The Functional Performance of Elderly Urban African-American Women Who Return Home to Live Alone After Medical Rehabilitation

Catherine L. Lysack, Susan E. MacNeill, Peter A. Lichtenberg

Key Words: activities of daily living • aged • community occupational therapy

Objective. Elderly women who live alone are at increased risk for loss of independence. Hospitalization, in particular, often marks the transition from independent living to institutional care. The purpose of this study was to examine the relationship of rehabilitation admission to the subsequent function of elderly women and their ability to return to live-alone status.

Method. The women in the study (N = 138) were admitted to a geriatric rehabilitation unit at a large urban medical center between September 1997 and September 1998. The findings reported here pertain to the subset of African-American women (n = 122), the majority of the sample. Data were collected using several standardized assessments, including the Functional Independence Measure (FIM).

Results. The FIM motor scores improved significantly for the total sample between admission and discharge, and the mean FIM motor score for the group that subsequently attained live-alone status was significantly higher than the non–live-alone group at 3 months and 6 months postdischarge. The participants who returned to live alone also reported significantly greater independence than did their non–live-alone counterparts across a variety of activities of daily living and instrumental activities of daily living skills.

Conclusion. These data suggest that rehabilitation is associated with improved functional outcomes, and higher functional performance is related to live-alone status.

Living alone is an increasingly common phenomenon in America, especially for elderly women. Nationally drawn samples of older adults confirm this trend. Whereas 20% of Americans 65 years of age and older lived alone in 1960, this proportion increased to 37%, or 8.9 million people, in 1990, and the numbers continue to grow (Kramerow, 1995; Mui & Burnette, 1994). Because men have higher death rates than women, women outnumber men at all but the youngest ages, and the difference increases with advancing age. At 65 years of age, the ratio of women to men is roughly 3 to 2; by 85 years of age, the ratio increases dramatically to 5 to 2 (U.S. Bureau of the Census, 1995). Thus, most elderly people living alone are women.

Despite the size of the live-alone population and the anticipated impact of this cohort of aging Americans on the health care system, older adults who live alone are a relatively recent focus of research. Although variability in the aging experience must be acknowledged, many who live alone are known to experience a decline in health, dimin-
ished physical and cognitive functioning, reduced economic resources, and a variety of social losses (Haug & Folmer, 1986; Lewis, 1997; Rubin, 1997; Verbrugge, 1976). Elderly persons who live alone are also at increased risk for depression and experience more frequent problems with home safety and maintenance (Chappell, 1991; Mui & Burnette, 1994). These problems are particularly acute for elderly women because they are more likely than men to live their final years of life alone.

An identifiable subgroup of older women who live alone is at even greater risk for loss of independence. They are elderly women living in urban areas, many of whom are minorities who also have significant medical problems (Hays, Fillenbaum, Gold, Shanley, & Blazer, 1995; Lewis, 1997; Worobey & Angel, 1990). Ozawa (1995) reported that African-American women, on average, have more chronic illnesses and more disabilities than their White counterparts. African-American women also appear to experience home confinement more often. Simonsick, Kasper, and Phillips (1998) found that elderly African-American women were less than one half as likely to leave their homes in a typical week than White elderly women—a difference that persisted even after controlling for physical independence, socioeconomic resources, and health conditions.

Serious illness followed by hospitalization can also be expected to affect a person’s ability to live alone. To date, however, no study has focused on the ability of elderly women to return to live-alone status after hospitalization. The limited research suggests that significant numbers of live-alone elderly persons lose their functional independence after a significant medical event necessitates their hospitalization. For example, Friedman (1995) followed 178 older patients in New Zealand who lived alone before having a stroke. He found that only 33% returned home to live alone after discharge; 23% went to live with family or took family into their homes; and a further 44% were placed in an institution. In a larger study of 372 geriatric rehabilitation hospital patients in the United States, MacNeill and Lichtenberg (1997) found that 39% returned to living alone, whereas 61% were discharged to care of family or institutional support. The researchers also demonstrated that the two strongest predictors of returning to live-alone status were physical functioning and cognitive status. However, both studies were cross-sectional in design and employed a small set of variables. In addition, neither explored ethnic variations in patterns of live-alone status. Better understanding older women’s ability to return to live-alone status is crucial, however, because hospitalization often marks the transition from independent living to institutional care.

The purpose of the current study was to identify and describe the factors related to the functional independence of elderly African-American women who return home to live alone after discharge from medical rehabilitation. We examined what characteristics (e.g., demographics, physical and cognitive abilities) distinguish those who return to live alone and those who do not and whether the importance of these characteristics change over time. The ultimate goal of this line of research is to develop deeper insight into the range of personal skills and structural resources required to live alone. This knowledge is not currently available, but it is highly salient in efforts to develop appropriate services to support the diverse needs of elderly persons in their homes and communities.

Method

Sample

Of 243 patients consecutively admitted to the geriatric rehabilitation unit at the Rehabilitation Institute of Michigan (RIM) in Detroit between September 1997 and September 1998, 194 men and women (80%) were identified as living alone before admission and completed the full study protocol. All who were admitted had a primary rehabilitation condition (typically stroke or fractured hip) and a potentially remediable disability (e.g., a gait disturbance, upper-extremity impairment). There were 138 women in the sample. The analysis reported here focuses on the 122 African-American women. The study was approved by the Behavioral Investigation Committee at Wayne State University and informed consent was obtained from all study participants.

Measures and Procedure

Four standardized assessments and a structured patient interview designed specifically for this study were used for data collection. The well-known Functional Independence Measure (FIM™)1 (Hamilton, Granger, Sherwin, Zielezny, & Tashman, 1987) evaluates functional performance on 18 activities of daily living (ADL): feeding, grooming, bathing, dressing (upper and lower), toileting, bladder and bowel control, locomotion, stair climbing, transfers (bed, toilet, bathtub), comprehension, expression, sociability, problem solving, and memory. Each item is scored from 1 (completely dependent) to 7 (completely independent), using a standardized, performance-based protocol. The FIM has been shown to have high interrater reliability, with an intraclass correlation coefficient of .97 for the total score (Hamilton et al., 1987). Validity has also been demonstrated with patients with brain injury and patients with stroke (Cook, Smith, & Truman, 1994). Occupational therapists and physical therapists on the RIM rehabilitation unit contributed the FIM data as part of their routine clinical activities.

Neuropsychologists at RIM measured the participants’

1FIM™ is a trademark of the Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc.
Depression and levels of cognitive impairment. Depression was assessed with the Geriatric Depression Scale (GDS; Yesavage et al., 1983), and scores were reported according to the following convention: 0 to 10 = no depression present; 11 to 16 = mild depression; and 17 and higher = moderate depression. The original GDS was developed for evaluation of geriatric populations and is composed of 30 yes–no self-referent statements. This study used the short form, which has been shown to be significantly correlated to the long form in geriatric psychiatric patients (r = .84, p < .01) as well as in nonclinical elderly patients (r = .66, p < .01) (Sheikh & Yesavage, 1986).

Cognitive impairment was evaluated with the Mattis Dementia Rating Scale (MDRS; Mattis, 1988). The performance-based MDRS includes subscales for attention, initiation, graphomotor construction, abstraction, and memory. A score of 124 or higher indicates intact cognition; scores lower than 103 indicate more severe cognitive impairment. The MDRS has been found to have excellent reliability, with test–retest reliability (r = .97) and split–half reliability (r = .90) (Gardner, Olver-Munoz, Fisher, & Empring, 1981).

To quantify the influence of comorbid chronic conditions for our sample, the Co-Morbidity Index was used (Charlson, Pompei, Ales, & MacKenzie, 1987). The Co-Morbidity Index (or Charlson Index as it is often called) was originally created for predicting mortality. The index is calculated by assigning weights to medical diagnoses and summing the weights for each patient. High scores reflect a high number of diseases or increased disease severity. Research assistants abstracted diagnoses from the participants’ charts, and RIM medical records staff members rechecked them for accuracy before calculation. Our own research (Moore & Lichtenberg, 1996) and that of the Health Care Financing Administration (Deyo, Cherkin, & Ciol, 1992) have found the Co-Morbidity Index to be a valid and excellent predictor of morbidity and disability outcomes.

In addition to the four standardized measures, an interview was developed for this study to gather more detailed information. The interview consisted of a series of close-ended questions that focused on patient demographics and preadmission and postdischarge performance in ADL and instrumental activities of daily living (IADL). In this study, the five ADL items were eating, grooming, toileting, dressing, and bathing. The items were rated on a 2-point scale: independent (completely independent without assistive devices) versus dependent. IADL were assessed with Lawton and Brody’s (1969) IADL scale. The 10 items on the scale are telephone use, financial management, medication use, food preparation, housekeeping, laundry, transportation use, shopping, driving, and chores and repairs. IADL items are scored on a 4-point scale, with possible total scores ranging from 0 (complete dependence) to 40 (complete independence). Lawton and Brody reported test–retest reliability of .73 and acceptable correlation with observer ratings (r = .61) for the IADL scale.

The full study interview (demographics, ADL, IADL) took approximately 45 min to complete and was conducted in-person by trained research assistants during the participants’ hospital stays. A shortened version of the interview was conducted via telephone at 3 months and at 6 months after discharge. Telephone interviews were completed with every participant contacted at 3 months and 6 months follow-up, irrespective of cognitive status. Proxy participants were used only to collect living arrangement data for those participants who were lost to follow-up.

The research assistants in this study were two graduate students and one postdoctoral fellow in clinical psychology. All three were already familiar with the standardized inhospital measures used in the study and the geriatric rehabilitation setting. Their duties included collation of the in-hospital data (collected by clinicians) and administration of the study interview. With respect to the study interview, the research assistants’ training first involved their review of an interview instruction manual written by the second and third authors. The manual included the complete details of interview administration and scoring. Next, they observed three interview administrations and conducted one in vivo interview for practice. Critical feedback on performance was provided by the authors immediately after each practice session. The third author supervised the research assistants and monitored quality throughout all phases of data collection and data entry.

Data Analysis

Data were analyzed with the Statistical Package for the Social Sciences (SPSS) PC+ (version 7.5). Descriptive statistics were used to summarize the participants’ demographic and clinical characteristics, including their scores on the FIM, MDRS, GDS, and Co-Morbidity Index and their functional status (ADL, IADL). Chi-square and t tests were used to test for significant differences between live-alone and non–live-alone participants. Logistic regression analysis was used to examine the association of several demographic and functional measures obtained during rehabilitation to live-alone status. Logistic regression was also used to model live-alone status as a function of total IADL score.

Results

Sample Characteristics

The 122 African-American women in the study ranged in age from 60 to 98 years (M = 75.1 years, SD = 9.1). The mean level of education was 11 years, although the amount of formal schooling completed by individual participants varied: 25% had 0 to 8 years of education; 50% had 9 to 12 years; and 25% had more than 12 years. Although by definition all the participants were living alone, their marital status before admission varied. As might be expected, the
majority were widowed (58%). Forty-three (46%) were separated or divorced, and 8 (7%) had never married. Finally, the mean length of hospitalization was 14.6 days (SD = 5.8).

Subject attrition was not a problem in the study. At 3 months postdischarge, research participation had declined from 122 to 115 but increased to 121 at 6 months with intensified follow-up, resulting in less than 1% attrition.

Functional Improvement in Hospital

The FIM data were used to examine the issue of functional improvement during hospitalization. For analysis purposes, the total FIM score was divided into two subscores: FIM motor (consisting of the first 13 physical ability items on the original measure) and FIM social–cognition (consisting of comprehension, expression, social interaction, problem solving, and memory). FIM motor data showed significant gains made by the total sample between admission and discharge. The FIM motor scores increased significantly, \( t(122) = 27.0, p < .001 \), rising from a mean of 48.5 (SD = 9.7) at admission to a mean of 68.2 (SD = 12.2) at discharge. Stated differently, the FIM data suggest that the participants had improved, on average, from a 3.7 to a 5.2 on each FIM item. Interestingly, those participants who did not attain live-alone status experienced a rate of in-hospital improvement in FIM motor scores very similar to those who did return to live-alone status. However, the group that did not return to live-alone status had a lower mean FIM score at admission and, therefore, a lower exit score (data not shown). In contrast to the FIM motor score, the FIM social–cognition score remained virtually unchanged from admission to discharge (admission \( M = 29.5 \); discharge \( M = 30.4 \)).

Discharge Disposition

At discharge, 53 (43.4%) of the 122 participants returned to live-alone status (defined as "sole resident of the home"). At 3 months, the rate of return to live alone had increased to 70 (60.9%) of 115 participants, and by 6 months, the rate was 79 (65.3%) of 121 participants. Most of the remaining participants were discharged to live with family or admitted to a nursing home or subacute hospital setting. The number of participants living in these other locations decreased substantially over the 6-month follow-up period, returning home to live alone (see Table 1). It should be noted that 14 (11.6%) of 121 participants were deceased at 6 months follow-up.

Distinguishing Live-Alone Elderly Women

We first examined whether participants who returned to live-alone status could be distinguished from those who did not on the basis of demographic characteristics (age, education) and in-hospital measures (FIM motor, cognition, depression, comorbidity). Next, we examined whether these differences showed trends over time.

Table 1

<table>
<thead>
<tr>
<th>Discharge Disposition</th>
<th>At Discharge (^{a} )</th>
<th>At 3 Months (^{b} )</th>
<th>At 6 Months (^{c} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>( % )</td>
<td>( n )</td>
</tr>
<tr>
<td>Alone</td>
<td>53</td>
<td>43.4</td>
<td>70</td>
</tr>
<tr>
<td>Family or relatives</td>
<td>41</td>
<td>33.6</td>
<td>17</td>
</tr>
<tr>
<td>Nursing home or subacute hospital</td>
<td>20</td>
<td>16.4</td>
<td>13</td>
</tr>
<tr>
<td>Acute hospital</td>
<td>6</td>
<td>4.9</td>
<td>6</td>
</tr>
<tr>
<td>Attendant</td>
<td>2</td>
<td>1.6</td>
<td>0</td>
</tr>
<tr>
<td>Assisted</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Friends</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Deceased</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

\(^{a} n = 122. \(^{b} n = 115. \(^{c} n = 121. \)

The \( t \) tests demonstrated that the live-alone participants had significantly higher FIM motor scores than their non–live-alone counterparts. The magnitude of this difference was approximately the same at all three measurement points (see Table 2). The \( t \) tests also confirmed that the live-alone participants were more likely to be cognitively intact (recalling that scores > 124 on the MDRS indicate intact cognition). Cognition scores for both groups were lower at 6 months than at immediate discharge, but not significantly lower. Overall, the participants were not depressed (recalling that scores < 10 indicate no depression on the GDS). However, at 6 months follow-up, the depression scores for the participants who had not returned to live-alone status were significantly higher than those who had returned home to live alone. Only at 3 months postdischarge did scores on the Co-Morbidity Index distinguish between those who returned home to live alone and those who did not. Finally and with respect to demographic differences, the mean age of the live-alone and non–live-alone groups was identical at discharge; however, at 6 months, the mean ages of the two groups were significantly different. The gap in education (measured in years of school) also increased from a nonsignificant difference at discharge to a significant difference at 6 months.

To refine this analysis and assess the contribution of

Table 2

| Distinguishing Live-Alone Status by In-Hospital Measures, Age, and Education |
|------------------|------------------|------------------|
|                   | At Discharge     | At 3 Months      | At 6 Months      |
| Mean Score        | Live Alone Not   | Live Alone Not   | Live Alone Not   |
| FIM motor         | 74.7             | 65.3***          | 74.0             | 59.6***          | 72.9             | 62.7***          |
| MDRS (cognition)  | 126              | 113***           | 125              | 109***           | 123              | 110**            |
| GDS (depression)  | 7.1              | 8.0              | 7.0              | 9.3              | 6.8              | 9.7*             |
| CMI (comorbidity) | 1.4              | 1.6              | 1.3              | 1.8*             | 1.4              | 1.7              |
| Age (in years)    | 75.1             | 75.1             | 73.5             | 77.4*            | 73.2             | 79.7**           |
| Education (in years) | 11.2          | 10.9             | 11.5             | 10.5             | 11.4             | 10.0*            |

Note. FIM = Functional Independence Measure; MDRS = Mattis Dementia Rating Scale; GDS = Geriatric Depression Scale; CMI = Co-Morbidity Index.

\( ^{*} p < .05. \(^{**} p < .001. \(^{***} p < .0005. \)
selected demographic factors and functional measures to live-alone status, a logistic regression analysis was conducted (see Table 3). Two demographic variables—age and education (both measured in years)—and the four standardized in-hospital measures—FIM motor score measured at discharge, MDRS score, GDS score, and Co-Morbidity Index—were used in the backward step-wise procedure. The analysis, which was conducted using the 6-month follow-up data, showed that the FIM motor score, MDRS scores at discharge, and an interaction variable provided the most powerful model with respect to correctly classifying live-alone elderly women. For example, the model predicts that a woman with an FIM motor score of 68.2 (the mean score for the sample) and an MDRS score of 118.3 (the mean score for the sample) would have an odds of living alone of 1.9 (a 66% probability of living alone). The model correctly classified 82% of the participants.

**ADL and IADL**

In addition to the standardized in-hospital measures, the 122 participants were telephoned at 3 months and 6 months postdischarge and asked about their ADL and IADL. These follow-up data were considered valuable because perceptions about one's abilities are known to be powerful indicators of actual functional performance. Moreover, reported ADL and IADL incorporate the context of the research participants' living situation into assessed functional ability.

The first finding was that complete independence in the five ADL items (defined in this study as eating, grooming, toileting, dressing, and bathing) was significantly related to live-alone status. This finding was true at 3 months ($\chi^2 = 43$, $p < .001$) and 6 months ($\chi^2 = 26$, $p < .001$) postdischarge. Stated differently, if a woman was independent in ADL, the odds of her living alone 6 months after discharge is 40 times greater than that if she was not independent.

Second, the proportion of participants who were independent in each of the five ADL skills (except eating) was significantly greater for those who lived alone than for those who did not. For the live-alone participants, greatest independence was reported in toileting, followed by eating, grooming, dressing, and bathing. For non-live-alone participants, the ADL items in decreasing order of independence was almost the same, except that eating surpassed toileting as the item of greatest independence (see Figure 1). Similarly, the total IADL score (sum of scores for each of the 10 IADL items) was significantly associated with live-alone status at 3 months, $\chi(96) = 8.4$, $p < .001$, and 6 months, $\chi(89) = 7.5$, $p < .001$, postdischarge.

More detailed analysis was undertaken to determine whether any particular IADL item was an especially important marker for live-alone status. The analysis showed that 9 of the 10 IADL items (except chores and repairs) reported at 6 months were significantly related to live-alone status at 6 months ($p < .01$) (see Figure 2). Four items—phone use, taking medication, managing finances, and food preparation—were highly significant ($p < .0005$). Hence, at 6 months postdischarge, not a single participant living alone was unable to use a telephone independently, and most who were independent in food preparation, or taking medication, or managing finances lived alone.

The ADL and IADL results provide important additional information about the functional skills required of elderly women who live alone. Thus, interesting comparisons can be made about the use of demographic factors together with standardized in-hospital measures versus self-reported ADL and IADL to correctly classify women as live alone or not. The logistic regression equation, which included the FIM motor score at discharge, MDRS, and the interaction between them, correctly classified 82% of the participants. A cross-tabulation of ADL independence with live-alone status correctly classified 70%. (Incidentally, 76% of the participants' live-alone status can be correctly classified by considering bathing alone.) Finally, a simple logistic regression model where the only variable entered was the total IADL score correctly classified 90% of participants (see Table 4). Independence in medication use alone correctly classified 81%.

**Discussion**

In this study, nearly half (43%) of our sample of elderly urban African-American women who lived alone before...
hospital admission, returned immediately to live-alone status after discharge. In addition, the rate of return to live alone increased over time such that 65% of the participants were living alone at home by 6 months follow-up. This rate of return to live-alone status is consistent with the rates reported in the only other study focused on return to live-alone status with this demographic population (MacNeill & Lichtenberg, 1997). The implicit preference for returning to live-alone status also is consistent with previous occupational therapy research, which has demonstrated that elderly stroke patients are reluctant to consider alternatives to returning home, even when they have substantial self-care deficits (Unsworth, 1996). The functional improvement realized by the participants in our study is also consistent with the gains seen in other samples of rehabilitation patients. For example, in their analysis of 60 adult patients discharged from in-patient rehabilitation, Poduri, Cushman, and Gibson (1996) saw the average “FIM motor” score increase from a mean of 40.6 at admission to 61.0 at discharge, only slightly lower than the scores achieved by our less impaired, albeit older, sample. In a second study using a nationally representative sample of 2,497 Medicare patients 65 years of age and older, Horner, Hoenig, Sloane, Rubenstein, and Kahn (1997) found no statistical difference between African-American and White patients with respect to therapeutic improvement during rehabilitation and in-patient length of stay. Our study offered no contradictory findings in this regard.

The current study also contributes new data with respect to the potential vulnerability of elderly women. For example, at discharge from hospital, several participants achieved live-alone status but were considerably more impaired than others in the live-alone group. Although the mean FIM motor score for the live-alone group at discharge was 74.7, individual scores were as low as 55. Similarly, although the mean MDRS score was 126, individual scores were as low as 90. What remains unclear is whether some of the participants who live alone are in fact at particularly high risk or whether other factors (e.g., increased levels of family support, use of community-based services) offset their lower functional status.

The ability of reported ADL and IADL to distinguish live-alone from non–live-alone status points to the importance of the patient’s perspective on function and its measurement within the naturalistic setting. Still, further research is needed to understand more completely the relationship between environmental and personal factors and their contribution to self-reported function. This insight is required not only to identify which functional skills pose the greatest barrier to successful return to live alone, for whom, and when (Law, 1993), but also to design appropriate interventions to enhance the ability of elderly women to live alone.

**Limitations**

The first limitation in the study pertains to the definition of “living alone” and its statistical treatment as a binary variable. In reality, there are degrees of living alone. However, this study did not measure the amount or frequency of social support from family members and other caregivers or from formal support services. Furthermore, the study design did not include salient environmental variables, such as the physical layout of the house and its state of (dis)repair, which have been shown to exert a significant influence on the ability of an elderly person to live alone (Carter, Campbell, Sanson-Fisher, Redman, & Gillespie, 1997).

Second, at no time in the study were the participants asked whether they wanted to live alone. As Kramarow (1995) cogently argued, social preferences around lifestyle and living arrangement can be affected by a variety of factors, not only a person’s physical and mental health. Financial and social necessity, personal preference, and cultural values are known to influence choices around living arrangements, including living alone (Coward, Lee, Netzer, Cutler, & Danigelis, 1996; Davis, Moritz, Neuhaus, Barclay, & Gee, 1997). In addition, as Gage, Cook, and Fryday-Field (1997) have shown in the occupational therapy literature, perceived self-efficacy and the dynamic interactions between resources and opportunities are critical factors in the transition from acute care to community living. Therefore, caution must be exercised in using return to live alone rates to draw conclusions about overall functional independence.

**Implications for Occupational Therapy Practice**

To date, no occupational therapy research has focused exclusively on elderly urban African-American women who live alone. In this sense, our study represents a preliminary step forward in the identification of a subgroup of women with potentially unmet occupational needs. This issue merits further investigation because development of appropriate services can only come about after there is solid understanding of what it means to live alone.

Second, the findings of this study support the contention that an investment in functional improvement (medical rehabilitation) pays dividends in that women who attain higher levels of function are more likely to return home to live alone. From the perspective of rehabilitation professionals and patients alike, this is a highly desirable outcome because quality of life may be improved and more costly institutional alternatives avoided when patients return home and care for themselves. The findings come as

---

**Table 4**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total IADL score</td>
<td>.4386</td>
<td>.1219</td>
<td>.0003</td>
</tr>
<tr>
<td>Constant</td>
<td>–7.9629</td>
<td>2.3938</td>
<td>.0009</td>
</tr>
</tbody>
</table>

Note. Overall model $\chi^2 = 42.6$. IADL = instrumental activities of daily living.
especially good news for occupational therapists because they assume the primary responsibility for ADL and IADL retraining and, thus, have the most to gain from efforts to establish a link between interventions and positive rehabilitation outcomes.

Third, study findings showed that a significant portion of the sample who did not return home alone immediately after hospitalization did so within 6 months. Findings also suggest that a small number of elderly women may be discharged home alone with very low functional capabilities. Both findings have important implications for occupational therapy because they invite a clinical role for therapists beyond the traditional rehabilitation setting. Because functional improvements are occurring after discharge, which may be amenable to acceleration and refinement by timely therapeutic intervention (Gage et al., 1997), more research is needed to determine the optimal order of functional skills retraining, the best context for this learning, and how a wide variety of factors can constrain the occupational performance of elderly women who live alone.

Conclusions
A variety of conclusions can be drawn from the study results. First, in-hospital measures of function such as the FIM and the MDRS are reasonably powerful tools for distinguishing between women who do or do not live alone not only at discharge, but also at 3 months and 6 months postdischarge.

Second, the results highlight the real gains in functional performance that can be realized in medical rehabilitation. This finding speaks to the importance of supporting all clinical efforts that can effect an increase in FIM scores because this will likely increase the overall numbers of persons able to return home alone.

Third, self-reported levels of ADL and IADL appear to explain some aspect of the live-alone phenomenon beyond that which is captured by standardized in-hospital measures like the FIM and MDRS. If this is indeed the case, then health care practitioners must enhance their skills related to measurement (assessment and intervention) undertaken in the real-life context of daily life (Avlund, 1997; Law, 1993; Letts et al., 1994). Furthermore, occupational therapists must take steps to increase pressure at the level of health policy so that our apparent “home-care advantage” can be put into practice to the benefit of patients (Rogers, Holm, & Stone, 1997).

This study represents a first step in identifying important variables that contribute to live-alone status in elderly urban African-American women. Future research will expand this understanding so that the most salient factors associated with living alone can emerge.

References
Avlund, K. (1997). Methodological challenges in measurements of functional ability in gerontological research: A review. Aging and

Clinical Experimental Research, 9, 164–174.


