

BACKGROUND

According to the CDC, of individuals with disabilities, 13.7% have mobility challenges, 10.8% have cognition deficits (serious difficulty concentrating, remembering or making decisions), 5.9% have deafness or serious difficulty hearing and 4.6% have blindness or serious difficulty seeing (Disability & Health Data System. (n.d.). Environmental modifications impact five dimensions of the home; environment, occupational, personal, physical temporal and social (Aplin, T., Jonge, D., & Gustafsson, L., 2015). In the United States 60% of homes will be occupied by individuals living with a physical disability (Cho, H. Y., MacLachlan, M., Clarke, M., & Mannan, H., 2016). There is a lack of collaboration between occupational therapists and design professionals (Larkin, H., Hitch, D., Watchorn, V., Ang, S., & Stagnitti, K., 2013; Wagenfeld, A., Reynolds, L., & Amiri, T, 2017). The purpose of this critically appraised topic is to investigate literature on interprofessional collaboration between occupational therapist and design professionals in order to improve the processes and outcomes for environmental modification for individuals with disabilities.



Houzz. (n.d.)

FOCUSED QUESTION

How does interprofessional collaboration between OT and design professionals improve accessibility for individuals living with disabilities?

METHOD

- Qualitative research was carried out to gain perspective in the field of accessibility.
- A comprehensive literature search was completed
- Thirteen articles were selected from the comprehensive literature search.
- The results from these articles were used as evidence to evaluate the focus question.
- The results and the outcomes were analyzed.
- Commonalities and limitations of the evidence were identified.
- Conclusions made and applied to a formal appraisal document



Alone Eagle Remodeling. (n.d.).

PROCEDURES FOR SELECTION

INCLUSION

- Examines application of interprofessional collaboration to improve accessibility
- Examines universal design and occupational therapy
- Published 2010 later
- Level I, II, III studies and peer reviewed
- Persons living with a disability

EXCLUSION

- Does not examine the effectiveness of modifying community or home accessibility
- Level IV or V study
- Published prior to 2010

RESULTS

Summary of Level I, II, & III

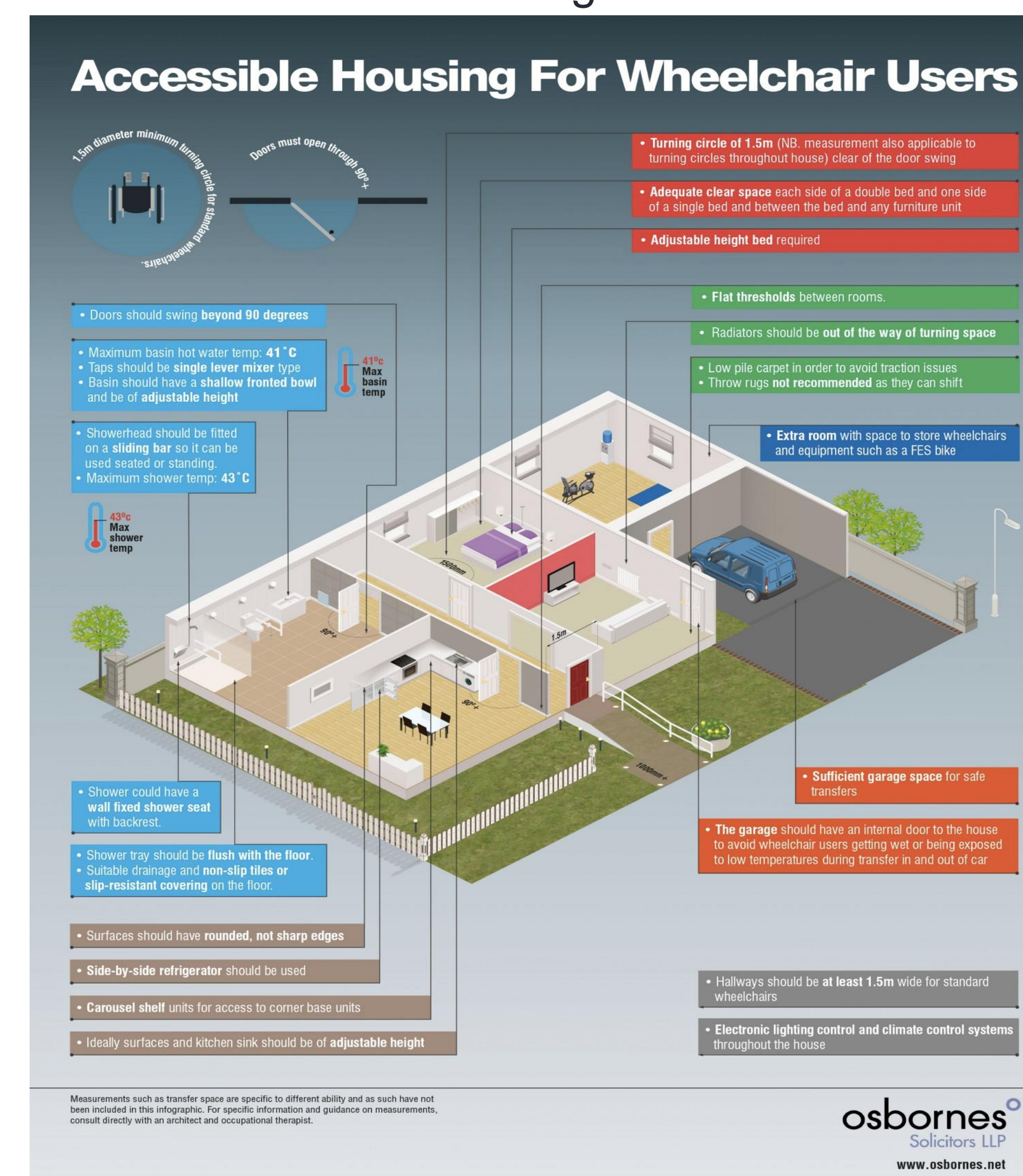
Five articles discuss how occupational therapy clinicians have valuable knowledge into the human condition that contribute to successful client-centered accessible design.

Four articles discuss how there is a lack in understanding and knowledge between occupational therapists and design professionals leading to limited collaboration

Two articles discuss how environmental modification in the home contribute to more than just accessibility, to include mental health.

Three articles discuss how Universal Design can improve accessibility for individuals within the home and in community.

There are six subthemes highlighted throughout this appraisal. *Universal design* as a model for environmental modification, accessibility and overall *improved health outcomes*, increased *community participation*, *interprofessional collaboration*, incorporation of *assistive technology* in environmental modification and *client involvement* in design.



BOTTOM LINE FOR OT

Overall this evidence supports that interprofessional collaboration between occupational therapists and design professionals leads to more client centered and functional environmental modification. Communication between design professionals and occupational therapists pose as a major barrier due to language use and the lack of understanding of the opposing practice. It is found that Universal Design (UD) is a valuable model to work from in order to collaborate. Further interprofessional education would support collaboration of design professionals and occupational therapists, ultimately leading to a more functional, cost effective and accessible home and community. Evidence supports increased accessibility allows for more independence in ADLs as well as great community participation and social satisfaction. Seven level two studies and six level three studies were analyzed in this systematic review.

REFERENCES

Alone Eagle Remodeling. (n.d.). Retrieved from: <http://www.aloneeagle.com/wheelchair-friendly-cabinet-installer-in-harrisburg-pa/>

Aplin, T., Jonge, D., & Gustafsson, L. (2015). Understanding home modifications impact on clients and their family's experience of home: A qualitative study. *Australian Occupational Therapy Journal*, 62(2), 123-131. doi:10.1111/1440-1630.12156

Cho, H. Y., MacLachlan, M., Clarke, M., & Mannan, H. (2016). Accessible home environments for people with functional limitations: A systematic review. *International Journal of Environmental Research and Public Health*, 13(8), 826. doi:10.3390/ijerph13080826

Houzz (n.d.). Retrieved from: <https://www.houzz.com/hznb/photos/handicap-accessible-bathroom-kirkland-wa-modern-bathroom-seattle-phvw-vp~136453481>

Larkin, H., Hitch, D., Watchorn, V., Ang, S., & Stagnitti, K. (2013). Readiness for interprofessional learning: a cross-faculty comparison between architecture and occupational therapy students. *Journal of Interprofessional Care*. 27(5), 413-419. doi:10.3109/13561820.2013.779233

Wagenfeld, A., Reynolds, L., & Amiri, T. (2017). Exploring the Value of Interprofessional Collaboration between Occupational Therapy and Design: A Pilot Survey Study. *The Open Journal of Occupational Therapy*, 5(3). <https://doi.org/10.15453/2168-6408.1354>

Visuality. (n.d.). Retrieved from: <https://visual.ly/community/Infographics/health/accessible-housing-wheelchair-users>

(left): Visuality. (n.d.).