# State of the Science



## Transitional Care

Moving patients from one care setting to another.

By Mary Naylor, PhD, RN, FAAN, and Stacen A. Keating, PhD, RN



ransitional care encompasses a broad range of services and environments designed to promote the safe and timely passage of patients between levels of health care and across care settings.1,2 High-quality transitional care is especially important for older adults with multiple chronic conditions and complex therapeutic regimens, as well as for their family caregivers. These patients typically receive care from many providers and move frequently within health care settings.3-6 A growing body of evidence suggests that they are particularly vulnerable to breakdowns in care and thus have the greatest need for transitional care services.7-10 Poor "handoff" of these older adults and their family caregivers from hospital to home has been linked to adverse events, 11-13 low satisfaction with care, 14-16 and high rehospitalization rates.2, 17, 18

Many factors contribute to gaps in care during critical transitions.<sup>2</sup> Poor communication, incom-

plete transfer of information, inadequate education of older adults and their family caregivers, limited access to essential services, and the absence of a single point person to ensure continuity of care all contribute. Language and health literacy issues and cultural differences exacerbate the problem.<sup>2</sup> (See "Culturally Appropriate Care," on page 30, for more about culture's effects on health care.)

Family caregivers play a major—and perhaps the most important—role in supporting older adults during hospitalization and especially after discharge. Until recently, however, little attention was paid to family caregivers' distinctive needs during transitions in care. Consequently, family caregivers consistently rate their level of engagement in decision making about discharge plans and the quality of their preparation for the next stage of care as poor.<sup>19</sup>

Caregiving can be rewarding, but it can also impose burdens on family caregivers.<sup>20</sup> The stress of caregiving is likely to be exacerbated during episodes of acute illness. Nurses and social workers need to attend to the emotional needs of caregivers during transitional care to help minimize their negative experiences and to enhance their ability to support their loved ones.

#### **RESEARCH-BASED INNOVATIONS**

To understand the state of the science related to transitional care models for older adults in the United States and the roles of family caregivers in these models, the authors searched the Medline, CINAHL, and Social Work Abstracts databases using combinations of the following terms: research, ages 65 years or older, continuity of patient care, patient transfer, discharge planning and postdischarge follow-up, and transitional care. The search period was from 1996 to 2007.

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The search identified three promising approaches to improving the quality of care for chronically ill older adults:

- increasing older adults' access to proven community-based transitional care services
- improving transitions within acute hospital settings
- improving patient handoffs to and from acute care hospitals

In general, these approaches have focused explicitly on the patient and only implicitly target family caregivers. Descriptions of two models for each of the three categories follow.

**Community-based care.** Evaluations of federal, state, and provider initiatives designed to improve the continuity of care for high-risk older adults indicate that having increased access to short-term, community-based services for managing acute episodes of chronic illnesses would likely be of benefit.<sup>21-23</sup> The findings of these studies have informed the design of community-based transitional care models in the United States.

Hospital at home. The needs of older adults who commonly experience acute episodes of chronic conditions may be best addressed by home-based care models such as Hospital at Home. (See www.hospitalathome.org for more information.) Patient, family caregiver, and provider perspectives on the benefits and limitations of this approach need to be examined.

Leff and colleagues enrolled community-dwelling, chronically ill older adults who would otherwise have been hospitalized for an acute exacerbation of selected chronic conditions in a prospective, quasi-experimental study (that is, a study lacking randomization). Eligible patients were identified in the ED and discharged to home after enrollment, where they received nursing, physician, and other services as guided by a prescribed protocol. The clinical outcomes achieved were similar to those obtained with acute care in the hospital and resulted in shorter lengths of stay and reduced overall costs.<sup>24</sup> Older adults expressed satisfaction with the treatment they received in the program.<sup>25</sup>

Day hospital. Modeled after a program offered in the British health care system, the day hospital is another form of community-based transitional care. The Collaborative Assessment and Rehabilitation for Elders (CARE) program

at the University of Pennsylvania in Philadelphia was one such initiative. 14, 26 The CARE program operated as a Medicare-certified comprehensive outpatient rehabilitation facility (CORF).<sup>27</sup> This interdisciplinary program, directed by a geriatric NP, targeted community-based older adults who were at high risk for hospitalization and other adverse outcomes. Enrollees had access to a range of health, palliative, and rehabilitation services for a few days each week for up to nine weeks.<sup>27</sup> A quasi-experimental study revealed improved function and decreased hospital use among the patients in the CARE program.<sup>28</sup> There were no differences in outcomes between cognitively intact and cognitively impaired older adults, suggesting that this challenging latter group also benefited from these services.28 Unfortunately, changes in reimbursement of CORFs forced the program to close.<sup>27, 29</sup> This model's effects on the needs and outcomes of family caregivers should be studied.

**Transitions within settings.** Frequent transitions within a hospital, such as from the ED to an ICU to a step-down unit to a general medical–surgical unit, can have devastating effects on the health of older adults and the well-being of family caregivers. For example, serious medication errors are common during transition periods.<sup>30</sup> The following hospital-based transitional care models are designed to address this problem.

Acute Care for Elders (ACE). The ACE model, developed at the University Hospitals of Cleveland in Ohio, aims to avoid functional decline and improve discharge readiness among older adults. Features of the model include adapting the physical environment to meet the older adult's needs, holding daily interdisciplinary team conferences, using nurse-initiated guidelines for preventive and restorative care, and starting discharge planning at admission and actively including family members in it.<sup>31</sup> An early randomized, controlled trial demonstrated that ACE patients had higher levels of function at discharge, shorter lengths of hospital stay, and decreased hospital costs compared with patients receiving usual care.<sup>31</sup>

Professional-patient partnership. This model was used in Baltimore to improve discharge planning and outcomes for older adult patients with heart failure and their family caregivers.<sup>32</sup> Nurses and social workers participated in an

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#### TAKE-HOME MESSAGES

- The large gaps in care that exist for patients and their caregivers during critical transitions can lead to adverse events, unmet needs, low satisfaction with care, and high rehospitalization rates.
- A beginning body of science exists that includes promising innovations aimed at improving the quality of care for chronically ill older adults during critical transitions.
- Though family caregivers play a major role in supporting older adults during critical transitions, rigorous studies have not been conducted to better understand and measure their role and needs. Nurses and social workers need to be involved in collaborative efforts to advance the science in this area.

educational program that emphasized engaging the patient and caregiver in the discharge planning process. Patients and their family caregivers completed a questionnaire to assess their needs upon discharge, watched a videotape on postdischarge care management, and received information on accessing community services. When compared with older adults and caregivers in a matched control hospital, study participants reported feeling better prepared to manage care after discharge. Two weeks postdischarge, caregivers in the intervention group were more satisfied with their roles than peers in the control group were.<sup>32</sup>

Transitions to and from acute care hospitals. Studies have evaluated multidimensional models of transitional care designed to address problems that commonly occur during the handoff of chronically ill patients between hospital and home. Nurse-led interdisciplinary interventions have consistently improved quality and cost savings. 8, 10, 33-35

Care transitions coaching. A multidisciplinary team at the University of Colorado Health Sciences Center in Denver tested an intervention designed to encourage older patients and their family caregivers to assume more active roles during care transitions. An advanced practice nurse (APN) served as the "transitions coach," teaching the patient and caregiver skills needed to promote cross-site continuity of care. Coaching began in the hospital and continued for 30 days after discharge. A randomized, controlled trial found that patients who received this intervention had lower all-cause rehospitalization rates through 90 days after discharge compared with control patients.

At six months, mean hospital costs were approximately \$500 less for patients in the intervention group compared with controls.<sup>35</sup>

APN transitional care model. Since 1989, a multidisciplinary team based at the University of Pennsylvania has been testing and refining an innovative model of transitional care delivered by APNs. Patients offered this care are high-risk, cognitively intact older adults with a variety of medical and surgical conditions who are transitioning from hospital to home. In collaboration with each older adult, family caregiver, physician, and other health team members and guided by evidence-based protocols, the APN assumes primary responsibility for optimizing each patient's health during hospitalization and for designing the plan for follow-up care. The same nurse implements this plan after discharge by providing traditional visiting nurse services, making home visits and being available seven days a week by telephone. Three randomized, controlled trials funded by the National Institutes of Health (NIH) consistently demonstrated that this model of care improves older adults' satisfaction, reduces rehospitalizations, and decreases health care costs. 8, 10, 36 Study is now focusing on the model's effects on caregivers.

The most recently reported trial of a protocol directed by APNs is designed to address the health problems and risks common among older adults during an acute episode of heart failure. When compared with the control group, members of the intervention group have improved physical function, quality of life, and satisfaction with care. People in the intervention group had fewer rehospitalizations during the year after discharge, resulting in a mean savings in total health care costs of \$5,000 per patient.<sup>10</sup>

One of the authors, MN, is currently working as part of a multidisciplinary team on an ongoing NIH-funded clinical trial that is testing the benefits of this model of care for cognitively impaired older adults and their family caregivers.

#### LIMITATIONS OF THE EVIDENCE

Although caregivers often have been included as targets of tested interventions, they typically have not been enrolled in studies; rather, the study subjects have been the older adults receiving care. Thus, there is limited evidence about how these innovations affect caregiver outcomes.

Most models have assessed nurse-directed interventions. Social workers were identified as

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collaborators in some models, but the unique contributions of social workers have not been identified. Social workers have long acknowledged the importance of collaboration, autonomy, and empowerment of patients and their families. These professionals contribute knowledge and expertise of many aspects of care, including the effects that transitional care has on families beyond physical ailments and the need for clear communication among patients, caregivers, and health care providers.<sup>37</sup> Studies are needed to make the case for social workers to serve as leaders or partners in transitional care models.

To date, most research has focused on the transition of older patients from hospital to home. More research is needed on transition to and from settings such as skilled nursing facilities.<sup>38</sup> Research in this area is critical because increasing numbers of older adults are experiencing multiple transitions during the course of an illness, often with devastating consequences such as serious adverse events related to medication errors. The percentage of hospitalized Medicare patients who were referred to a skilled nursing facility from the hospital rose significantly from 37.4% in 1986 to 46% in 1999.39 Stephen Jencks, MD, the former senior clinical advisor at the Centers for Medicaid and Medicare Services, told MN that the rehospitalization rate among nursing home residents at 30 days increased by 50% between 2000 and 2004.

#### **IMPLICATIONS FOR SUPPORT OF FAMILY CAREGIVERS**

Although they have had limited focus on family caregivers, the available studies indicate that the following are key elements to improving care transition and enhancing the support of family caregivers:

- focus on the patients' and family caregivers' needs, preferences, and goals
- utilize interdisciplinary teams guided by evidencebased protocols
- improve communication among patients, family caregivers, and providers
- use information systems, such as electronic medical records, that can span traditional settings

**Evidence-based family-focused care.** Study findings suggest that family caregivers' lack of knowledge, skills, and resources are significant barriers to effective care.<sup>40</sup> Early identification

and treatment of an older adult's health problems are beyond the skills of family caregivers, and they often lack access to a health professional who will respond to questions and concerns in a timely manner.<sup>41</sup>

To address these barriers, new investments are needed to prepare family caregivers for their roles during critical transitions. A comprehensive assessment of each caregiver's needs should be performed at the time of the older adult's admission to the hospital, which will require that health professionals have new tools and more time for coaching family caregivers.

**Development of performance measures.** One of the most significant clinical barriers to high-quality care that supports family caregivers during challenging transitions is the dearth of performance

Increasing numbers of older adults are experiencing multiple transitions during the course of an illness, often with devastating consequences such as serious adverse events related to medication errors.

measures that capture their roles in care coordination, continuity, and transition. Most existing standards focus on processes and outcomes within, rather than across, settings. Few focus on the actual experiences of older adults during transfers, and none recognize the distinct role of family caregivers. Designing, testing, and integrating such measures into national performance sets are high priorities.

**Regulatory reform.** Medicare regulations promote the system of separate and distinct providers—hospitals, home health care agencies, and skilled nursing facilities—delivering, monitoring, and charging for acute care services. A system that pays little attention to the continuing care needs of older adults and their family caregivers as they move across these various settings

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commonly leaves gaps in care. Regulatory barriers to delivering evidence-based transitional care that focuses on both patients and family caregivers must be eliminated.

Alignment of incentives through reimbursement. Nurses, social workers, physicians, and other providers are not reimbursed for coordinating care in the fee-for-service system. Instead, the reimbursement policy favors hospitals for providing acute care because it fills empty beds and generates revenue. The result is frequent transitioning to and from acute care facilities. Public and private payers need to be more flexible about reimbursement, adequately compensate health care providers for care coordination and transitional care, and develop and test incentives that support family caregivers and improve the transition between levels of care or across settings.

**Need for research.** Few evidence-based transitional care models explicitly focus on the needs of family caregivers during acute care transitions. Furthermore, the quality of the available evidence from these models is uneven. Rigorous studies comparing the benefits and costs of promising innovations are needed.

The available evidence suggests that nurses play pivotal roles in ensuring that successful care transitions occur. Similar studies of the value of interventions led by social workers and by nurse and social worker teams are needed. ▼

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1.5 HOUR

Continuing Education

#### **TEST**

#### **Transitional Care**

**LEARNING OBJECTIVES:** After reading this article and taking this test, you should be able to

- explain problems that occur in transitioning patients between levels of health care and across care settings and list two models that may improve this care.
- 1. What factor has been linked to adverse events, low satisfaction with care, and high rehospitalization rates?
  - a. high nurse-to-patient staffing ratios on medical-surgical floors
  - b. holding admitted patients in the emergency department for more than 24 hours
  - c. limited time during office visits for older patients to ask questions about their medical care
  - d. poor "handoff" of older adults and their family caregivers from hospital to home

### 2. Which of these factors contributes to gaps in care during critical transitions?

- a. the expense of prescribed medications
- b. older adults' lack of motivation
- c. limited access to essential services
- d. family members' unavailability for providing care
- 3. According to the study by Levine et al (2006), how do family caregivers consistently rate their level of engagement in making discharge plans and the quality of their preparation for the next stage of care?
  - a. poor
- c. good
- b fair
- d. excellent
- 4. What was the result of the Collaborative Assessment and Rehabilitation for Elders program that provided access to a range of health, palliative, and rehabilitation services?
  - a. a 20% rehospitalization rate within 3 months of completing the program
  - b. a decrease in medication errors while enrolled in the program
  - c. improved function and decreased hospital use
  - d. minimal improvement in cognitively impaired older adults
- 5. According to a study by Foust and colleagues, which of these is a common problem during transition periods?
  - a. exacerbation of health problems
  - b. medication errors
  - c. lack of follow-up
  - d. missed appointments for mental health counseling
- 6. What was one of the components of the professional-patient partnership model used in Baltimore?
  - a. an advanced practice nurse provided traditional visiting nurse services
  - a questionnaire was used to assess the needs of patients and family caregivers at hospital discharge
  - c. an advanced practice nurse served as a "transitions coach"
  - d. a social worker visited patients at home twice a week for 4 weeks
- 7. According to studies, which of these is key to improving care transition and enhancing the support of family caregivers?
  - a. information systems, such as electronic medical records
  - b. adult day care programs to help relieve caregivers' burden
  - c. counseling sessions with social workers for family caregivers
  - d. Web camera devices for providing remote health care services

TEST CODE: AJNC7

CFRP: B

FEE: \$17.95

#### **RESOURCE**

# **Algorithm**

## for Fall Risk Screening, Assessment, and Intervention

As a healthcare provider, you are already aware that falls are a serious threat to the health and well-being of your older patients.

More than one out of four people 65 and older fall each year, and over 3 million are treated in emergency departments annually for fall injuries.

The CDC's STEADI initiative offers a coordinated approach to implementing the American and British Geriatrics Societies' clinical practice guideline for fall prevention. STEADI consists of three core elements: **Screen**, **Assess**, and **Intervene** to reduce fall risk.

The STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention outlines how to implement these three elements.

### Additional tools and resources include:

- Information about falls
- Case studies
- Conversation starters
- Screening tools
- Standardized gait and balance assessment tests (with instructional videos)
- Educational materials for providers, patients, and caregivers
- Online continuing education
- Information on medications linked to falls
- Clinical decision support for electronic health record systems

You play an important role in caring for older adults, and you can help reduce

injuries.

CDC's STEADI tools and resources can help you screen, assess, and intervene to reduce your patient's fall risk. For more information, visit www.cdc.gov/steadi.





these devastating

### STEADI Algorithm for Fall Risk Screening, Assessment, and Intervention among Community-Dwelling Adults 65 years and older

#### START HERE



**1** SCREEN for fall risk yearly, or any time patient presents with an acute fall.

Available Fall Risk **Screening Tools:** 

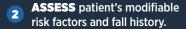
- Stay Independent: a 12-question tool [at risk if score ≥ 4]
  - Important: If score < 4, ask if patient fell in the past year (If **YES** → patient is at risk)
- Three key questions for patients [at risk if YES to any question]
  - Feels unsteady when standing or walking?
  - Worries about falling?
  - Has fallen in past year?
    - » If YES ask, "How many times?" "Were you injured?"

#### SCREENED NOT AT RISK

#### **PREVENT** future risk by recommending effective prevention strategies.

- Educate patient on fall prevention
- Assess vitamin D intake
  - If deficient, recommend daily vitamin D supplement
- Refer to community exercise or fall prevention program
- Reassess yearly, or any time patient presents with an acute fall

#### **SCREENED AT RISK**



Common ways to assess fall risk factors are listed below:

#### Evaluate gait, strength, & balance

Common assessments:

- Timed Up & Go
- 4-Stage
- 30-Second Chair Stand Balance Test

#### Identify medications that increase fall risk

(e.g., Beers Criteria)

Ask about potential home hazards (e.g., throw rugs, slippery tub floor)

#### Measure orthostatic blood pressure

(Lying and standing positions)

#### Check visual acuity

Common assessment tool:

Snellen eve test

Assess feet/footwear

Assess vitamin D intake

#### **Identify comorbidities**

(e.g., depression, osteoporosis)

#### **INTERVENE** to reduce identified risk factors using effective strategies.

#### Reduce identified fall risk

• Discuss patient and provider health goals • Develop an individualized patient care plan (see below) Below are common interventions used to reduce fall risk:

#### Poor gait, strength, & balance observed

- Refer for physical therapy
- Refer to evidence-based exercise or fall prevention program (e.g., Tai Chi)

#### Medication(s) likely to increase fall risk

• Optimize medications by stopping, switching, or reducing dosage of medications that increase fall risk

#### Home hazards likely

• Refer to occupational therapist to evaluate home safety

#### Orthostatic hypotension observed

- Stop, switch, or reduce the dose of medications that increase fall risk
- Educate about importance of exercises (e.g., foot pumps)
- Establish appropriate blood pressure goal
- Encourage adequate hydration
- Consider compression stockings

#### Visual impairment observed

- Refer to ophthalmologist/optometrist
- Stop, switch, or reduce the dose of medication affecting vision (e.g., anticholinergics)
- Consider benefits of cataract surgery
- Provide education on depth perception and single vs. multifocal lenses

#### Feet/footwear issues identified

- Provide education on shoe fit, traction. insoles, and heel height
- Refer to podiatrist

#### Vitamin D deficiency observed or likely

• Recommend daily vitamin D supplement

#### Comorbidities documented

- Optimize treatment of conditions identified
- · Be mindful of medications that increase fall risk



#### **FOLLOW UP** with patient in 30-90 days.

Discuss ways to improve patient receptiveness to the care plan and address barrier(s)



An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA).

### **Incorporating "What Matters" Information into the Care Plan**

Once the care team has begun the process of talking with an older adult about "What Matters" to them, the next step is to incorporate their expressed preferences and goals into their care plan. By anchoring an initial "What Matters" conversation around specific points in the care process during which decisions about care are likely to be made (e.g., first visit, new diagnosis, change in health status, or life transition), the team may be in a better position to build a clinical care plan that reflects the older adult's goals. Below are some key strategies to ensure that an older adult's expressed goals and preferences are incorporated into their plan of care.

- Patient education as part of care planning. Because most patients are not medical professionals, they may not be as knowledgeable about the harms and benefits of various treatment and care options. Applicable decision aids (e.g., patient education videos, flash cards) may be used to educate them and support conversations about various options and tradeoffs in some care decisions. While such aids can be useful for relevant decisions, they are not a substitute for a conversation to elicit the issues that are most important to older adults. Additionally, the uncertainty of benefits and harms of treatment options for older adults makes the traditional approach of decision aids and shared decision making less effective.16 It is incumbent upon the clinicians to understand each patient's goals and preferences and offer treatment options within the context of those goals and preferences.
- When an older adult's preferences conflict with clinical advice. Generally, an older adult's goals and preferences should be respected as much as possible when planning their care with them. However, in some cases, an older adult may have preferences that are in direct conflict with their clinician's medical advice, or they may reject the advice of a clinician. If this is the case, more communication about "What Matters" to them may lead to more clarity about why they are rejecting certain options or plans. Both the older adult and the clinician may need to reevaluate their perspectives and work together to find alternatives.
- Leveraging interdisciplinary resources to address older adults' needs. When asking older adults about "What Matters" to them, many of their preferences or concerns may involve social determinants of health on which a clinician is unable to have a direct impact (e.g., housing, food, access to social services). This is where having an interdisciplinary care team can be critical a social worker or nurse navigator, for example, may be able to connect people with additional resources outside of the clinical sphere. Some teams use regular (e.g., weekly) interdisciplinary team huddles to discuss the results of that week's "What Matters" conversations and share resources that can be used to address older adults' concerns. Sharing these stories and problem solving together also helps build will and improve satisfaction among members of the care team.
- Engaging with community resources. In addition to the interdisciplinary care team, community-based organizations can be excellent resources for addressing needs beyond the health system. Maintaining a list of community organizations that can provide support for the social determinants of health (e.g., housing, food assistance, transportation, financial support, behavioral health) can facilitate the provision of referrals. Documenting any referrals given to an older adult during a "What Matters" conversation in the EHR also allows clinicians to follow up on these social determinants during subsequent visits

Patient Name:	Date:
Patient ID #	

#### Katz Index of Independence in Activities of Daily Living **Independence Activities Dependence** (1 Point) (0 Points) Points (1 or 0) NO supervision, direction or personal **WITH** supervision, direction, assistance. personal assistance or total care. (0 POINTS) Need help with **BATHING** (1 POINT) Bathes self completely or needs help in bathing only a single part bathing more than one part of the of the body such as the back, genital body, getting in or out of the tub or Points: \_\_\_\_\_ area or disabled extremity. shower. Requires total bathing (0 POINTS) Needs help with **DRESSING** (1 POINT) Get clothes from closets dressing self or needs to be and drawers and puts on clothes and outer garments complete with fasteners. completely dressed. Points: \_\_\_\_\_ May have help tying shoes. **TOILETING** (1 POINT) Goes to toilet, gets on and (0 POINTS) Needs help off, arranges clothes, cleans genital area transferring to the toilet, cleaning self or uses bedpan or commode. Points: \_\_\_\_\_ without help. TRANSFERRING (1 POINT) Moves in and out of bed or (**0 POINTS**) Needs help in moving chair unassisted. Mechanical transfer from bed to chair or requires a complete transfer. Points: \_\_\_\_\_ aids are acceptable CONTINENCE (1 POINT) Exercises complete self (**0 POINTS**) Is partially or totally control over urination and defecation. incontinent of bowel or bladder Points: (1 POINT) Gets food from plate into (0 POINTS) Needs partial or total **FEEDING** help with feeding or requires mouth without help. Preparation of food Points: \_\_\_\_\_ may be done by another person. parenteral feeding. TOTAL POINTS: \_\_\_\_\_ **SCORING:** 6 = High (patient independent) 0 = Low (patient very dependent)

#### Source

*try this:* Best Practices in Nursing Care to Older Adults, The Hartford Institute for Geriatric Nursing, New York University, College of Nursing, <u>www.hartfordign.org</u>.

Issue Number 2, Revised 2007

Series Editor: Marie Boltz, PhD, GNP-BC Series Co-Editor: Sherry A. Greenberg, MSN, GNP-BC New York University College of Nursing

## Katz Index of Independence in Activities of Daily Living (ADL)

By: Meredith Wallace, PhD, APRN, BC, Fairfield University School of Nursing, and Mary Shelkey, PhD, ARNP, Virginia Mason Medical Center

**WHY:** Normal aging changes and health problems frequently show themselves as declines in the functional status of older adults. Decline may place the older adult on a spiral of iatrogenesis leading to further health problems. One of the best ways to evaluate the health status of older adults is through functional assessment which provides objective data that may indicate future decline or improvement in health status, allowing the nurse to intervene appropriately.

**BEST TOOL:** The Katz Index of Independence in Activities of Daily Living, commonly referred to as the Katz ADL, is the most appropriate instrument to assess functional status as a measurement of the client's ability to perform activities of daily living independently. Clinicians typically use the tool to detect problems in performing activities of daily living and to plan care accordingly. The Index ranks adequacy of performance in the six functions of *bathing, dressing, toileting, transferring, continence, and feeding*. Clients are scored yes/no for independence in each of the six functions. A score of 6 indicates full function, 4 indicates moderate impairment, and 2 or less indicates severe functional impairment.

**TARGET POPULATION:** The instrument is most effectively used among older adults in a variety of care settings, when baseline measurements, taken when the client is well, are compared to periodic or subsequent measures.

**VALIDITY AND RELIABILITY:** In the thirty-five years since the instrument has been developed, it has been modified and simplified and different approaches to scoring have been used. However, it has consistently demonstrated its utility in evaluating functional status in the elderly population. Although no formal reliability and validity reports could be found in the literature, the tool is used extensively as a flag signaling functional capabilities of older adults in clinical and home environments.

STRENGTHS AND LIMITATIONS: The Katz ADL Index assesses basic activities of daily living. It does not assess more advanced activities of daily living. Katz developed another scale for instrumental activities of daily living such as heavy housework, shopping, managing finances and telephoning. Although the Katz ADL Index is sensitive to changes in declining health status, it is limited in its ability to measure small increments of change seen in the rehabilitation of older adults. A full comprehensive geriatric assessment should follow when appropriate. The Katz ADL Index is very useful in creating a common language about patient function for all practitioners involved in overall care planning and discharge planning.

#### MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.

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Patient Name:	Date:
Detient ID #	

## LAWTON - BRODY INSTRUMENTAL ACTIVITIES OF DAILY LIVING SCALE (I.A.D.L.)

**Scoring:** For each category, circle the item description that most closely resembles the client's highest functional level (either 0 or 1).

A. Ability to Use Telephone		E. Laundry	
1. Operates telephone on own initiative-looks	1	1. Does personal laundry completely	1
up and dials numbers, etc.		2. Launders small items-rinses stockings, etc.	1
2. Dials a few well-known numbers	1	3. All laundry must be done by others	0
3. Answers telephone but does not dial	1		
4. Does not use telephone at all	0		
B. Shopping		F. Mode of Transportation	
Takes care of all shopping needs independently	1	1. Travels independently on public transportation or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not	1
3. Needs to be accompanied on any shopping	0	otherwise use public transportation	
trip		3. Travels on public transportation when	1
4. Completely unable to shop	0	accompanied by another	
		4. Travel limited to taxi or automobile with	0
		assistance of another	
		5. Does not travel at all	0
C. Food Preparation		G. Responsibility for Own Medications	
1. Plans, prepares and serves adequate meals	1	1. Is responsible for taking medication in correct	1
independently		dosages at correct time	
2. Prepares adequate meals if supplied with	0	2. Takes responsibility if medication is prepared in	0
ingredients		advance in separate dosage	
3. Heats, serves and prepares meals, or	0	3. Is not capable of dispensing own medication	0
prepares meals, or prepares meals but does			
not maintain adequate diet			
4. Needs to have meals prepared and served	0		
D. Housekeeping		H. Ability to Handle Finances	
1. Maintains house alone or with occasional	1	1. Manages financial matters independently	1
assistance (e.g. "heavy work domestic help")		(budgets, writes checks, pays rent, bills, goes to	
2. Performs light daily tasks such as dish	1	bank), collects and keeps track of income	
washing, bed making		2. Manages day-to-day purchases, but needs help	1
3. Performs light daily tasks but cannot	1	with banking, major purchases, etc.	
maintain acceptable level of cleanliness		3. Incapable of handling money	0
4. Needs help with all home maintenance	1		
tasks			
5. Does not participate in any housekeeping	0		
tasks			
~		~	
Score		Score	
		Total score	

Source: *try this:* Best Practices in Nursing Care to Older Adults, The Hartford Institute for Geriatric Nursing, New York University, College of Nursing, <u>www.hartfordign.org.</u>

and 0 through 5 for men to avoid potential gender bias.

A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women





Issue Number 23, Revised 2007

Series Editor: Marie Boltz, PhD, APRN, BC, GNP Managing Editor: Sherry A. Greenberg, MSN, APRN, BC, GNP New York University College of Nursing

### The Lawton Instrumental Activities of Daily Living (IADL) Scale

By: Carla Graf, MS, APRN, BC, University of California, San Francisco

**WHY:** The assessment of functional status is critical when caring for older adults. Normal aging changes, acute illness, worsening chronic illness, and hospitalization can contribute to a decline in the ability to perform tasks necessary to live independently in the community. The information from a functional assessment can provide objective data to assist with targeting individualized rehabilitation needs or to plan for specific in home services such as meal preparation, nursing care, home-maker services, personal care, or continuous supervision. A functional assessment can also assist the clinician to focus on the person's baseline capabilities, facilitating early recognition of changes that may signify a need either for additional resources or for a medical work-up (Gallo, 2006).

**BEST TOOL**: The Lawton Instrumental Activities of Daily Living Scale (IADL) is an appropriate instrument to assess independent living skills (Lawton & Brody, 1969). These skills are considered more complex than the basic activities of daily living as measured by the Katz Index of ADLs (See *Try this*: Katz Index of ADLs). The instrument is most useful for identifying how a person is functioning at the present time, and to identify improvement or deterioration over time. There are eight domains of function measured with the Lawton IADL scale. Women are scored on all 8 areas of function; historically, for men, the areas of food preparation, housekeeping, laundering are excluded. Clients are scored according to their highest level of functioning in that category. A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women, and 0 through 5 for men.

**TARGET POPULATION**: This instrument is intended to be used among older adults, and can be used in community or hospital settings. The instrument is not useful for institutionalized older adults. It can be used as a baseline assessment tool and to compare baseline function to periodic assessments.

VALIDITY AND RELIABILITY: Few studies have been performed to test the Lawton IADL scale psychometric properties. The Lawton IADL Scale was originally tested concurrently with the Physical Self-Maintenance Scale (PSMS). Reliability was established with twelve subjects interviewed by one interviewer with the second rater present but not participating in the interview process. Inter-rater reliability was established at .85. The validity of the Lawton IADL was tested by determining the correlation of the Lawton IADL with four scales that measured domains of functional status, the Physical Classification (6-point rating of physical health), Mental Status Questionnaire (10-point test of orientation and memory), Behavior and Adjustment rating scales (4-6-point measure of intellectual, person, behavioral and social adjustment), and the PSMS (6-item ADLs). A total of 180 research subjects participated in the study, however, few received all five evaluations. All correlations were significant at the .01 or .05 level. To avoid potential gender bias at the time the instrument was developed, specific items were omitted for men. This assessment instrument is widely used both in research and in clinical practice.

**STRENGTHS AND LIMITATIONS**: The Lawton IADL is an easy to administer assessment instrument that provides self-reported information about functional skills necessary to live in the community. Administration time is 10-15 minutes. Specific deficits identified can assist nurses and other disciplines in planning for safe discharge.

Limitations of the instrument can include the self-report or surrogate report method of administration rather than a demonstration of the functional task. This may lead either to over-estimation or under-estimation of ability. In addition, the instrument may not be sensitive to small, incremental changes in function.

**FOLLOW-UP:** The identification of new disabilities in these functional domains warrants intervention and further assessment to prevent ongoing decline and to promote safe living conditions for older adults. If using the Lawton IADL tool with an acute hospitalization, nurses should communicate any deficits to the physicians and social workers/case managers for appropriate discharge planning.

#### MORE ON THE TOPIC:

Best practice information on care of older adults: www.ConsultGeriRN.org.

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