Active Living Research Meeting
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Title: Healthy Aging Network Audit Tool Development and Pilot project
William A. Satariano, PhD, MPH - Presenter

Authors and Affiliations: (In no particular order.)

The CDC Healthy Aging Research Network: Lucinda L. Bryant PhD, MSHA (*University of Colorado),* Rebecca Hunter, M.Ed., Christen Sible *(University of North Carolina, Chapel Hill)*, Delores M. Pluto, PhD, Sara Wilcox, PhD, Sabrina Tindall *of South Carolina)*, Kathleen McTigue, MD, Constance Mols Bayles, Ph.D., FACSM, Kendra J. Winters M.S., CHES, Courtney Johnson, RD (*University of Pittsburgh)* Anne Vernez Moudon, Dr. es Science, Chanam Lee, Ph.D. Candidate, Gwen Moni, David Levinger (*University of Washington)* Thomas Prohaska, PhD *(University of Illinois, Chicago),* Laura K. Brennan Ramirez, PhD, MPH, (*St. Louis University and* Inneval, LLC), William A. Satariano, PhD, MPH, Susan L. Ivey, MD, MHSA, Melissa Kealey, MPH *(University of California, Berkeley)*

Abstract

Background
The CDC Healthy Aging Network (HAN) is focusing on the relationship between the built environment and physical activity in older adults. Audits are one method used to collect data on the aspects of the build environment thought to influence physical activity. However, it is not known whether these audit assessments adequately operationalize the aspects of the build environment important to older adults. Changes in functioning associated with aging, such as declines in visual acuity, hearing, and cognitive ability and memory, sensitivity to loud noises, bright lights and extreme temperatures; slower walking pace; susceptibility to steep inclines or cross-slopes; and limited bladder control, may mean that particular aspects of the built environment may be particularly important to older adults, and thus should be included on an audit instrument when studying this population. For example, sidewalk maintenance may be more important to the mobility of older adults than to the general population.

Objectives
The purpose of this pilot study is to develop and pilot test a research audit instrument to collect data on the street-scale factors associated with physical activity in several older adult populations (i.e., individuals aged 65 or older with an emphasis on those with special needs, such as wheelchair or oxygen tank assistance) across multiple settings (e.g., urban/rural, colder/warmer climates, presence/absence of diverse racial and economic groups, residential/commercial, flat or hilly areas).

Methods

Identification of additional audit items of importance to older adults: HAN conducted a review of the literature about associations between physical activity in older adults and the built environment, as well as common functional limitations associated with aging. In addition, some of the six HAN sites are conducting qualitative research with older adults. They are conducting semi-structured interviews with ten adults age 65 and older with varying functional status, as well as conducting walking interviews/joint audits with older adults. The researcher first asks the older adult to point out anything that seems important, then completes the audit with the older adult. After completing the audit, the researcher asks the older adult respondent whether anything of importance is missing.

Pilot testing of the audit instruments: The St. Louis university audit instrument was modified by the HAN to include additional items thought to be important to older adults, and the audit instrument is being piloted by researchers at six of the HAN sites. A senior center or residential site was selected in each of the following six cities: Alamosa Colorado, Columbia South Carolina. Hendersonville North Carolina, Seattle Washington, McKeesport City Pennsylvania, Chicago Illinois, and Berkeley California. A GIS map was created of the street segments within a 0.5 radius of that site. A segment is a section (1/4 mile or less) of street or road between two intersections. Each site selected 15-30 street segments within this radius for

auditing. An effort was made to select segments that are along a walking route for older adults, such as the route from the senior living complex to the grocery store. Destinations which the WBC Survey suggested may be important walking destinations for older adults, such as 1) grocery stores, 2) drug stores, 3) banks, 4) post-offices, and 5) non-fast food restaurants were considered if available. Where variety existed, at least 5 residential segments and 5 commercial segments were audited. Audits were performed on each of the selected street segments and intersections by at least two trained researchers. Street segments and intersections were auditing separately. The data will be entered into an Access database and imported into a GIS through the use of a segment ID number assigned to each street segment.

Results and Conclusions

The pilot study is still in process and will be completed at the end of Sept. 2004. Once the audit instrument has been pilot tested, it will be modified for use in a larger study. Final products of this pilot phase will include a recommended audit instrument for use as an environmental assessment tool for research about physical activity with older adults, pilot data on these six neighborhoods, and an inter-rater reliability assessment of the agreement between auditors on each question.

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