

An Investigation into the Link Between Health Care Facility Design and Service Provision

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Introduction

- ARC Linkage-Project
- Helping Hand Aged Care, Delfin Lend Lease and Spotless Services
- Research Aims
- Research Strategy
- Results
- Concluding Discussion

Background

- 1976, 9% aged 65 and over
- 1996, 12% aged 65 and over
- 2016, 16% aged 65 and over
- 12% of the population but account for 35% of health expenditure

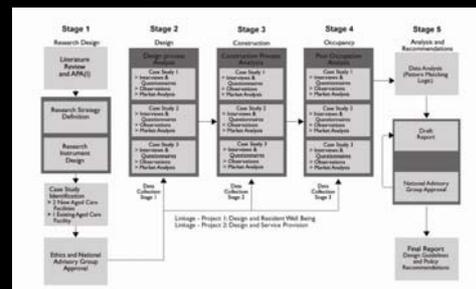
Background (cont.)

- Evolving from institutional to more domestic models that:
 - promote independence
 - allow ageing in place
- New BCA category for aged care buildings introduced in 2002
- Quality of living environment impacts on psychological and physical health
- Limited research into:
 - measurement of living environment quality
 - measurement of design flexibility

Research Aims

- identify issues that impact on residential aged care design
- develop strategies that improve the capacity of residential facilities to:
 - adapt to changing care needs, and
 - support the efficient and effective provision of care, and
- inform certification and design standards.

Research Strategy

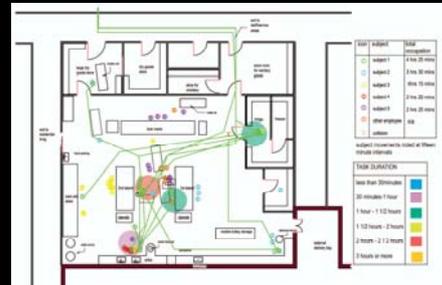


Results – Document Analysis

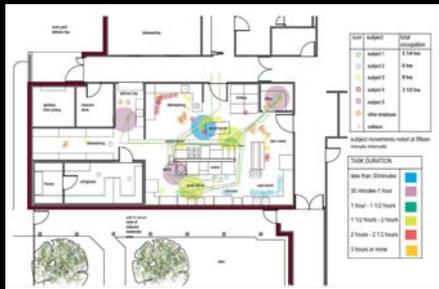
Table 1: Number and Location of Design Element References

| Design Element | Document Type | | | | Total |
|----------------|------------------------|----------------|--------------|------------------|-------|
| | General Correspondence | Design Minutes | Site Minutes | Contract Notices | |
| Access | 3 | 14 | 2 | 2 | 21 |
| Kitchen | 2 | 12 | 1 | 2 | 17 |
| Laundry | 2 | 5 | 1 | 0 | 8 |

Results – Structured Observations



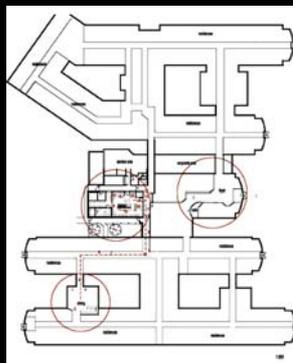
Results – Structured Observations (cont.)



Ingle Farm



Mawson Lakes



Results – Self-Report Surveys

Table 2: Interview Summary

| Interview Group | No. | Key Concepts |
|----------------------------|-----|---|
| Residents | 9 | Functionality – more concerned about service provision than facility design Design flexibility – desire to personalise space and to have sufficient space for personal possessions Socialising flexibility – option to socialise or not |
| Staff (Nursing) | 9 | Functionality – design for efficient work flow patterns and sufficient space for larger pieces of equipment Security – sufficient security especially after hours Privacy – needed for administration duties and breaks |
| Staff (Logistics) | 7 | Functionality – design for efficient maintenance and work flow patterns Consultation – sufficient consultation during design stage Storage – sufficient space for maintenance equipment |
| Management | 5 | Finance – expensive to build and operate Design flexibility – accreditation and ageing in place Consultation – post-occupancy evaluation needed |
| Visiting Service Providers | 7 | Functionality – building legibility/navigability, sufficient space, equipment and parking |
| Architects | 2 | Consultation – client assumes the architect is familiar with the building type Quality/cost – limited by the project budget |



Results – Self-Report Surveys (cont.)

| Location | No. | Environmental Factor | Results | | | | |
|--------------|-----|----------------------|----------------|---|---|---|----------------|
| | | | very poor 1 | 2 | 3 | 4 | very good 5 |
| Ingle Farm | 5 | natural light | | 2 | 2 | 1 | 2 |
| | | artificial light | | 2 | 1 | 2 | 2 |
| | | noise level | | 2 | 2 | 1 | 2 |
| | | temperature | | 1 | 2 | 2 | |
| | | fresh air flow | | | 3 | 1 | 1 |
| Mawson Lakes | 3 | humidity | | 1 | 1 | 4 | 2 |
| | | practicality | | 1 | 1 | 1 | 2 |
| | | natural light | 2 | | 1 | | |
| | | artificial light | | | 1 | 1 | 1 |
| | | noise level | | | 3 | | |
| | | temperature | | 1 | | 1 | 1 |
| | | fresh air flow | | 1 | | 2 | |
| | | humidity | | 1 | 2 | | |
| | | practicality | | | | 1 | 2 |



Discussion

- Access, kitchens and laundries dominate the design process
- Storage, spatial personalisation and work flow efficiency
- Consultation with users and staff
- Project limitations:
 - small sample
 - lack of decision-making structures
 - client held documentation only
 - limited to areas used by external service providers



Conclusion

- Two key contextual factors:
 - trends indicate a need for increasingly flexible aged care facilities
 - there is a link between design and user satisfaction
- This study has isolated a number of design elements critical to the capacity of service providers to provide efficient and effective service
- This study has also affirmed other research that indicates the importance of the briefing process in user satisfaction.



thank you