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Transitional Care: Moving patients from one care setting to another

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Transitional 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}



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Many factors contribute to gaps in care during critical transitions.² Poor communication, incomplete 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.² (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.¹⁹

Caregiving can be rewarding, but it can also impose burdens on family caregivers.²⁰ 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.

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.^{21–23} 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.²⁴ Older adults expressed satisfaction with the treatment they received in the program.²⁵

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).²⁷ 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.²⁷ A quasi-experimental study revealed improved function and decreased hospital use among the patients in the CARE program.²⁸ 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.^{27, 29} 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.³⁰ 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.³¹ 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.³¹

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.³² Nurses and social workers participated in an 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.³²

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.

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.³⁵

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.¹⁰

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 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.³⁷ 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.³⁸ 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 evidence-based 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.⁴⁰ 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.⁴¹

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 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 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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References

1. Coleman EA, Boult C. Improving the quality of transitional care for persons with complex care needs. *J Am Geriatr Soc* 2003;51(4):556–7. [PubMed: 12657079]
2. Naylor MD. Nursing intervention research and quality of care: influencing the future of healthcare. *Nurs Res* 2003;52(6):380–5. [PubMed: 14639084]
3. Partnership for Solutions. Johns Hopkins University. Chronic conditions: making the case for ongoing care. Baltimore, MD: Johns Hopkins University; 2002.
4. Burt CW, McCaig LF. Trends in hospital emergency department utilization: United States, 1992–99. *Vital Health Stat* 2001;13(150):1–34.
5. Gabrel, CS.; Jones, A. The National Nursing Home Survey: 1997 summary; *Vital Health Stat*. 2000. p. 1-121. http://www.cdc.gov/nchs/data/series/sr_13/sr13_147.pdf
6. Agency for Healthcare Research and Quality. HCUPNet. National and regional estimates on hospital use for all patients from the HCUP Nationwide Inpatient Sample (NIS). Rockville, MD: Agency for Healthcare Research and Quality; 2001.

7. Coleman EA, et al. Posthospital care transitions: patterns, complications, and risk identification. *Health Serv Res* 2004;39(5):1449–65. [PubMed: 15333117]
8. Naylor MD, et al. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *JAMA* 1999;281(7):613–20. [PubMed: 10029122]
9. Naylor MD. A decade of transitional care research with vulnerable elders. *J Cardiovasc Nurs* 2000;14(3):1–14. [PubMed: 10756470]
10. Naylor MD, et al. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. *J Am Geriatr Soc* 2004;52(5):675–84. [PubMed: 15086645]
11. Forster AJ, et al. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med* 2003;138(3):161–7. [PubMed: 12558354]
12. Moore C, et al. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. *J Gen Intern Med* 2003;18(8):646–51. [PubMed: 12911647]
13. Wenger NS, Young RT. Quality indicators for continuity and coordination of care in vulnerable elders. *J Am Geriatr Soc* 2007;55 (Suppl 2):S285–S292. [PubMed: 17910549]
14. Harrison MB, et al. Quality of life of individuals with heart failure: a randomized trial of the effectiveness of two models of hospital-to-home transition. *Med Care* 2002;40(4):271–82. [PubMed: 12021683]
15. Levine, C. *Rough crossings: family caregivers' odysseys through the health care system*. New York: United Hospital Fund of New York; 1998.
16. Weaver FM, et al. Patients' and caregivers' transition from hospital to home: needs and recommendations. *Home Health Care Serv Q* 1998;17(3):27–48. [PubMed: 10351068]
17. Bernstein, AB., et al. *Health care in America: trends in utilization*. Hyattsville, MD: National Center for Health Statistics; 2004 Jan. DHHS pub. no. 2004–1031. <http://www.cdc.gov/nchs/data/misc/healthcare.pdf>
18. Vinson JM, et al. Early readmission of elderly patients with congestive heart failure. *J Am Geriatr Soc* 1990;38(12):1290–5. [PubMed: 2254567]
19. Levine C, et al. "This case is closed": family caregivers and the termination of home health care services for stroke patients. *Milbank Q* 2006;84(2):305–31. [PubMed: 16771820]
20. Schumacher K, et al. Family caregivers: caring for older adults, working with their families. *Am J Nurs* 2006;106(8):40–9. [PubMed: 16905931]
21. Kodner DL, Kyriacou CK. Bringing managed care home to people with chronic, disabling conditions: prospects and challenges for policy, practice, and research. *J Aging Health* 2003;15(1):189–22. [PubMed: 12613468]
22. Kane RL, et al. Effect of an innovative Medicare managed care program on the quality of care for nursing home residents. *Gerontologist* 2004;44(1):95–103. [PubMed: 14978325]
23. Abdallah LM. EverCare nurse practitioner practice activities: similarities and differences across five sites. *J Am Acad Nurse Pract* 2005;17(9):355–62. [PubMed: 16115114]
24. Leff B, et al. Hospital at Home: feasibility and outcomes of a program to provide hospital-level care at home for acutely ill older patients. *Ann Intern Med* 2005;143(11):798–808. [PubMed: 16330791]
25. Leff B, et al. Satisfaction with Hospital at Home care. *J Am Geriatr Soc* 2006;54(9):1355–63. [PubMed: 16970642]
26. Neff DF, et al. APN-directed transitional home care model: achieving positive outcomes for patients with COPD. *Home Healthc Nurse* 2003;21(8):543–50. [PubMed: 12917525]
27. Evans LK, Yurkow J. Balanced Budget Act of 1997 impact on a nurse-managed academic nursing practice for frail elders. *Nurs Econ* 1999;17(5):280–2. [PubMed: 10711179]
28. Yu F, et al. Functional outcomes for older adults with cognitive impairment in a comprehensive outpatient rehabilitation facility. *J Am Geriatr Soc* 2005;53(9):1599–606. [PubMed: 16137294]
29. Evans LK, et al. The CARE Program: a nurse-managed collaborative outpatient program to improve function of frail older people. *Collaborative Assessment and Rehabilitation for Elders. J Am Geriatr Soc* 1995;43(10):1155–60. [PubMed: 7560709]
30. Foust JB, et al. Opportunities for improving post-hospital home medication management among older adults. *Home Health Care Serv Q* 2005;24(1–2):101–22. [PubMed: 16236662]

31. Panno JM, et al. Acute Care for Elders (ACE): a holistic model for geriatric orthopaedic nursing care. *Orthop Nurs* 2000;19(6):53–60. [PubMed: 11899309]
32. Bull MJ, et al. A professional-patient partnership model of discharge planning with elders hospitalized with heart failure. *Appl Nurs Res* 2000;13(1):19–28. [PubMed: 10701280]
33. Rich MW, et al. A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure. *N Engl J Med* 1995;333(18):1190–5. [PubMed: 7565975]
34. Coleman EA, et al. Preparing patients and caregivers to participate in care delivered across settings: the Care Transitions Intervention. *J Am Geriatr Soc* 2004;52(11):1817–25. [PubMed: 15507057]
35. Coleman EA, et al. The Care Transitions Intervention: results of a randomized controlled trial. *Arch Intern Med* 2006;166(17):1822–8. [PubMed: 17000937]
36. Naylor M, et al. Comprehensive discharge planning for the hospitalized elderly: a randomized clinical trial. *Ann Intern Med* 1994;120(12):999–1006. [PubMed: 8185149]
37. Zimmerman J, Dabelko HI. Collaborative models of patient care: new opportunities for hospital social workers. *Soc Work Health Care* 2007;44(4):33–47. [PubMed: 17804340]
38. Nishita CM, et al. Transitioning residents from nursing facilities to community living: who wants to leave? *J Am Geriatr Soc* 2008;56(1):1–7. [PubMed: 18184201]
39. Silverstein B, et al. Usefulness of the nursing home quality measures and quality indicators for assessing skilled nursing facility rehabilitation outcomes. *Arch Phys Med Rehabil* 2006;87(8):1021–5. [PubMed: 16876545]
40. Brodaty H, et al. Meta-analysis of psychosocial interventions for caregivers of people with dementia. *J Am Geriatr Soc* 2003;51(5):657–64. [PubMed: 12752841]
41. Kelley LS, et al. Access to health care resources for family caregivers of elderly persons with dementia. *Nurs Outlook* 1999;47(1):8–14. [PubMed: 10070648]