



 THE CENTER FOR HEALTH DESIGN®

RESIDENTIAL HEALTH CARE FACILITIES
2014 GUIDELINES REVISION PROJECT

RESIDENT OPERATED MOBILITY DEVICES

FUNDED BY

THE HULDA B. & MAURICE L.
ROTHSCHILD FOUNDATION

PUBLISHED BY

THE CENTER FOR
HEALTH DESIGN

www.healthdesign.org

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JULY 2012



ACKNOWLEDGEMENTS

The Hulda B. & Maurice L. Rothschild Foundation



The Rothschild Foundation is a national private philanthropy with a primary interest in improving the quality of life for elders around the country, in long-term care communities. Currently, the Foundation is supporting the development of alternative long-term care programs and built environment designs, as well as regulatory change.

The Center for Health Design



The Center for Health Design (CHD) is a nonprofit organization that engages and supports professionals and organizations in the healthcare, construction, and design industry to improve the quality of healthcare facilities and create new environments for healthy aging. CHD's mission is to transform healthcare environments for a healthier, safer world through design research, education, and advocacy.



Foreword

Residential Health Care Facilities 2014 Guidelines Revision Project

The *Guidelines for Design and Construction of Health Care Facilities* is used as code in over 40 states by facilities, designers, and authorities having jurisdiction for the design and construction of new and renovated health care facilities across the nation. The Facility Guidelines Institute (FGI) is responsible for the *Guidelines*, which are updated on a 4-year cycle by a group of volunteers, — the Health Guidelines Revision Committee (HGRC). The committee is made up of experts from all sectors of the healthcare industry: doctors, nurses, engineers, architects, designers, facility managers, health care systems, care providers, etc. For further information and/or to view the *Guidelines*, go to the Facility Guidelines Institute’s website at www.fgiguidelines.org.

The 2010 *Guidelines for Design and Construction of Health Care Facilities* has launched into the 2014 cycle for revisions. In preparation of the 2014 revision cycle, The Center for Health Design and the Rothschild Foundation teamed together to identify areas for improvement within the Residential Health Care Facility portion of the *Guidelines*, specifically related to nursing homes. This resulted in a working meeting of long term care experts that came together to work on proposals for the 2014 *Guidelines* on topics such as culture change, resident-centered care, alternative care models, utilization of mobility devices, incorporation of wellness centers and programming, improvements to resident rooms, and access to nature and outdoor spaces by residents. The work completed by this group has been developed into formal proposals that have been submitted through the FGI website for the 2014 *Guidelines*.

Concurrently, the FGI and the Steering Committee of the 2014 *Guidelines* revision process agreed that a separate volume for residential health care facilities is needed within the marketplace to support not only the positive culture change that has been occurring within the long term care field, but to also assist with updating guidelines currently utilized within different states. This has resulted in the proposal of the *Guidelines for Design and Construction of Long Term Residential Health, Care, Support and Related Facilities* as a separate standalone publication.

The public proposal process closed on October 31, 2011, and the HGRC voted on final proposals in the end of January 2012. A public comment period on all the proposals that have been made for both Volume 1 (acute care and ambulatory care facilities) and Volume 2 (residential health, care, and support facilities) will begin in May, 2012 through mid-December, 2012. Voting on the comments is slated for 2013 with the final publication completed in 2014.

Many thanks are extended to the following dedicated volunteers who have provided many hours in preparing and filling in templates for the formal proposals to be completed and their generous time in writing the following issue briefs that review the current 2010 *Guidelines* language, identify the needs for improvements, the provision of recommendations, and the supportive research and references required to submit a proposal to the HGRC for consideration.

- Rob Mayer, The Hulda B. & Maurice L. Rothschild Foundation
- Kimberly Nelson Montague, Planetree
- Karla Gustafson, Ageless Designs
- Ingrid Fraley, Design Services Inc. and Design for Aging Knowledge Center
- Jerry Smith, Smith Green Health
- Margaret Calkins, IDEAS Consulting/SAGE
- Thomas Jung, retired Division of Health Facility Planning, NYSDOH
- Lois Cutler, University of Minnesota
- Richard Wilson, Sitrin Health Care
- Larry Funk, Laguna Honda
- Cathy Lieblich, Pioneer Network
- Jude Rabig, Rabig Consulting
- Gaius Nelson, Nelson-Tremain Partnership
- Melissa Pritchard, SFCS
- Skip Gregory, retired, Florida Agency for Health Care Administration

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- Sara Marberry, The Center for Health Design
- Jane Rohde, JSR Associates Inc. (Project Facilitator)



RESIDENT OPERATED MOBILITY DEVICES

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The use of resident operated mobility devices (i.e., motorized wheelchairs, scooters, etc.) and other assistive equipment increases with age as the rate of functional abilities decline in older populations (Freedman, Martin, & Schoeni, 2002). There has been a noted increase in the use of battery-operated wheelchairs and power chairs in senior living settings. Considering the increasing demographics of the U.S. senior population and given factors such as the rise in the number of people with obesity and its association with a variety of debilitating chronic diseases and conditions directly impacting ability to ambulate (Cooper & Cooper, n.d.), the usage of battery-operated vehicles is likely to continue to increase.

The increase of resident-operated vehicles can be of concern. The ability of a resident to operate a vehicle can be a safety and liability issue. Facility owners/operators have an obligation to monitor residents' safe usage of battery-operated vehicles in accordance with providing a safe living environment, while supporting high quality of life and as much independence as possible. The legal obligation to provide ongoing observation of residents can be interpreted to extend to the use of battery-operated vehicles as a safety issue per *United States vs. Hillhaven* (Utah, 1997) under Title 22. The Court determined that reasonable, safety-related restrictions could be imposed. Any rules and regulations imposed must be no more restrictive than necessary to meet safety-related concerns (Goldman, n.d.). Safety-related concerns for residents, staff, and visitors need to address the rules and regulations of operating the mobility device in regards to speed, right of way, parking, passing, courtesy of the corridors, use of warning sounds, rear-view mirrors, etc.

The ability to operate a battery-operated vehicle requires the user to be able to safely transfer in or out of the vehicle. There needs to be a certain sufficiency in body strength, mobility, and stability to safely operate a battery-operated vehicle

(The National Institute for Rehabilitation Engineering, 2003). Other determinates of a resident's ability to safely operate a vehicle include the possible need for a skills test, special permit, and/or requirement of personal liability insurance.

Recovery from damages is the right of a facility owner/operator. Inclusion in a resident's admissions agreement for damages that a resident may cause to their apartments, to the community, or to another person may cover this requirement. However, before requiring additional insurance, consideration would need to be given to the potential of this action being interpreted as violating the rights of someone using a mobility device who is an individual with disabilities. This would make the requirement for special insurance illegal under the Fair Housing Act by Department of Justice (DOJ) and HUD (U.S. Department of Housing and Urban Development Office of Fair Housing and Equal Opportunity, 2004).

Further, with the Centers for Medicare and Medicaid Services (CMS) and private insurers no longer reimbursing for facility-acquired medical errors, infection, falls, and other never events (National Quality Forum), safety in senior living settings has become an even stronger and important focus of care providers. Effective October 2012, CMS will withhold 1% of regular reimbursements based upon performance (30% based upon patient/resident experience and satisfaction); therefore not only safety, but quality of life are in the forefront in relation to reimbursement in long term care settings. Thus, the provision of guidelines for resident operated mobility devices is appropriate, needed, and well-timed.

The design of the physical environment is directly impacted by the presence of resident operated mobility devices necessitating the inclusion and consideration of issues related to equipment storage at point of use, charging station locations, corridor widths, battery storage, and appropriate maintenance areas for equipment in senior living settings.

The Patient Handling and Movement Assessment section of the 2010 *Guidelines for Design and Construction of Health Care Facilities* addresses battery-operated mobility devices only in regard to areas of storage and space and clearance. Specific to common elements of long term care facilities, the 2010 *Guidelines* state that the resident should be provided with adequate storage near points of use within dining areas including adequate space and clearance for residents' utilization of ambulation devices. Consideration of mobility devices in relationship to resident and patient

usage during the functional programming process had not been fully defined and included within the 2010 *Guidelines*.

In preparation of proposal changes for the 2014 *Guidelines for Design and Construction of Health Care Facilities*, the following was considered to avoid unintended consequences in providing detailed guidance on designing long term care settings in relation to resident operated mobility devices:

- Battery operated vehicles may not be in the best interest of the resident who is capable of weight-bearing exercises and may need physical exercise to avoid muscle and tone loss. The use of battery operated vehicles for staff convenience vs. resident's best interest should be considered. Therefore, this has been included within proposal language for the 2014 *Guidelines* within the functional program process.
- As outlined in detail above, the Department of Justice and HUD, under the Fair Housing Act, disallows facilities from requiring persons with disabilities to pay extra fees or deposits as a condition of receiving a reasonable accommodation. (U.S. Department of Housing and Urban Development Office of Fair Housing and Equal Opportunity, 2004). This illustrates the importance of evaluating the need and use of resident operated mobility devices from the beginning of the programming and design process to reduce construction costs for retrofits and/or create ambulation issues for residents (limiting appropriate access to devices, etc.).
- Accidents caused by battery operated vehicles have resulted in licensing deficiencies and lawsuits. Example: *United States vs. Hillhaven* (D. Utah, 1997). Understanding that providing not only physical access, storage, and clearances, but also operational policies and procedures are important for facilities. As noted above, this often includes residents passing a driver's test that includes a license for safe operation of a mobility device to reduce potential risk.

Specific design considerations utilized as background for the 2014 *Guidelines* proposals include:

- Storage evaluation to include review of specific space requirements for a resident to park a vehicle near a point of use such as the dining room, activity area, or in a resident's own room.

- Clearance consideration examines the ability of the resident to safely access his or her vehicle. Once the resident has safely accessed the vehicle, there must be enough room for him or her to navigate the vehicle into traffic thoroughfares. Vehicle thoroughfares must be allotted enough clearance for a resident to safely operate the vehicle to avoid collision with other residents, individuals, and objects.
- Additional functional program storage issues to be considered include the emerging designs of battery operated vehicles such as standing, bariatric, and smart wheelchairs (Cooper & Cooper, n.d.).
- The maintenance issues of charging/recharging batteries for mobility devices require the examination of location issues in the general facility as well as resident rooms. The heights of outlets or docking portals should be determined based upon the resident care population.

In summary, it is generally recognized that there is an increase in usage of resident operated mobility devices in long term care settings. This is supported by evidence based research information on aging demographics. The workgroup proposal recommendations provided for the 2014 *Guidelines* clearly address storage, clearance, operation, safety and liability, and maintenance issues of resident operated mobility devices.



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