Managing risks of aging at home

Considerations to support older adult patients

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Clinical question

How can I help my older patient manage the risks of living at home as they age?

Bottom line

Most Canadians prefer to live at home as they age.[1,2] Aging in place can promote autonomy and feelings of security and comfort, stemming from familiarity with the physical environment and relationships with friends and neighbours.[3,4] Unfortunately, for some patients, particularly those living with frailty and cognitive disability, aging in place comes with risks. A recent article by Nix et al[5] helps guide clinicians and interdisciplinary health care teams in performing effective and patient-centred environmental assessment and modification.

Evidence

A 2022 survey of 489 older adults in British Columbia found that 88% preferred to age in place.[2] Aging in place can have risks; each year approximately 5.8% of Canadian community-dwelling older adults experience serious injuries from falling.[6] For people living with dementia, a variety of other risks can emerge, including medication errors, cooking accidents (eg, cuts, fires), motor vehicle collisions, abuse, and neglect.[7] These risks are more prominent in the early stages of cognitive decline when patients are still performing higher-level instrumental daily activities, such as cooking, driving, and medication management.[8,9] Multifactorial and home interventions, including environmental assessment, can reduce the risk of falls.[10,11]

Approach

There are attempts to shift toward the dignity of risk approach in the care of older adults, including for environmental assessment and modification.[12] The dignity of risk approach promotes patient-centred care by acknowledging that "life experiences carry the risk of failure and that we must support people in experiencing a spectrum of success and failure throughout their life."[12] Many interventions that reduce the risk of falls and injuries can have the unintended consequence of restricting patient autonomy. When considering various risk mitigation strategies, it is important to weigh the magnitude of risk reduction—to both the patient and others—against the impact on patient autonomy and seek options that align with the patient's values and preferences.

Risks emerge from the intersection of environmental, personal, occupational, and social factors. Potentially relevant personal factors include issues with sensorium, polypharmacy, mobility, bowel and bladder function, cognition, history of falls, pain, substance use, and sleep. Social factors include socioeconomic status, neighbourhood, pets, co-habitants, and social supports. Environmental assessment and modification should be conducted as 1 component of a comprehensive geriatric assessment that captures these other factors.

Ideally, environmental assessment and modification should be conducted by an interdisciplinary team, although this option is not always readily available. Members of an interdisciplinary health care team vary, but may include physicians, nurses, nurse practitioners, occupational therapists, physiotherapists, social workers, and pharmacists. Team members may have different roles within their scopes of practice to identify and mitigate risks in community-dwelling older adults. The results of a home assessment should be collated with the results of a comprehensive geriatric assessment. Subsequently, decisions about risk mitigation strategies should be made through collaboration with the patient, their caregivers, and the health care team.

Implementation

Nix et al provide a comprehensive list of potential risk factors and environmental modifications for patient homes.[5] Conducting an environmental assessment systematically is important to ensure risks are not missed. The clinician or team conducting the assessment should identify an array of strategies to mitigate each identified risk. The magnitude of each risk to the patient and others should be weighed against the impact of risk mitigation on patient autonomy. For some risks, a mitigation strategy might be straightforward. For example, removing rugs from the home is a simple intervention that reduces the risk of falling. If the patient has an emotional or cultural connection to their rugs, the rugs could be moved to a less hazardous part of the room or hung on the wall as a tapestry.

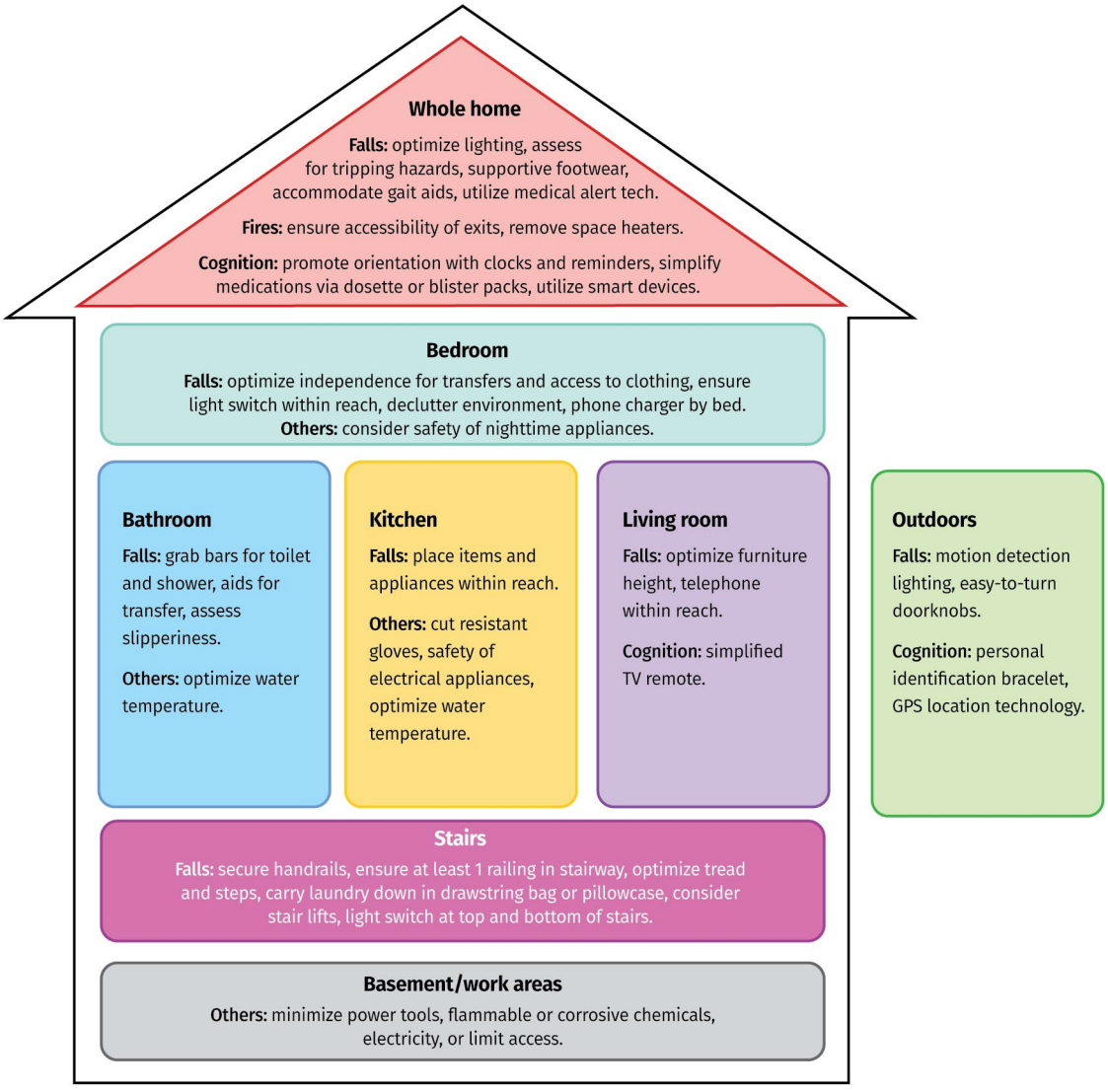
For other risks, choosing a strategy is more complicated. For patients who enjoy walking outside unaccompanied, there are a variety of risk mitigation strategies, and each option involves a trade-off. Locking doors or installing alarms that activate when doors open greatly reduces risk, but highly restricts patient autonomy. Alternatively, informing trusted neighbours or nearby

shopkeepers about the patient's enjoyment of walking, or using global positioning system devices to monitor the patient's location, moderately reduces risk, and moderately restricts patient autonomy. Encouraging the patient to carry identification (eg, a bracelet with their name, home address, and emergency contact information) and a cellphone when they go for a walk, and marking the front of the patient's home with meaningful orientation markers minimally reduces risk and minimally restricts patient autonomy.

Health care providers should help patients choose risk mitigation strategies that align with the patient's values and preferences. A risk might be considered intolerable if: the risk has increased due to recent functional or cognitive changes; the risk has already manifested in actual harm to the patient; taking the risk is inconsistent with the patient's values and preferences; or it exposes others to risk of harm, such as the potential for a fire or vehicle collision.[13] If the patient lacks capacity to make personal care decisions, then health care providers should help the patient's substitute decision maker choose an option that aligns with the patient's prior expressed values and preferences.[14]

Detailed guidance[5] to consider during a home environmental assessment can be found in **Figure 1**. Assessments should include examining falls hazards

Figure 1. Structured approach to environmental assessment and modification



GPS—global positioning system, TV—television.
Data from Nix et al.[5]

inside and outside the home, risk of fire, the patient's ability to respond to emergencies, including the use of communication strategies as alert devices or pre-programmed phones, and the patient's risk of walking unaccompanied outside the home. For patients living with dementia, risks associated with leaving the home unaccompanied need to be mitigated and balanced with the risks of restricting outdoor access.

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Competing interests
None declared

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