



OT PRACTICE DOCUMENT: HOME ASSESSMENT AND MODIFICATIONS

WHAT IS THE PURPOSE OF A HOME ASSESSMENT AND MODIFICATIONS?

In healthcare, home modifications refer to interventions aimed at improving a person's physical environment to increase safety, accessibility, and usability, and to align the home's features with the functional, cognitive, emotional, sensory, and spiritual needs of the person¹. Home modifications can include adaptive equipment, technology, and/or changes to the physical environment². Frequently used concepts in this area of practice include³:

- **UNIVERSAL DESIGN:** An approach to design that aims to create environments to be used by all people, to the greatest extent possible, without the need for adaptation.
- **INCLUSIVE DESIGN:** A design that considers the full range of human diversity with respect to ability, language, culture, gender, age, and other forms of human differences.
- **ACCESSIBLE DESIGN:** A design process in which accessible environments are created by taking into consideration physical, cognitive, sensory, and emotional needs.
- **USABLE DESIGN:** A design process in which usable environments are created so that a person is able to effectively, efficiently, and satisfactorily participate in necessary and meaningful occupations. Accessibility is a necessary pre-condition of usability.

Individuals of all ages living with disabilities, including neurological, musculoskeletal, and/or other health conditions often require home assessments and modifications to maximize safety, comfort, and participation in daily activities³. Additionally, following an injury or surgical procedure, a person may benefit from a home assessment and modifications to support hospital discharge, planning, and recovery. Home assessments and modifications also support older adults who want to stay living in their homes and communities as they age⁵.

THE ROLE OF OCCUPATIONAL THERAPY IN HOME ASSESSMENT AND MODIFICATIONS

Occupational therapists are the only regulated healthcare professionals who are trained in assessing and providing intervention in the areas of mental, physical, and cognitive health and are skilled in anticipating future needs and progression of disease and disability. Home assessment and modification interventions delivered by occupational therapists have demonstrated greater efficacy than interventions delivered by other professionals². To help determine the fit between the person and their home environment, occupational therapists consider personal, environmental, and occupational factors when assessing the safety, accessibility and usability of the home. To maximize adoption and promote the success of recommended modifications and interventions, intrinsic and extrinsic factors are considered^{2,4}:

INTRINSIC FACTORS

- The clinical course of the disease or condition. For example, thinking about future environmental needs and planning accordingly.
- Availability and preferences for personal assistance.
- Client's cognitive, physical, and financial ability to maintain modifications.
- Client's readiness for change and adoption of home modifications.
- Concern for aesthetics; some clients may prioritize aesthetics over function.
- Health literacy, technology readiness, and capabilities.
- Perceived stigma regarding equipment or modifications.
- Tolerance for displacement while the home is being modified.

EXTRINSIC FACTORS

- Access to financial resources.
- Access to personal assistance and available social support.



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- Ensuring that modifications work for all occupants of the home.
- Suitability of the home, including structural conditions of the home, housing type, climate of geographic area, available space, and layout.
- Portability and storage requirements of adaptive equipment
- Access to professional home renovators and equipment vendors.

The occupational therapist role in home assessment and modifications typically also includes^{2, 5, 6}:

- Conducting a comprehensive assessment including interviewing the client, conducting a home visit(s), and observing the client in daily activities in their home environment.
- Assessing person (e.g., transfers, mobility, balance, vision, attention) and environment factors (e.g., social supports, housing condition) to determine level of supports needed.
- Evaluating individual client needs for housing that matches their abilities and resources, and facilitating the transition to a more suitable housing, if required.
- Recommending adaptive equipment and physical modifications, including bar grabs, handrails, ramps, raised toilet seats, and other adaptive equipment throughout the home.
- Recommending assistive technology to improve safety and independence (e.g., personal emergency response systems and smart home technology).
- Educating the client on broad, yet individualized needs, including lighting and colour contrast.
- Educating clients on how their condition(s) may impact how they interact with their home environment and making recommendations that take into consideration the expected medical and/or functional changes that can be potentially expected.
- Recommending ergonomically appropriate hardware, such as D-shaped cabinet pull handles and faucets that are hands-free, adjustable, and with temperature controls.
- Recommending adaptations to how a person participates in their activities of daily living.
- Training clients on re-establishing habits and routines.
- Engaging in caregiver capacity building through education and joint problem-solving.
- Advocating for funding programs to support home assessments and modifications and assisting with funding justifications (i.e., program applications or letters).
- Advocating for or contributing their expertise as consultants in related programs and services.
- Contributing to policy development related to aging or living in place, disability rights, and accessible housing.

REFERENCES

1. Wahl H., Fänge A., Oswald F., Gitlin L., & Iwarsson S. (2009). The home environment and disability-related outcomes in aging individuals: what is the empirical evidence? *Gerontologist* 49,355–367.
2. Stark, S., et al. (2015). Clinical reasoning guideline for home modification interventions. *AJOT*, 69.
3. Warsson, S. (2015). Housing Adaptations and Home Modifications. In: Söderback, I. (eds) *International Handbook of Occupational Therapy Interventions*. Springer, Cham.
4. Harper, K., et al. (2022). Barriers and facilitating factors influencing implementation of occupational therapy home assessment recommendations: A mixed methods systematic review. *ACOT*, 69, 599-624.
5. CAOT. (2019). CAOT Position Statement: Aging in Place. <http://tinyurl.com/4xk8k2bf>
6. RCOT. (2019), Adaptations without delay. <https://www.rcot.co.uk/node/2057>

All Occupational Therapy Practice Documents have been developed and reviewed in collaboration with diverse occupational therapists with lived experience and expertise in the respective areas of practice. For any feedback, contact practice@caot.ca.