from NZ report highest usage (100%) with lesser use in other locations.

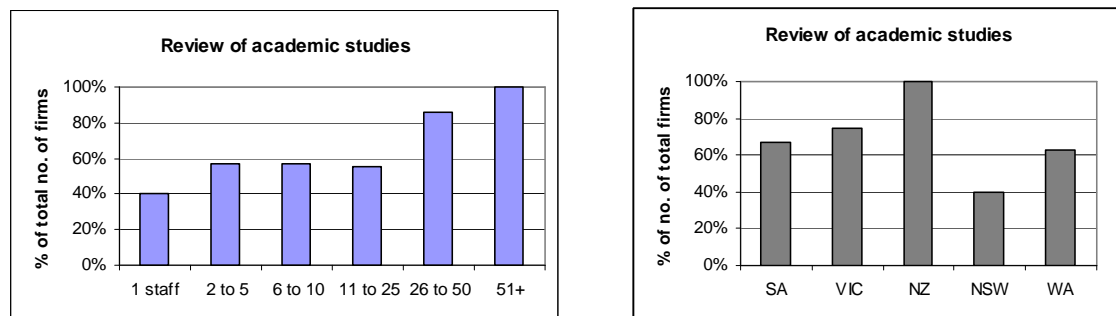
Table 15: Reasons for Non-use of Magazines & journals – Architecture journals

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Architecture journals	1	1	0	0	8

'Other' reasons were the most common reason for non-use – further detail regarding these was not offered.

#### 4.4.5 Own original research – Review of academic studies

Figure 57: Own original research – Review of academic studies



Information from academic studies seems to be commonly used only in larger firms and by NZ based firms. This may be due to the limited resources, including time availability, in smaller firms to seek, catalogue and disseminate such information within those firms.

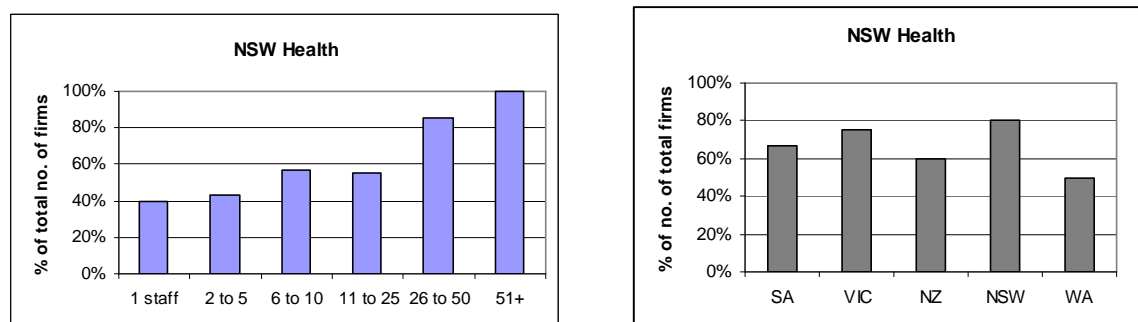
Table 16: Reasons for Non-use of Own original research – review of academic studies

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Review of academic studies	5	4	0	0	3

The lack of awareness and perceived availability seem to be the most common reasons for the non-use of such academic reviews.

#### 4.4.6 Health Facility Design Guideline – NSW Health

Figure 58: Health Facility Design Guideline – NSW Health



There is an increasing use of this resource by larger firms (26+ staff). The use of NSW Health Design Guidelines by larger firms may perhaps reflect the fact that several large projects have required the use of these guidelines in the late 2005 or early 2006. Smaller firms may not yet be undertaking projects that require their use – therefore it would be expected that use would increase over time.

The location of firms using these guidelines varies, with greatest use in NSW and VIC, although use in other locations is still relatively high. For example, 50% of WA firms use this resource.

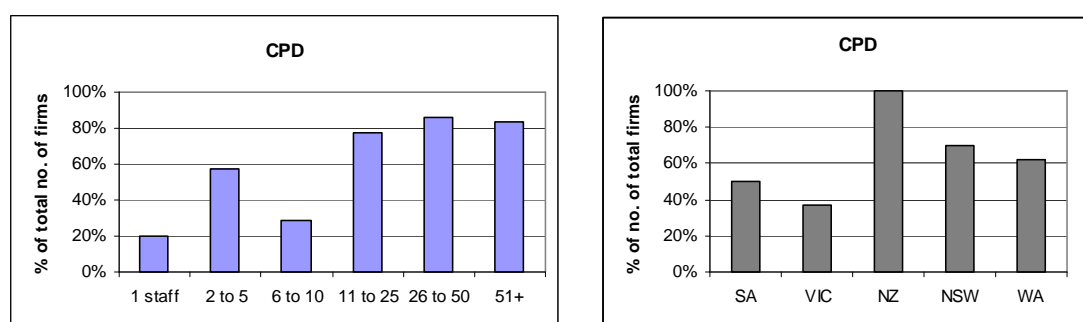
**Table 17: Reasons for Non-use of Health Facility Guidelines – NSW Health**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Health Facility Design Guideline – NSW Health	6	0	0	0	2

For those firms who do not use this resource, the main reason for the non-use is the unawareness of such guidelines.

#### 4.4.7 CPD/ CPE

**Figure 59: CPD/CPE**



Information gathered through CPD/CE is used mostly by the larger firms (11+ staff) and at a much lower rate by smaller organisations. This means that even some large firms, albeit a small percentage, do not use information from CPD/CE at all with smaller firms even less likely to get information from CPD/CPE sources. This raises some concerns regarding overall participation in these activities (and perhaps the content and quality of the information obtained from these sources) particularly given the trend towards compulsory participation being a condition for architects' registration in most Australian States. The highest use of this resource is by NZ firms (100%).

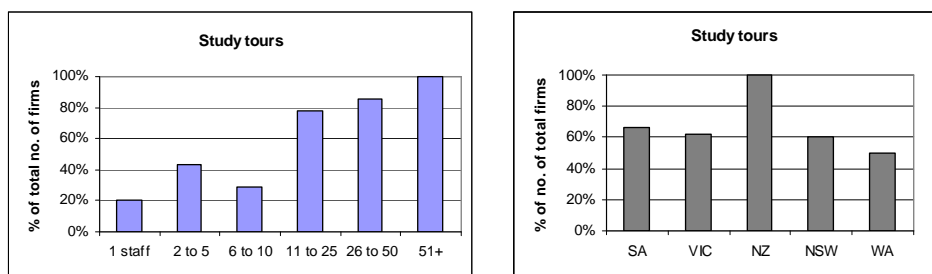
**Table 18: Reasons for Non-use of CPD/CPE**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
CPD/CPE	5	2	0	2	2

Unawareness and perceived unavailability are the main reasons for the non use of CPD/CPE, while some firms also noted the financial consideration for using this resource.

#### 4.4.8 Own original research – Study tours

Figure 60: Own original research – Study Tours



Only firms with more than 11 staff are likely to participate in study tours, with a peak of 100% of firms of 51+ staff using this resource. The relatively higher costs for participation for small firms participating in such tours may explain the low frequency.

Firms in NZ (100%) are the most likely to undertake study tours followed by firms in the other States, with WA least likely which may be the result of distance and greater travel costs associated with undertaking this activity.

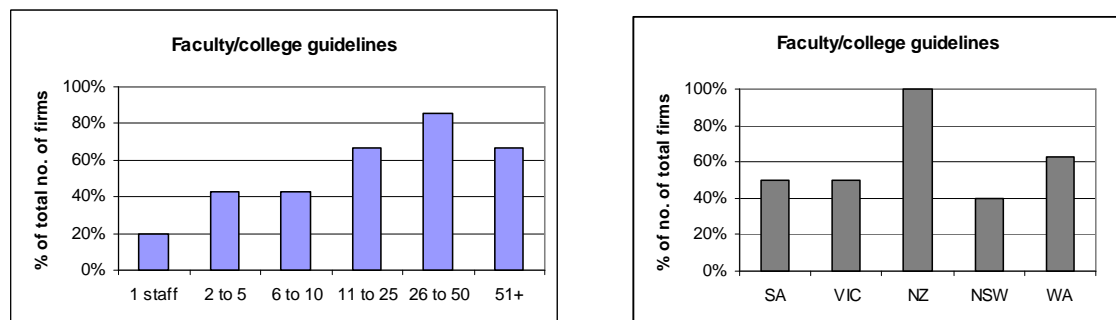
Table 19: Own original research – Study Tours

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Study tours	2	1	1	7	3

Financial expense seems to be the main consideration for not undertaking study tours.

#### 4.4.9 Other guidelines/ standards/ policies – Faculty/ college guidelines

Figure 61: Other guidelines/standards/policies – Faculty/college guidelines



Most use of this resource is by larger firms (11+ staff) although usage is not as high as for NSW HFG for the largest firms (51+). The highest use is by NZ based firms followed by WA and the other States.

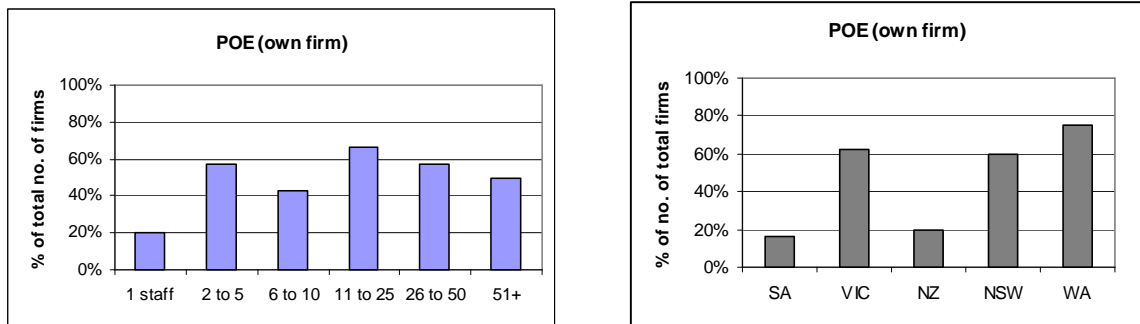
Table 20: Reasons for Non-use of Other guidelines/standards/policies – Faculty/college guidelines

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Faculty/college guidelines	9	1	0	0	3

There seems to be a high level of unawareness of faculty/college guidelines that contributes to the non-use of this resource.

#### 4.4.10 POE study results – Your firm

Figure 62: POE study results – Your firm



This figure indicates a relatively low incidence of POE being undertaken by firms of all sizes. The incidence of POE may well be even lower than indicated, as the term POE was not defined. In practice, this may range from a quick client satisfaction survey through to a complex, well-designed, and carefully reported study commissioned and paid for by a client.

More WA firms conduct POE than firms from other locations, closely followed by VIC and NSW.

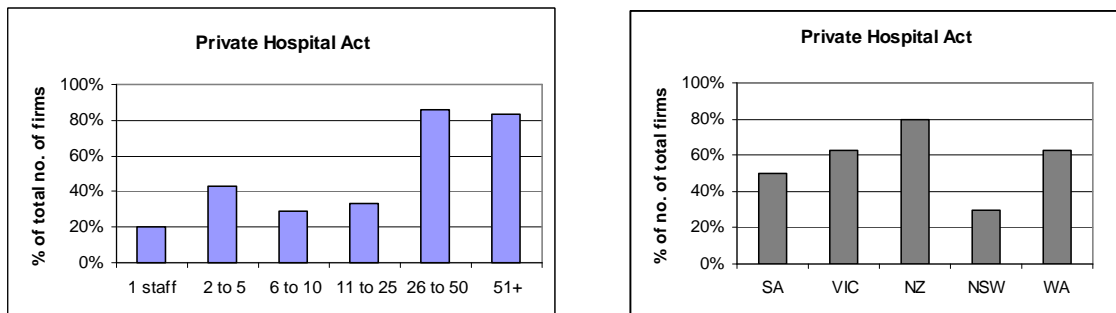
Table 21: Reasons for Non-use of POE study results – your firm

Resource	Unaware	Not available	Unreliable	Too expensive	Other
POE study results – your firm	2	3	0	0	5

The respondents seem to be aware of POE study results, but for some firms, POE study results seem to be an information source that may not have immediate relevance to their work.

#### 4.4.11 Other guidelines/standards/policies – Private Hospital Act

Figure 63: Other guidelines/standards/policies – Private Hospital Act



It should be noted that the *Private Hospital Act* referred to is not one 'Act', rather this term covers all state and territory *Acts* that are applicable to privately funded hospital projects. In general a *Private Hospital Act* would be used only by those firms that undertake privately funded healthcare facility projects. As noted in the discussion following

**Figure 25:** Source of funding versus firm size it is the larger firms that undertake most private sector work and so this result is not surprising.

This resource is used mostly by firms from NZ, WA and VIC where private hospitals are closely regulated by legislation – hence the need to consult this resource for projects in those locations may be greater than for other places.

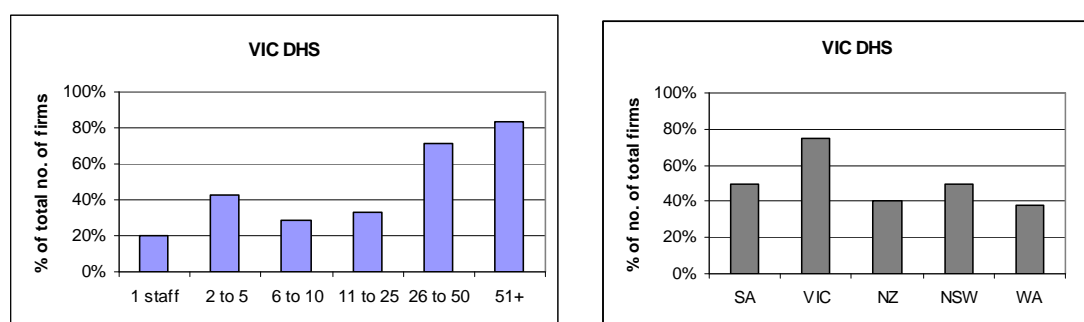
**Table 22: Reasons for Non-use of Other guidelines/standards/policies – Private Hospital Act**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Private Hospital Act	7	1	0	0	4

The main reason for lack of use of this resource was lack of awareness of its existence. This may be a result of the number of firms that would have no reason to consult a Private Hospital Act from any state or territory because they undertake few or no private healthcare facility projects.

#### 4.4.12 Health Facility Design Guideline – VIC Department of Human Services

**Figure 64: Health Facility Design Guideline – VIC Department of Human Services**



The relatively low use of VIC DHS design guidelines outside of Victoria suggests that there is a lack of awareness of the existence of this resource other than by firms based in Victoria.

These guidelines were largely intended for regulation of the private hospital sector in that State, so they may not be perceived as being useful elsewhere. In addition, the current version has also been superseded by more recent versions of NSW guidelines and hence may be considered to be less reliable for use other than for private hospital projects in Victoria.

**Table 23: Reasons for Non-use of Health Facility Design Guideline – VIC Department of Human Services**

Resource	Unaware	Not available	Unreliable	Too expensive	Other
Health Facility Design Guideline – Vic DHS	8	2	0	0	4

As discussed earlier, lack of awareness is the most common reasons for the non-use, for mostly firms outside of Victoria.



## 4.5 Importance of Resources – Summary

The following table sets out the information sources used by the health care firms in terms of the frequency of use. This indicates the relative importance of the resources and the % of firms who scored each in regard to how often they used them to inform their health care project work.

Table 24: Top-10 information sources used frequently, occasionally, and rarely

Resource	Firms indicating use			Total – any use
	Frequently	Occasionally	Rarely	
Information from client	69%			69%
Other guidelines/standards/policies – BCA or NZ equivalent	67%			67%
Information from previous projects – By your practice	64%			64%
Other guideline/standards/policies – Australian/NZ standards	59%			59%
Other consultant/colleague – Your practice	51%			51%
Own original research – Site visits	49%	26%		75%
Other guidelines/standards/policies – Other government circulars	33%	26%		59%
Info from previous projects – By others	28%	18%	28%	74%
Own original research – Internet search	28%	28%	31%	87%
Other consultants/colleagues – Other in industry	26%	28%	28%	82%
Magazines & journals – Manufacturer's promotion literature		36%	26%	62%
Own original research – Review academic studies		28%	23%	51%
Own original research – Study tours		23%	26%	49%
Magazines & journals – Architecture journals		23%	36%	59%
Health Facility Design Guideline – NSW Health		21%		21%
Magazines & journals – Trade journals			36%	36%
Other guidelines/standards/policies – Faculty/College guideline			23%	23%
CPD/CPE			23%	23%

Table 24 indicates that 69% of respondents frequently use information given by their clients. They also gather information from Australian and NZ guidelines such as the Building Code of Australia (BCA), NZ, and other government circulars. Information from previous projects conducted by their respective organisations and others in the industry is also indicated as frequently used. Furthermore, they seem to rely on information given by their consultants and colleagues both in their own practice and others in the industry. It is interesting to note that the majority of the respondents also frequently conduct their own research through site visits and websites to obtain information about healthcare facility design.

There is significant overlap in terms of importance of various resources indicating that while used to some extent by most firms, some of these tend to be more important to some firms than to others.

The 'top ten' ranking of total 'mentions' of use (i.e. combination frequent, occasional and rarely) is shown in the following table.

**Table 25: Resources – Top 10 by (any) use**

<b>Rank</b>	<b>Resource</b>	<b>Firms indicating any use - %</b>
1	Own original research – Internet search	87
2	Other consultants/colleagues – Other in industry	82
3	Own original research – Site visits	75
4	Info from previous projects – By others	74
5	Information from client	69
6	Other guidelines/standards/policies – BCA or NZ equivalent	67
7	Information from previous projects – By your practice	64
8	Magazines & journals – Manufacturer's promotion literature	62
9	Other guideline/standards/policies – Australian/NZ standards	59
10	Magazines & journals – Architecture journals	59

This table again indicates the importance of a firm's own research in informing project work. Generally this type of resource ranks more highly than information provided from external sources (with the exception of information from a client for a particular project).

## 4.6 Additional information sources identified

### 4.6.1 Identification of Additional Resources Used

As part of completion of the survey, respondents were asked to advise, for the various categories noted, additional resources that they use in their practice. The following figure identifies the responses given.

Figure 65: Other additional information sources used

Resource	No. firms
Magazines and journals – Other	8
Health Facility Design Guidelines (Australia /NZ) – Other	5
Health Facility Design Guidelines (International) – Other	2
Research summaries – Other	4
Other resources	6

### 4.6.2 Magazines & journals – Other

As stated by respondents other magazines and/or journals used are:

- Health Facility Guidelines HFES
- Specialist sub consultants' (magazines/journals)
- Client suggestions and resources
- Manufacturers' websites and email products (CDs)

### 4.6.3 Other resources (Health Facility Guidelines, Research Summaries and Other)

Other resources identified are:

- The UK *Health Building Notes and Technical Notes* (HBN and HTM) – however these are out-of-date sometimes.
- Books by US providers / academics
- TAS disability services

### 4.6.4 Recommendations re Additional Resources

The survey then asked respondents to identify further additional resources that they had found useful, or that they would like to see developed for industry use.

In response to the question:

*'Are there other additional resources that you or your firm have used and that would be valuable for other healthcare facility designers to know about?'* the following responses were received:

**Table 26: Recommendations re Additional Resources**

<b>Resource</b>	<b>Reason for Recommending</b>
Alzheimer's Association (library)	Excellent, conveniently located library which is comprehensive
Hosplan manuals	Useful
ACHS Standards	Standards and QA checks for planning
University of Wisconsin, Milwaukee	Have been to conference addressed by Prof of Architecture and ageing, Prof Uriel Cohen
National indigenous housing guide	Good principles for remote area design
Sub consultants	Specific and detailed knowledge and experience
Green Guide to Health Care (GGHC)	Begins to integrate health design and sustainability issues
Books on healthcare architecture	Be informed about the design of hospitals in other parts of the world
VIC Dept of Health – project planning website	
Design ideas for accessible homes.	Develop easy and safe environment for access and use/details
Tascord (Amcord urban)	Best living environment; Low energy sustainable design
RAIA EDG (Environmental Design Guide)	(No reason given)

#### **4.6.5 Additional Resources for Development**

In response to the question:

*'In addition to the resources listed in question 2.1, are there any additional resources you or your firm would like to see developed for use by health facility designers?'*,

the following responses were received:

- Renovation guidelines
- Design manuals
- National design guide
- Design standards reference
- Coordinated health design guidance Australia and NZ
- State Health Depts. - to share resources across borders
- Online Australian/NZ/international standards catalogue
- Public library of articles (digital)
- Facility benchmarking info
- National database of info
- 'Smart Home' terminology
- Group & cluster unit developments.
- Low cost high efficiency construction technology

## 4.7 Preferred methods for accessing resources

In terms of the nominated information resources, respondents were asked to nominate how they accessed these on a regular basis. 41 responses were received to this question nominating for the following methods, whether they used them and how frequently they did so.

Note, that many respondents nominated more than one method of accessing the information sources, therefore the responses add to more than 100%.

Figure 66: Methods of accessing information sources

Method	Yes responses	% of all responses	No. nominating 'most frequent/frequent' use	% of all responses
Paper	38	92.7	28	68.3
Internet	38	92.7	26	68.4
Email	32	78.0	10	24.4
Other	9	22.0	2	4.8

Other resources nominated included:

- Australian Dental Association liaison
- Consultation
- Discussion
- Spoken word

This figure illustrates that paper documents are still important and thus will still figure prominently for some time as an information dissemination source. It also illustrates the increasing importance of the internet to designers in gathering information.

## SECTION 5 USE OF INFORMATION SOURCES BY SIZE OF FIRM AND BY LOCATION

### 5.1 Information sources used by size of firms

#### 5.1.1 Summary

The preferred information sources for all size firms include information from their own past projects, from colleagues/consultants from their own/other firms, information from their clients and Standards such as BCA or Aust/NZ Standards.

- Sole practitioners most commonly use information from their own past projects, site visits, and internet research. The Australian and New Zealand (A/NZ) standards are also used to inform their design work, as well as information from their clients and manufacturer's promotion materials. The states' guidelines, journals, research summaries, international sources, and sources from libraries are used less often.
- The most commonly used information source used by firms with 2-5 staff is information from previous projects undertaken by their own practice, site visits, and information from clients. The national standards are also used frequently, as well as manufacturers' promotional materials and internet research. Journals and other academic studies are less commonly used. It is interesting to note that firms with 2-5 staff do not use the Health Facility Design Guidelines as frequently by other firms (by employee number).
- Firms with 6 – 10 staff most frequently use information gathered from internal firm colleagues/consultants and from those in other practices. They also most commonly obtain information from site visits, their own previous projects, the BCA and other standards, internet research and govt circulars.
- Firms with 11- 24 and 26 – 50 staff display a similar pattern (as above) with a reliance on their own research from prior projects and colleagues, reliance on Standards, BCA, etc and to a lesser extent on post occupancy evaluation (POE), academic studies and Health Facility Guidelines (HFG).
- Large firms with 51+ staff use the widest range of information sources (i.e. 14 sources) than other firm sizes, including a wide range of journals. Site visits and study tours prove to be commonly undertaken to inform their design works. Large firms also use review of academic studies, which is uncommonly used in smaller firms. The NSW guidelines and other standards are also referred to widely, including other government circulars. Another interesting difference with other smaller firms is that information from American Institute of Architects (AIA) and the UK National Health Service (NHS) are also widely used, as well as the Continuing Professional Development (CPD) programs.

Figure 67: Frequency of information sources used by firms with sole practitioner (1 staff)

1 staff (sole practitioner)			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	4	80%
2	Site visits	4	80%
3	Internet Research	4	80%
4	Your practice	3	60%
5	Manufacturers' promotions	3	60%
6	A/NZ standards	3	60%
7	Info Client	3	60%
8	Others in the same industry	2	40%
9	Undertaken by others	2	40%
10	Architecture Journals	2	40%
11	Review academic studies	2	40%
12	NSW Health	2	40%
13	BCA	2	40%
14	Other Government	2	40%
15	Trade Journals	1	20%
16	Study tours	1	20%
17	CHAA Website	1	20%
18	Research summaries other	1	20%
19	VIC DHS	1	20%
20	QLD Health	1	20%
21	NHS	1	20%
22	International other	1	20%
23	Faculty	1	20%
24	Private Hospital Act	1	20%
25	CPD	1	20%
26	Post Occ. Firm	1	20%
27	Post Occ. Other	1	20%
28	Magazines, journals, other	0	0%
29	ACHSE Library	0	0%
30	University Library	0	0%
31	WA Health	0	0%
32	SA DHS	0	0%
33	NZ Ministry of Health	0	0%
34	Guidelines other	0	0%
35	AIA	0	0%
36	Other resources	0	0%

Figure 68: Frequency of information sources used by firms with 2-5 staff

2 to 5 staff			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	7	100%
2	Site visits	7	100%
3	Info Client	7	100%
4	Manufacturers' promotions	6	86%
5	Internet Research	6	86%
6	A/NZ standards	6	86%
7	BCA	6	86%
8	Your practice	5	71%
9	Others in the same industry	5	71%
10	Undertaken by others	5	71%
11	Architecture Journals	5	71%
12	Other Government	5	71%
13	Trade Journals	4	57%
14	Review academic studies	4	57%
15	CPD	4	57%
16	Post Occ. Firm	4	57%
17	Magazines, journals, other	3	43%
18	Study tours	3	43%
19	CHAA Website	3	43%
20	University Library	3	43%
21	NSW Health	3	43%
22	VIC DHS	3	43%
23	Faculty	3	43%
24	Private Hospital Act	3	43%
25	WA Health	2	29%
26	SA DHS	2	29%
27	QLD Health	2	29%
28	NZ Ministry of Health	2	29%
29	Guidelines other	2	29%
30	AIA	2	29%
31	NHS	2	29%
32	Post Occ. Other	2	29%
33	Other resources	2	29%
34	ACHSE Library	1	14%
35	Research summaries other	0	0%
36	International other	0	0%



Figure 69: Frequency of information sources used by firms with 6-10 staff

6 to 10 staff			
No	Information sources	No. of firms	% of firms
1	Your practice	7	100%
2	Others in the same industry	7	100%
3	Undertaken by your practice	7	100%
4	Site visits	7	100%
5	Internet Research	7	100%
6	A/NZ standards	7	100%
7	BCA	7	100%
8	Other Government	7	100%
9	Info Client	7	100%
10	Undertaken by others	6	86%
11	Manufacturers' promotions	6	86%
12	Trade Journals	5	71%
13	Architecture Journals	5	71%
14	Review academic studies	4	57%
15	NSW Health	4	57%
16	Magazines, journals, other	3	43%
17	Faculty	3	43%
18	Post Occ. Firm	3	43%
19	Study tours	2	29%
20	CHAA Website	2	29%
21	University Library	2	29%
22	VIC DHS	2	29%
23	WA Health	2	29%
24	QLD Health	2	29%
25	Private Hospital Act	2	29%
26	CPD	2	29%
27	ACHSE Library	1	14%
28	Research summaries other	1	14%
29	AIA	1	14%
30	NHS	1	14%
31	Post Occ. Other	1	14%
32	SA DHS	0	0%
33	NZ Ministry of Health	0	0%
34	Guidelines other	0	0%
35	International other	0	0%
36	Other resources	0	0%

Figure 70: Frequency of information sources used by firms with 11-25 staff

11 to 25 staff			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	9	100%
2	Undertaken by others	9	100%
3	Site visits	9	100%
4	Internet Research	9	100%
5	A/NZ standards	9	100%
6	BCA	9	100%
7	Info Client	9	100%
8	Your practice	7	78%
9	Others in the same industry	7	78%
10	Trade Journals	7	78%
11	Study tours	7	78%
12	CPD	7	78%
13	Architecture Journals	6	67%
14	Manufacturers' promotions	6	67%
15	Faculty	6	67%
16	Post Occ. Firm	6	67%
17	Post Occ. Other	6	67%
18	Review academic studies	5	56%
19	NSW Health	5	56%
20	QLD Health	4	44%
21	AIA	4	44%
22	NHS	4	44%
23	Other Government	4	44%
24	CHAA Website	3	33%
25	VIC DHS	3	33%
26	NZ Ministry of Health	3	33%
27	Private Hospital Act	3	33%
28	Magazines, journals, other	2	22%
29	University Library	2	22%
30	Other resources	2	22%
31	ACHSE Library	1	11%
32	Research summaries other	1	11%
33	WA Health	1	11%
34	Guidelines other	1	11%
35	International other	1	11%
36	SA DHS	0	0%

Figure 71: Frequency of information sources used by firms with 26-50 staff

26 to 50 staff			
No	Information sources	No. of firms	% of firms
1	Your practice	7	100%
2	Undertaken by your practice	7	100%
3	Site visits	7	100%
4	A/NZ standards	7	100%
5	BCA	7	100%
6	Info Client	7	100%
7	Others in the same industry	6	86%
8	Undertaken by others	6	86%
9	Trade Journals	6	86%
10	Manufacturers' promotions	6	86%
11	Study tours	6	86%
12	Review academic studies	6	86%
13	Internet Research	6	86%
14	NSW Health	6	86%
15	Faculty	6	86%
16	Private Hospital Act	6	86%
17	CPD	6	86%
18	VIC DHS	5	71%
19	Other Government	5	71%
20	Architecture Journals	4	57%
21	NHS	4	57%
22	Post Occ. Firm	4	57%
23	Post Occ. Other	4	57%
24	ACHSE Library	3	43%
25	CHAA Website	3	43%
26	WA Health	3	43%
27	SA DHS	3	43%
28	University Library	2	29%
29	QLD Health	2	29%
30	NZ Ministry of Health	2	29%
31	Guidelines other	2	29%
32	AIA	2	29%
33	Other resources	1	14%
34	Magazines, journals, other	0	0%
35	Research summaries other	0	0%
36	International other	0	0%

Figure 72: Frequency of information sources used by firms with 51+ staff

51+ staff			
No	Information sources	No. of firms	% of firms
1	Your practice	6	100%
2	Undertaken by your practice	6	100%
3	Trade Journals	6	100%
4	Architecture Journals	6	100%
5	Manufacturers' promotions	6	100%
6	Site visits	6	100%
7	Study tours	6	100%
8	Review academic studies	6	100%
9	Internet Research	6	100%
10	NSW Health	6	100%
11	A/NZ standards	6	100%
12	BCA	6	100%
13	Other Government	6	100%
14	Info Client	6	100%
15	Others in the same industry	5	83%
16	Undertaken by others	5	83%
17	VIC DHS	5	83%
18	QLD Health	5	83%
19	NZ Ministry of Health	5	83%
20	AIA	5	83%
21	NHS	5	83%
22	Private Hospital Act	5	83%
23	CPD	5	83%
24	Faculty	4	67%
25	Post Occ. Other	4	67%
26	ACHSE Library	4	67%
27	CHAA Website	3	50%
28	SA DHS	3	50%
29	Post Occ. Firm	3	50%
30	University Library	2	33%
31	WA Health	2	33%
32	Research summaries other	1	17%
33	Other resources	1	17%
34	Magazines, journals, other	0	0%
35	Guidelines other	0	0%
36	International other	0	0%

## 5.2 Information used by firm locations

The following section provides a summary of responses by firms located by state and territory of Australia, plus New Zealand. Due to limited responses received from the ACT and Queensland to the survey, the aggregated results were not sufficient to draw any valid conclusions for this section, and were therefore not included.

### 5.2.1 Summary of Findings

- Information generated from previous experience and past projects holds an important role for designers in informing their successive design works. This includes site visits arranged by their own firms.
- Information generated through CPD programs is only used by a small portion of respondents, particularly in SA and VIC.
- Figure 73 illustrates that respondents from South Australia prefer to use information from their own and others' experience in past projects and site visits, their own internet research, information from their clients, and Standards (i.e. BCA and A/NZ standards). Trade journals, manufacturers' promotional materials and guidelines such as the NSW Health, SA DHS are used by the majority of the respondents. Other guidelines such as the VIC DHS, WA Health, QLD Health, and NZ Ministry of Health are used only by a minority of SA designers, including information from the CHAA website.
- Respondents from Victoria (Figure 74) seem to obtain information from their own experience in past projects, site visits, A/NZ standards, and information from their clients. A majority of Victorian designers also use journals, academic studies, and guidelines from the VIC DHS as well as the NSW Health to inform their design work. Other information from the libraries and faculties, including CHAA website, are used by half of the respondents.
- As indicated in Figure 75, New Zealand facility designers use a range of resources, which are mainly their own internal firm resources, magazines/journals, standards, and information from clients. It is interesting to note that the SA DHS guidelines are used by more NZ respondents than other equivalent guidelines such as NSW Health, QLD Health, and VIC DHS document.
- For NSW (Figure 76), it can be seen that health facility designers use resources mainly from their own internal firm research and site visits, the standards (A/NZ standards and BCA) and information from clients. Furthermore, an interesting finding is that 'other government circulars' are used by more respondents than the NSW Health guideline. Only half of the NSW respondents use the VIC and the QLD guidelines as sources of information. A minority of the NSW respondents use ACHSE Library and CHAA website.
- While it is important to note the small sample size from Tasmania (Figure 77), Tasmanian healthcare facility designers seem to rely on their own resources as the basis for information. Standards such as A/NZ standards and the BCA are ranked second in terms of their usage, while other State guidelines do not seem to be used by respondents.
- As noted for the other States, respondents from Western Australia (Figure 78) rely on information sources developed from their own practices. Information from site visits and internet research also seem to be used by a majority of them. Furthermore, the WA guidelines and the national standards such as the A/NZ standards and the BCA are also used widely among the WA respondents. Magazines, journals and other sources are used by still a majority of them (including CHAA website), while guidelines from other states (such as NSW Health, etc) are only used by a minority.

### 5.2.2 South Australia (SA)

Figure 73: Frequency of information sources used by respondents from SA

SA			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	6	100%
2	Site visits	6	100%
3	Internet Research	6	100%
4	BCA	6	100%
5	Info Client	6	100%
6	Undertaken by others	5	83%
7	A/NZ standards	5	83%
8	Your practice	4	67%
9	Others in the same industry	4	67%
10	Trade Journals	4	67%
11	Manufacturers' promotions	4	67%
12	Study tours	4	67%
13	Review academic studies	4	67%
14	NSW Health	4	67%
15	SA DHS	4	67%
16	Other Government	4	67%
17	Post Occ. Other	4	67%
18	Architecture Journals	3	50%
19	ACHSE Library	3	50%
20	University Library	3	50%
21	VIC DHS	3	50%
22	NHS	3	50%
23	Faculty	3	50%
24	Private Hospital Act	3	50%
25	CPD	3	50%
26	Guidelines other	2	33%
27	Magazines, journals, other	1	17%
28	CHAA Website	1	17%
29	WA Health	1	17%
30	QLD Health	1	17%
31	NZ Ministry of Health	1	17%
32	AIA	1	17%
33	Post Occ. Firm	1	17%
34	Research summaries other	0	0%
35	International other	0	0%
36	Other resources	0	0%

### 5.2.3 Victoria (VIC)

Figure 74: Frequency of information sources used by respondents from VIC

VIC			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	8	100%
2	Site visits	8	100%
3	A/NZ standards	8	100%
4	Info Client	8	100%
5	Your practice	6	75%
6	Others in the same industry	6	75%
7	Trade Journals	6	75%
8	Manufacturers' promotions	6	75%
9	Review academic studies	6	75%
10	Internet Research	6	75%
11	NSW Health	6	75%
12	VIC DHS	6	75%
13	BCA	6	75%
14	Other Government	6	75%
15	Architecture Journals	5	63%
16	Study tours	5	63%
17	Private Hospital Act	5	63%
18	Post Occ. Firm	5	63%
19	Undertaken by others	4	50%
20	CHAA Website	4	50%
21	Faculty	4	50%
22	ACHSE Library	3	38%
23	QLD Health	3	38%
24	AIA	3	38%
25	Other resources	3	38%
26	CPD	3	38%
27	University Library	2	25%
28	Research summaries other	2	25%
29	NZ Ministry of Health	2	25%
30	NHS	2	25%
31	Post Occ. Other	2	25%
32	Magazines, journals, other	1	13%
33	SA DHS	1	13%
34	International other	1	13%
35	WA Health	0	0%
36	Guidelines other	0	0%

#### 5.2.4 New Zealand (NZ)

Figure 75: Frequency of information sources used by respondents from NZ

NZ			
No	Information sources	No. of firms	% of firms
1	Your practice	5	100%
2	Undertaken by your practice	5	100%
3	Undertaken by others	5	100%
4	Architecture Journals	5	100%
5	Manufacturers' promotions	5	100%
6	Site visits	5	100%
7	Study tours	5	100%
8	Review academic studies	5	100%
9	Internet Research	5	100%
10	SA DHS	5	100%
11	NZ Ministry of Health	5	100%
12	A/NZ standards	5	100%
13	BCA	5	100%
14	Faculty	5	100%
15	CPD	5	100%
16	Info Client	5	100%
17	Others in the same industry	4	80%
18	Trade Journals	4	80%
19	NHS	4	80%
20	Private Hospital Act	4	80%
21	NSW Health	3	60%
22	QLD Health	3	60%
23	AIA	3	60%
24	VIC DHS	2	40%
25	Other Government	2	40%
26	Post Occ. Other	2	40%
27	CHAA Website	1	20%
28	University Library	1	20%
29	Other resources	1	20%
30	Post Occ. Firm	1	20%
31	Magazines, journals, other	0	0%
32	ACHSE Library	0	0%
33	Research summaries other	0	0%
34	WA Health	0	0%
35	Guidelines other	0	0%
36	International other	0	0%



### 5.2.5 New South Wales (NSW)

Figure 76: Frequency of information sources used by respondents from NSW

NSW			
No	Information sources	No. of firms	% of firms
1	Undertaken by your practice	10	100%
2	Undertaken by others	10	100%
3	Site visits	10	100%
4	Internet Research	10	100%
5	A/NZ standards	10	100%
6	BCA	10	100%
7	Info Client	10	100%
8	Others in the same industry	9	90%
9	Manufacturers' promotions	9	90%
10	Other Government	9	90%
11	Your practice	8	80%
12	NSW Health	8	80%
13	Trade Journals	7	70%
14	Architecture Journals	7	70%
15	CPD	7	70%
16	Study tours	6	60%
17	Post Occ. Firm	6	60%
18	Post Occ. Other	6	60%
19	VIC DHS	5	50%
20	QLD Health	5	50%
21	Review academic studies	4	40%
22	NHS	4	40%
23	Faculty	4	40%
24	ACHSE Library	3	30%
25	CHAA Website	3	30%
26	NZ Ministry of Health	3	30%
27	AIA	3	30%
28	Private Hospital Act	3	30%
29	Magazines, journals, other	2	20%
30	WA Health	2	20%
31	University Library	1	10%
32	SA DHS	1	10%
33	Guidelines other	1	10%
34	International other	1	10%
35	Other resources	1	10%
36	Research summaries other	0	0%

### 5.2.6 Tasmania (TAS)

Figure 77: Frequency of information sources used by respondents from TAS

TAS			
No	Information sources	No. of firms	% of firms
1	Your practice	2	100%
2	Undertaken by your practice	2	100%
3	Architecture Journals	2	100%
4	Manufacturers' promotions	2	100%
5	Site visits	2	100%
6	Internet Research	2	100%
7	Others in the same industry	1	50%
8	Undertaken by others	1	50%
9	Trade Journals	1	50%
10	Magazines, journals, other	1	50%
11	Review academic studies	1	50%
12	Guidelines other	1	50%
13	A/NZ standards	1	50%
14	BCA	1	50%
15	Other Government	1	50%
16	CPD	1	50%
17	Info Client	1	50%
18	Post Occ. Firm	1	50%
19	Study tours	0	0%
20	ACHSE Library	0	0%
21	CHAA Website	0	0%
22	University Library	0	0%
23	Research summaries other	0	0%
24	NSW Health	0	0%
25	VIC DHS	0	0%
26	WA Health	0	0%
27	SA DHS	0	0%
28	QLD Health	0	0%
29	NZ Ministry of Health	0	0%
30	AIA	0	0%
31	NHS	0	0%
32	International other	0	0%
33	Faculty	0	0%
34	Private Hospital Act	0	0%
35	Other resources	0	0%
36	Post Occ. Other	0	0%

### 5.2.7 Western Australia (WA)

Figure 78: Frequency of information sources used by respondents from WA

WA			
No	Information sources	No. of firms	% of firms
1	Your practice	8	100%
2	Undertaken by your practice	7	88%
3	Site visits	7	88%
4	Internet Research	7	88%
5	WA Health	7	88%
6	A/NZ standards	7	88%
7	BCA	7	88%
8	Info Client	7	88%
9	Others in the same industry	6	75%
10	Undertaken by others	6	75%
11	Trade Journals	6	75%
12	Post Occ. Firm	6	75%
13	Architecture Journals	5	63%
14	Manufacturers' promotions	5	63%
15	Review academic studies	5	63%
16	CHAA Website	5	63%
17	Other Government	5	63%
18	Faculty	5	63%
19	Private Hospital Act	5	63%
20	CPD	5	63%
21	Study tours	4	50%
22	University Library	4	50%
23	NSW Health	4	50%
24	Magazines, journals, other	3	38%
25	VIC DHS	3	38%
26	AIA	3	38%
27	NHS	3	38%
28	Post Occ. Other	3	38%
29	ACHSE Library	2	25%
30	Research summaries other	2	25%
31	SA DHS	2	25%
32	QLD Health	2	25%
33	NZ Ministry of Health	1	13%
34	Guidelines other	1	13%
35	Other resources	1	13%
36	International other	0	0%

## SECTION 6 ADDITIONAL INFORMATION

### 6.1 Awareness of CHAA

Respondents were asked to advise if prior to completion of the questionnaire they were aware of the existence of the Centre for Health Assets Australasia.

Figure 79: Awareness of CHAA

Answer	Number	Percentage
Yes	15	36.6%
No	25	61.0%
Not answered	1	2.4%
Total	41	100%

If respondents answered 'yes', they were then asked to indicate how they had heard of CHAA. Nineteen responses were received to this question (with some respondents nominating more than one source) as follows:

Figure 80: Awareness of CHAA: source

Responses	No. of affirmative responses	% of responses
Invitation to CHAA launch/ seminar/other event	6	27.2%
CHAA website	2	9.1%
Health Department	4	18.2%
Industry peers	8	36.4%
Other source	2	9.1%
Total	22	100%

The above figures indicate a relatively low awareness of CHAA, which is perhaps not surprising given that it has only existed since January 2005.

The main sources for learning about CHAA to date have been industry peers and positive marketing by CHAA (i.e. issuing invitations to various events such as its official launch, industry seminars, conference, etc).

This is closely followed by Health Departments as an information source (4 responses). Generally it appears that promotion by its own sponsors (there are 8 member jurisdictions of HCAMC) is not a major source of information dissemination about the Centre. This is an avenue that could be immediately pursued to increase awareness of CHAA and its work within industry. It would also offer the opportunity to promote the goals and objectives of its sponsors in participating in the formation of CHAA and its ongoing research work.

### 6.2 Other Comments

As a final question, respondents were asked if they wished to add any further comments to the survey. Those received are listed below.

"Healthcare specification should be accessible from government departments and post grad university courses/seminars. Difficult area for Institute of Architects to manage."

"We work in regional and remote Australia and are particularly interested in design and sustainability 'in action' for projects with special needs."

"No"

"Our firm is also heavily involved in aged care, principally for not for profit sector. This accounts for 30 – 40% of our work over last 5 years. Since \$0.5 - \$25M. We are part of a larger organization and have tried to relate responses to work from this office."

"Need to compile register of individuals involved in healthcare architecture - survey instrument (is) practice focused."

"With an ever aging population and higher risk of accidents through use of motor vehicles, sporting and other accidents there will be an ever increasing demand for disabled facilities and accessible (monitored) accommodation."

### 6.3 Survey Form

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## AUSTRALASIAN SURVEY OF HEALTHCARE FACILITY DESIGNERS



THE UNIVERSITY OF  
NEW SOUTH WALES

**f b e**  
FACULTY OF THE  
BUILT ENVIRONMENT



The Centre for Health Assets Australasia (CHAA), a Research Centre within the Faculty of the Built Environment at the University of NSW, with RAIA is conducting a survey of the technical information resources used by health facility designers.

Members are invited to participate in the survey. The results will assist in the deployment of Australasian Health Facility Guidelines, inform prospective and current healthcare facility architects of the availability of technical information sources, and (over time) provide a longitudinal study of changing designer information needs. In the shorter terms use of the survey results may also assist both CHAA and the RAIA to:

- better target continuing education opportunities for Architects involved in health projects
- create opportunities for joint research projects between the health industry and architects
- assist in improving the quality of 'offer documents' for principal design consultants on healthcare projects.

Currently available data concerning the use of information resources by architects working in this field is limited. The participation of members in the completion and return of this survey would be greatly appreciated in order for CHAA and the RAIA to better target the technical information needs of health facility designers.

Participation in the survey is strictly voluntary.

The information collected is anonymous and is strictly confidential. Only aggregate results will be published.

Any concerns may be directed to the Ethics Secretariat, The University of New South Wales, SYDNEY 2052 AUSTRALIA (Tel: +61 2 9385 4234, Fax: +61 2 9385 6648, Email: [ethics.sec@unsw.edu.au](mailto:ethics.sec@unsw.edu.au))

Thank you for your participation. Please return your completed survey by **16 DECEMBER 2005** to:

THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS  
REPLY PAID 62666 (no postage/stamps required)  
THE RESEARCH MANAGER  
MELBOURNE VIC 3000

Or via fax 03 9650 3364.

If you have any questions on how to complete this form, or would like more information, contact:

**The RAIA Research Manager**, on 03 9650 2477 or email [roberto.colanzi@raia.com.au](mailto:roberto.colanzi@raia.com.au)





# AUSTRALASIAN SURVEY OF HEALTHCARE FACILITY DESIGNERS



THE UNIVERSITY OF  
NEW SOUTH WALES

**f b e**  
FACULTY OF THE  
BUILT ENVIRONMENT



THE PURPOSE OF THIS SURVEY IS TO EXAMINE THE ROLE AND FUNCTION  
OF ARCHITECTS IN THE DESIGN OF HEALTH CARE FACILITIES.

- Have you or your firm currently or within the past 5 years undertaken any architectural design work concerning health care facilities (public or private)?

☐ Yes (if 'Yes') please complete this questionnaire

☐ No (if 'No') please do not complete the questionnaire. If you would like to receive a copy of the results please provide your details below

- Would you like to receive a copy of the survey results, once they are published? (Please tick)

☐ Yes (please complete your details below)

☐ No

If 'Yes' please provide your contact details. (These details are not recorded as part of the analysis of the survey results & findings.)

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

- If we have any questions regarding your responses, may we contact you? (Please tick)

☐ Yes (please complete your details above)

☐ No

Thank you for your participation. Please return your completed survey by 2 DECEMBER 2005 to:

THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS  
REPLY PAID 62666 (no postage/stamps required)  
THE RESEARCH MANAGER  
MELBOURNE VIC 3000

Or via fax 03 9650 3364.

If you have any questions on how to complete this form, or would like more information, contact:

The RAIA Research Manager, on 03 9650 2477 or email [roberto.colanzi@raia.com.au](mailto:roberto.colanzi@raia.com.au)

**1.1 Where is your practice located?**  
(please tick **ONE** only i.e. main office)

<input type="checkbox"/> Australian Capital Territory	<input type="checkbox"/> New South Wales
<input type="checkbox"/> Northern Territory	<input type="checkbox"/> Queensland
<input type="checkbox"/> South Australia	<input type="checkbox"/> Tasmania
<input type="checkbox"/> Victoria	<input type="checkbox"/> Western Australia
<input type="checkbox"/> New Zealand	

**1.2 Is your practice located in a:**  
(please tick **ONE** only)

<input type="checkbox"/> Capital city
<input type="checkbox"/> Regional city or town, or
<input type="checkbox"/> Rural area?

**1.3 List the number of staff employed by the firm**

	FTE <sup>1</sup> Number employed
Active Principals, Directors & Partners	_____
Qualified Professional Staff	_____
Unqualified Fee-earning Staff	_____
Support & Administration	_____
<b>Total staff</b>	_____

<sup>1</sup> (Full time equivalent) For example, if an employee works 20 hours per week, divide 20 by 40 hours (number of weekly full-time hours) to get 0.5 full-time employees. Similarly, if a full-time position is created part way throughout the year, divide the number of weeks worked by the number of weeks in the year.

**1.4 How many years has the practice been operating?**

<input type="checkbox"/> Less than 1 year
<input type="checkbox"/> 1 to less than 5 years
<input type="checkbox"/> 5 to less than 10 years
<input type="checkbox"/> 10 or more years

**1.5 Have you or your firm undertaken any design work involving healthcare facilities during the following years (please tick the year design was undertaken)**

	2000-01	2001-02	2002-03	2003-04	2004-05	Currently
In Australia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overseas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**1.6 For the healthcare facility projects undertaken by you or your firm in the last 5 years, please advise the locations of these facilities? (please tick all appropriate)**

**Australia/New Zealand**

<input type="checkbox"/> Australian Capital Territory	<input type="checkbox"/> New South Wales
<input type="checkbox"/> Northern Territory	<input type="checkbox"/> Queensland
<input type="checkbox"/> South Australia	<input type="checkbox"/> Tasmania
<input type="checkbox"/> Victoria	<input type="checkbox"/> Western Australia
<input type="checkbox"/> New Zealand	

**International**

<input type="checkbox"/> Europe	<input type="checkbox"/> Pacific Region (other than Australia & NZ)
<input type="checkbox"/> South East & North East Asia	<input type="checkbox"/> USA/Canada
<input type="checkbox"/> United Kingdom	<input type="checkbox"/> Middle East
<input type="checkbox"/> Other (please state)	

**1.7 What is the Gross Revenue for your firm (all revenues received by your firm for services rendered per financial year) (please tick 1 box per year)**

Australian Dollars (AUD)	2002-03	2003-04	2004-05
\$0 to 50,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$50,001 to 100,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$100,001 to \$200,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$200,001 to \$500,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$500,001 to \$750,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
\$750,001 to \$1 million	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Greater than \$1m (please state amount)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**1.8 As a percentage, what were the gross revenues generated from healthcare facility design expressed as a % of total gross practice revenue:**

	2000-01	2001-02	2002-03	2003-04	2004-05
Percentage (%)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**1.9 For healthcare facility projects undertaken in the last 5 years, or currently being undertaken please advise the TOTAL NUMBER by approximate size of these projects in terms of the client's total project cost per project (includes all fees, site costs, construction, equipment, etc)**

<b>Total Project Cost</b>	<b>No. Projects Undertaken</b>
< \$1 million	_____
≥ \$1m to <\$5 million	_____
≥ \$5m to < \$20 million	_____
≥ \$20m to < \$50 million	_____
≥ \$50 million	_____

**1.10 Is undertaking healthcare facility design a key business strategy of yourself or your practice?**

☐ Yes

☐ No

☐ Undertake as opportunities present themselves

**1.11 How does your firm most often generate commissions in the area of health care facility design? (Tick ONE box only)**

☐ Response to EOI/tenders for direct appointment

☐ Invitation/direct appointment by healthcare client without tendering

☐ Appointed by builder/contractor/project manager eg D & C, PFI/PPP, etc

☐ Other

**1.12 Please indicate the percentage of healthcare facility design work undertaken by you or your firm for the following types of funding organisations:**

<b>Funding organisation</b>	<b>%</b>
Public (Federal/State/Territory/Other)	_____
Private:	
For profit	_____
Not for Profit	_____
Religious/Institutional	_____
Don't know (please tick if appropriate)	<input type="checkbox"/>

**Total funders** 100%

**1.13 Please indicate the volume of design work (expressed as a percentage of all healthcare design work undertaken by you or your firm in the last 5 years) for the following types of healthcare facilities.**

%

General Hospital (whole or part)	_____
Specialty Hospital e.g. paediatric, women's, forensic unit, etc. Please list type(s)	_____
Day Facility (stand alone) including ambulatory care, procedures, dialysis, oncology, diagnostics, etc. Please list type(s)	_____
Community Health (hospital site/stand alone)	_____
Dental Health (hospital site/stand alone)	_____
Medical Centre including primary care/GP, specialists such as medical, surgical, dermatology, etc. Please list type(s)	_____
Mental Health units including inpatient, community, ambulatory care, etc. Please list type(s)	_____
Ambulance Station (stand alone unit or on general hospital site)	_____
Residential aged care	_____
Other e.g. specialist laboratories, blood bank, mothercraft units, veterinary clinics, prison hospitals, carparks, etc. Please list type(s)	_____
<b>Total Volume</b>	100%

**1.14 For a typical healthcare facility project undertaken, please state whether you or your firm provides/undertakes the following services and functions (please tick)**

	Yes	No
Pre-design & site analysis	<input type="checkbox"/>	<input type="checkbox"/>
Design, design development	<input type="checkbox"/>	<input type="checkbox"/>
Contract documentation	<input type="checkbox"/>	<input type="checkbox"/>
Tendering & contract administration	<input type="checkbox"/>	<input type="checkbox"/>
Approvals certification	<input type="checkbox"/>	<input type="checkbox"/>
Interior design, documentation & contract administration	<input type="checkbox"/>	<input type="checkbox"/>
Landscape design, documentation & contract administration	<input type="checkbox"/>	<input type="checkbox"/>
Project management	<input type="checkbox"/>	<input type="checkbox"/>
Project feasibility	<input type="checkbox"/>	<input type="checkbox"/>
Computer graphics	<input type="checkbox"/>	<input type="checkbox"/>
Asset Strategic Planning	<input type="checkbox"/>	<input type="checkbox"/>
Project briefing (Project Definition Plan)	<input type="checkbox"/>	<input type="checkbox"/>
User group consultation	<input type="checkbox"/>	<input type="checkbox"/>
Health facility planning (as a specialist service to other consultants /clients/joint venture partner)	<input type="checkbox"/>	<input type="checkbox"/>
Health service planning (as a specialist service to other consultants/clients/joint venture partner)	<input type="checkbox"/>	<input type="checkbox"/>
Post Occupancy Evaluation	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>

**1.15 For the healthcare projects undertaken by your firm in the last 5 years, under which of the following procurement strategies have you been engaged? Please indicate the approximate proportion of projects by total project cost.**

Procurement Strategy	Yes	%
Traditional Architectural Services / Lump Sum contract	<input type="checkbox"/>	—
Design, Document & Construct (D,D.& C)	<input type="checkbox"/>	—
Document & Construct (D&C)	<input type="checkbox"/>	—
Managed Contract/Construction Management	<input type="checkbox"/>	—
PPP/PFI	<input type="checkbox"/>	—
Other (please state)	<input type="checkbox"/>	—
<b>Total Volume</b>		100%

**Please go to Q2.1**

## RESOURCES

- 2.1 A). From the following list of health project information resources please advise those used by your firm (or by individual designers within your firm) for health care facility projects within the last 5 years.

Then

- B). Please number in order of importance or usage level the resources that you have indicated are used within your firm on a scale of 1 to 5 with:

1 being 'rarely used/used once or twice' e.g. for reference or specific one-off purpose',

3 being 'occasional but intensive use' e.g. for specific project type

5 being used 'very frequently' i.e. for all the firm's healthcare design projects

Then

- C). If you do not or have not used a resource please TICK why (please tick one reason only).

Resource	A). Used (Yes/No)	B). Importance	C) For Resources NOT USED please indicate by ticking the main reason? (TICK 1 only)				
			Unaware of existence	Not available	Unreliable/ out of date	Too expensive	Other reason
<b>Other consultants/colleagues</b>							
Your practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others in the same/related industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Information gathered from previous projects</b>							
Undertaken by your practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Undertaken by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Magazines &amp; Journals</b>							
Trade journals (e.g. Hospital & Healthcare Journal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Architecture journals (e.g. Architecture Australia)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Manufacturers' promotional literature (catalogues, advertisements, product launches, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state) _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Own/firm's original research gathered by means of:</b>							
Site visits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Study tours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review of published academic studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## RESOURCES (2.1 continued)

Resource	A) Used (Yes/No)	B). Importance	C) For Resources NOT USED please indicate by ticking the main reason? (TICK 1 only)				
			Unaware of existence	Not available	Unreliable/out of date	Too expensive	Other reason
<b>Research Summaries published by others</b>							
ACHSE Library – email bulletin/library search function	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CHAA website e-resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
University Library/search engine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state) _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Publications/information such as:</b>							
<i>Health Facility (Design) Guidelines:</i>							
Australia/New Zealand							
NSW Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VIC Department of Human Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WA Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SA Dept Human Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QLD Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Zealand Ministry of Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state) _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International							
AIA (American Institute of Architects)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NHS (National Health Service UK)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state) _____ _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## RESOURCES (2.1 continued)

Resource	A). Used (Yes/No)	B). Importance	C) For Resources NOT USED please indicate by ticking the main reason? (TICK 1 only)				
			Unaware of existence	Not available	Unreliable/out of date	Too expensive	Other reason
<b>Other Guidelines/Standards/ Policy Documents</b>							
Australian/NZ Standards and Handbooks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building Code of Australia (BCA) or New Zealand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Government Circulars/Policy Documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Faculty/College guidelines e.g. Australian College of Emergency Medicine (ACEM), Royal College of Anaesthetists, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private Hospital Act	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other Documents (please state)</b>							
1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Continuing Professional Development (CPD/CPE) e.g. conferences, seminars in Australia or overseas.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Information from client e.g. briefing information, user group consultation, client-initiated research</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Post Occupancy Evaluation study results. If this is a source please advise if studies are conducted by:</b>							
Your firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other source eg client	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2.2 Are there other additional resources that you or your firm have used and that would be valuable for other healthcare facility designers to know about?**

**Resource:**

Why used:

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**Resource:**

Why used:

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**Resource:**

Why used:

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**2.3 In addition to the resources listed in question 2.1, are there any additional resources you or your firm would like to see developed for use by health facility designers?**

**Resource:**

Why not used:

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**Resource:**

Why not used:

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**Resource:**

Why not used:

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**2.4 A) Of the resources accessed, which of the following methods do you or your firm most often employ to access them?**

*Then*

**B) Please rank those used in order of frequency of use. (1 being 'most frequent' through to 4 being 'least frequent')**

	A		B
	Yes	No	Frequency
Paper based	<input type="checkbox"/>	<input type="checkbox"/>	_____
Internet	<input type="checkbox"/>	<input type="checkbox"/>	_____
Email	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other (please state)	<input type="checkbox"/>	<input type="checkbox"/>	_____
_____			

## AWARENESS OF CENTRE FOR HEALTH ASSETS AUSTRALASIA

**3.1 Before receiving this questionnaire, were you aware of the existence of the Centre for Health Assets Australasia (CHAA)?**

☐ Yes  
☐ No

**3.2 If yes, where did you first hear about CHAA? Please tick**

	<b>Yes</b>
Invitation to CHAA Launch/CHAA mailing list	<input type="checkbox"/>
CHAA website ( <a href="http://www.fbe.unsw.edu.au/CHAA">www.fbe.unsw.edu.au/CHAA</a> )	<input type="checkbox"/>
Health Department briefing	<input type="checkbox"/>
From industry peers/colleagues	<input type="checkbox"/>
Others (please state)	<input type="checkbox"/>

**If you would like further information about CHAA, its work and education programs, please visit the CHAA website at**

**[www.chaa.net.au](http://www.chaa.net.au)  
or email [chaadmin@unsw.edu.au](mailto:chaadmin@unsw.edu.au)**

## OTHER COMMENTS TO THE SURVEY

**4.1 Are there any comments you wish to add?**

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### Definitions of Terms Used in the Survey Form

<i>Acute hospitals:</i>	Public, Department of Veterans' Affairs (repatriation) and private hospitals which provide services primarily to admitted patients with acute or temporary ailments. The average length of stay is relatively short. (Australia's Health, 2002, p.433)
<i>Nursing homes:</i>	Establishments which provide long-term care involving regular basic nursing care to chronically ill, frail, disabled or convalescent people or senile inpatients. (Australia's Health, 2002, p.442)
<i>Private hospital:</i>	A privately owned and operated institution, catering for patients who are treated by a doctor of their own choice. Patients are charged fees of accommodation and other services provided by the hospital and relevant medical and paramedical practitioners. Includes private freestanding day hospital facilities. (Australia's Health, 2002, p.444)
<i>Public hospital:</i>	A hospital controlled by a State or Territory health authority. In Australia, public hospitals offer free diagnostic services, treatment, care and accommodation to all who need it. (Australia's Health, 2002, p.444)
<i>Subacute care:</i>	Subacute care is one part of the continuum of care between acute-hospital care and long-term, nursing home care. Taken from: <a href="http://aspe.hhs.gov/daltcp/reports/scltrves.htm">http://aspe.hhs.gov/daltcp/reports/scltrves.htm</a> 29/08/05