

# Virtual Mentor

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## STATE OF THE ART AND SCIENCE

### Transitions of Care: Putting the Pieces Together

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Transitions of care have become an important target for the Triple Aim of improving care quality and the patient care experience, improving the health of our population, and reducing cost [1]. Most research to date has focused on hospital-to-home care transitions, and numerous studies have shown major gaps in care during these transitions. For instance, communication across sites happens infrequently, follow-up needs are not consistently identified, and relatively few patients have timely outpatient follow-up care after hospital discharge [2, 3]. Moreover, patients and their caregivers feel unprepared to manage their conditions after discharge, are uncertain about their medications, and are often unclear about whom to contact with questions [4]. For socioeconomically disadvantaged patients, these issues are compounded by insufficient access to outpatient care, lack of social support, and transportation needs [5, 6]. Health care professionals, likewise, identify poor care transitions as an important target for improvement [7].

In addition to patients' and clinicians' frustration with these gaps in care, some evidence suggests they could threaten patient safety. For example, one study found 19 percent of patients had an adverse event after discharge; 30 percent of these, most of which were medication errors, were preventable [8].

The cost to our health care system of poorly executed care transitions has been the major driver of interest in this field. Hospital readmissions are common and costly. A 2009 analysis of Medicare fee-for-service beneficiaries found that about one-quarter were readmitted to the hospital within 30 days of discharge at an estimated total cost of \$17.4 billion [9]. Though it is unclear how many, some readmissions are preventable, and there has been a great deal of effort in recent years to develop strategies to prevent some them [10].

In many ways, transitional care deficiencies are a reflection of a fragmented health care system, perpetuated by fee-for-service payments that reward individual interventions by individual clinicians rather than systems integration. Over the last decade, there have been increasing efforts to improve transitions of care at the national, regional (i.e., a metro region comprising several health systems), and local (i.e., a single hospital or health system) levels.

Nationally, the Center for Medicare and Medicaid Services (CMS) has recently introduced several innovations designed to realign financial incentives and promote

improved care coordination across sites. The Center for Medicare and Medicaid Innovation (CMMI)—established by the Affordable Care Act—includes a bundled payment pilot program that is examining ways to bundle all payments for an entire episode of care rather than paying separately for discrete elements of care [11]. Currently, CMS pays separately for each service delivered to a patient during the hospital stay, for each service delivered in the outpatient setting, and for any readmission. One example of a bundled payment would be a lump sum paid for all services during an inpatient stay as well as any care—including readmissions—during the 30 days after discharge. Advocates hope that the promise of sharing the dollars saved by this approach will provide incentive for health systems to invest in care coordination efforts between in- and outpatient services.

CMS has also started a program that will reduce payments to hospitals with high readmission rates for several conditions (after adjustments have been made for illness severity and risk level of patients); these penalties are set to increase over each of the next few years. Finally, CMS has been publicly reporting hospital readmission rates on [hospitalcompare.gov](http://hospitalcompare.gov) as an additional impetus and encouragement to hospitals to engage in readmission risk-reduction efforts.

At the regional level, the Affordable Care Act has led to the development of accountable care organizations (ACOs) as a vehicle for integrating health systems [12]. An ACO brings together a collection of health providers—including hospitals and clinics that may have been competitors previously—into a risk-sharing agreement. Again, the promise of shared savings through better care coordination is the “carrot” with which regulators hope to drive interest in ACOs.

There is a growing body of literature examining transitional care interventions deployed at the local level. Several “bridging” interventions have reduced readmission rates among older patients with complex medical needs [13], older patients with congestive heart failure [14], and socioeconomically disadvantaged patients [15]. In these interventions, a member of the health care team—often a nurse—meets with the patient and family prior to hospital discharge, helps prepare them to manage care at home, and then makes home visits for several weeks after discharge. However, not all transitional care interventions have successfully reduced readmissions [16], and interventions have not been rigorously tested in broader patient populations.

A number of outstanding questions concerning transitions of care remain. National efforts to realign financial incentives are commendable, but, as with any intervention, there is the possibility of unintended harmful consequences. For instance, financial penalization of hospitals with high readmission rates may disproportionately impact resource-poor hospitals that serve socioeconomically disadvantaged patients, potentially exacerbating existing health care disparities [17].

The establishment of primary care medical homes was an effort at care coordination that preceded ACOs. Their role in improving transitions of care and reducing

readmissions has not been well examined. Patient experiences and gaps in care prior to emergency room and hospital visits are not well understood. In other words, we do not know much about care as patients are becoming ill or whether attention to care “proximate” to hospitalizations could be an important adjunct to improving transitional care quality. Finally, we are only beginning to understand how transitional care personnel, outpatient clinics, and community resources could interact with one another to provide seamless care across settings. More study is needed before we understand how to define roles and train diverse personnel to optimize care transitions.

Medical students and postgraduate trainees can be an integral part of improvement efforts. While, in many cases, they continue to train in the fragmented system of old, they are increasingly being exposed to discussions about health care delivery rehabilitation while their attitudes and ideas are still forming.

In both in- and outpatient settings, trainees experience firsthand the shortcomings of a fragmented system. For example, they may receive critically ill patients transferred from a hospital with disorganized, incomplete records; they may care for readmitted patients whose seemingly comprehensive care plan was derailed by unforeseen transportation or access barriers, or see patients in posthospitalization follow-up who are ill-prepared to manage their illnesses or implement numerous medication changes. Amid these realities, residents are uniquely positioned to address care transition challenges systematically and to seek advanced postgraduate training in this arena.

Although the new guard of physicians may have more training in interdisciplinary teamwork and care coordination, care transitions education has been neither widely adopted nor standardized, and mentorship in this area may be lacking. There is a need to develop transitions of care curricula to better prepare trainees for today’s health care environment, in which patient handoffs across and within settings occur frequently.

Finally, little is understood about what patients need to make the transition successfully from the structured hospital environment to being responsible for their own care. Health systems are rapidly hiring health coaches, care coordinators, and community health workers, but we don’t yet have a clear sense of how and for which patients these health care personnel will be most helpful. Some may benefit from a multidisciplinary team approach, whereas others may want a single point-person across settings. And while enhanced education and coaching may benefit many patients, others may prioritize material needs such as food, shelter, transportation, and social supports during times of transition.

Many innovations to improve transitions of care across settings are being implemented at national, regional, and local levels and help address key gaps in our fragmented health system. However, as with the introduction of any new intervention, continued research on the effectiveness and potential harms of these

innovations will be important. Many questions remain about which innovations will best achieve the aims of affordable, high-quality, patient-centered care.

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