

The Home Assessment

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Background

- Fall risk factors:
 - Person: age, sex, vision, medical history
 - Environment: features of the home
 - No home assessments designed for individuals with low vision
 - Existing assessments do not adequately assess:
 - Lighting details (wattage, placement, switch access)
 - Color contrast
 - Visual distractions
 - Glare
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Our Home Assessment

- New assessment for people with visual impairment
- Evaluates eight areas of the home for hazards, adaptations, and clutter:
 1. Entryway
 2. Living room
 3. Dining area
 4. Kitchen
 5. Stairs
 6. Hallway
 7. Bedroom
 8. Bathroom
- Identify which hazards contribute most to falls

Demographics

- We currently have **166** home assessments in our database.

Variable	Result
Lives alone, n (%)	33 (19.9%)
Married, n (%)	99 (59.6%)
Has pets in home, n (%)	55 (33.3%)
Currently employed, n (%)	54 (32.5%)
Number of floors in home, mean (SD)	2.4 (0.9)
Number of rooms assessed, mean (SD)	7.0 (0.9)

Footwear and Assistive Devices

- We currently have **166** home assessments in our database.

Variable	Result
Footwear in home	—
Barefoot, n (%)	7 (4.3%)
Socks, n (%)	18 (11.0%)
Slippers, n (%)	45 (27.4%)
Sneakers, n (%)	59 (36.0%)
Other, n (%)	35 (21.1%)
Use of assistive device at home, n (%)	10 (6.1%)

Total Hazards by Room and Home

Room	Average number of hazards (SD)	Total possible hazards
Entryway	6.9 (3.9)	38
Living room	4.6 (1.8)	20
Dining room	4.7 (1.7)	20
Kitchen	4.9 (2.3)	24
Stairs	7.5 (1.8)	24
Hallway	2.8 (1.3)	17
Bedroom	5.7 (2.1)	26
Bathroom	10.1 (2.4)	25
Home total	42.0 (10.0)	194

Most Common Hazards

Hazard	Number of homes containing hazard
Inadequate ambient light (< 300 lux)	164
No grab bars at sink	160
Exposed light bulbs	159
Width of walkway narrowed by obstacles/furniture (< 36 inches)	153
No grab bars at toilet	153
Door threshold > 0.5 inches	140
Furniture without arm rests	139
No bathmat in bathtub/shower	136

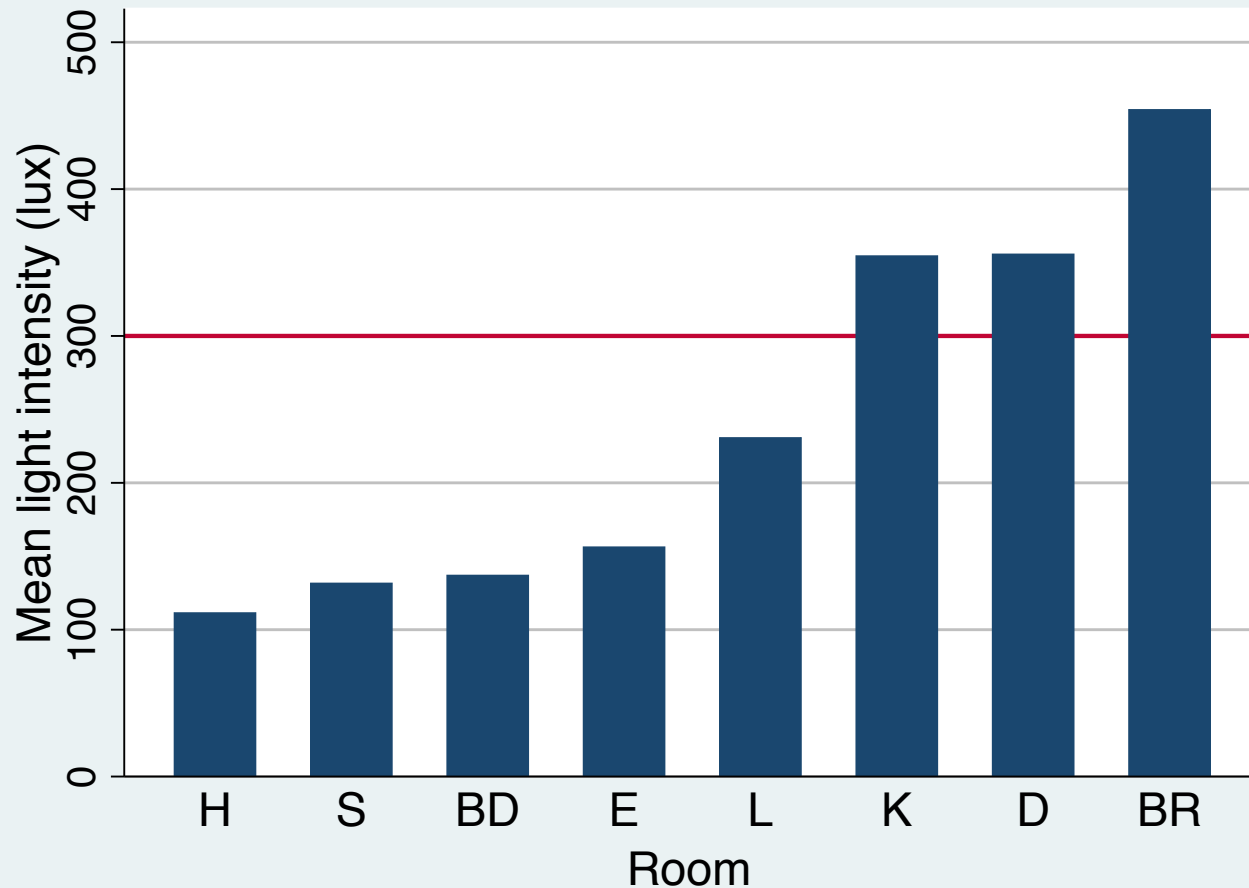
Least Common Hazards

Hazard	Number of homes containing hazard
Height of stair handrail < 34 inches or > 38 inches	0
Interior door at entryway swings directly over a step	0
Inability to reach microwave with both feet on floor	1
External steps loose	2
Entryway landing more narrow than doorway	3
Landing only on one side of doorway	4

Other Hazards

Hazard	Number of homes containing hazard
Rugs with unsecured/curling edges	120
Unstable furniture	86
Glossy/shiny floor	71
Papers/books/objects in pathway	59
Portion of stairs without handrail	57
Loose handrails	42
Electrical or phone cords on floor	29
Clutter on floor (> 50%)	28
Frayed/torn/folded carpeting	19

Lighting by Room



Key

H = Hallway

S = Stairs

BD = Bedroom

E = Entryway

L = Living room

K = Kitchen

D = Dining area

BR = Bathroom

Summary

- Most hazardous areas of the home are the bathroom and stairs
 - Most common hazard is inadequate lighting
 - Only kitchen, dining area, and bathroom meet minimum requirement
 - Next steps:
 - Relate home hazards to falls data, vision testing, fear of falling, physical activity
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Thank You!

Questions?
