Preliminary Findings

STUDY 2 – Accessible Design, Hospital Discharge and Ageing in Place: A National Survey of Occupational Therapists

This report is the second of two studies investigating accessible housing conducted through the Summer Foundation–La Trobe University research program. These reports provide an evidence base to inform decision-makers on incorporating minimum mandatory accessibility standards in the 2022 National Construction Code (NCC).

While past research has highlighted the negative impacts of inaccessible housing, little systematic evidence exists regarding the importance of *specific* accessible design features. The costs of inaccessible housing have been predominantly researched by economists and building experts rather than health professionals working with people with mobility limitations. Occupational therapists (OTs) have expert knowledge of home assessments and the accessible design needs of people with mobility limitations.

Aim: To identify which accessible features would have the greatest positive impact on discharging patients from hospital *and* enabling older Australians to age at home. This study also examined which home modifications are most often needed, as well as quantified the delays to discharge arising from home modifications.

Respondents: 134 OTs who regularly conduct home visit assessments.

Method: OTs were asked to rate 22 accessible features according to impact on hospital discharge and/or ageing in place. The features were derived from the Livable Housing Australia Design Guidelines.

Key Findings

1. The accessibility features that have the greatest impact on hospital discharge and ageing in place are:
    - Step-free pathways/entrances to homes
    - Step-free showers and larger shower sizes
    - Bathrooms and bedrooms on the ground floor

2. The most frequently recommended home modifications for hospital discharge and ageing in place are:
    - Installing a grab rail in the shower and/or toilet
    - Removing a shower screen
    - Installing a handrail at the entrance to the home

3. The survey also found that:
    - 42.6% of clients have a delayed discharge due to waiting for the completion of home modifications, resulting, on average, in 22 additional days spent in hospital
    - The national cost of these delayed discharges is estimated to range between $1.69 billion to $3.17 billion per annum

Conclusion

A lack of accessible features in all homes makes hospital discharge slower and ageing in place harder. The findings of this study indicate that the most important accessible features to consider as mandatory requirements for minimum access design in the NCC are:

- A safe and step-free path to a step-free entrance into the dwelling
- A 900 x 900mm shower with a step-free entry, on the ground floor
- A toilet and space for a bedroom on the ground floor
- Reinforced walls around the toilet, shower and bath to support the safe installation of grab rails at a later date

These features are important for both ageing in place and hospital discharge. Their inclusion as minimum standards will make homes more accessible for everyone. Without mandatory minimum accessibility standards, many post-build home modifications will remain necessary. This study points to the inefficiencies of retrospectively modifying homes, rather than incorporating minimum accessibility features as standard in new homes.

Table 1. Average ratings of (a) whether the lack of features delays hospital discharge (0 = never to 3 = nearly always), and (b) whether the features have a positive effect on supporting ageing in place (0 = no effect to 3 = major effect).

Design feature	Hospital discharge	Ageing in place
Step-free entrance to residence	1.89	2.41
Step-free shower entry	1.76	2.61
Step-free pathway to entrance	1.57	2.36
Shower size	1.54	2.27
Shower on ground floor	1.49	2.49
Toilet on ground floor	1.40	2.56
Ground (or entry level) bedroom space	1.36	2.31
Transition height for different floor surfaces	1.32	1.86
Space in front of toilet	1.25	1.97
Slip-resistant flooring	1.22	2.15
Removable shower screen	1.20	1.93
Space adjacent to shower	1.20	1.75
Internal door width	1.19	1.70
Toilet in bathroom located in corner	1.18	1.58
Reinforcement of bathroom and toilet walls	1.17	2.08
Closet toilet walls	1.15	1.74
Entrance door width	1.02	1.57
Width of pathway to entrance	0.92	1.41
Internal corridor width	0.90	1.47
Internal stairways - no winders	0.89	2.02
Provision for future stair-climber or lift	0.73	1.85
Kitchen space	0.66	1.45

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