Improving Transitions of Care

Findings and Considerations of the “Vision of the National Transitions of Care Coalition”

SEPTEMBER 2010
In the United States health and long-term care system, patients—particularly the elderly and individuals with chronic illnesses—experience transitions in their care, meaning that they leave one care setting (i.e. hospital, nursing facility, assisted living facility, primary care physician care, home health care, or specialist care), and move to another. Care coordination is a related, but distinct concept, which refers to the interaction of providers to ensure optimal care for a patient. Every transition of care will involve care coordination, but care coordination is a broader process that typically encompasses the assessment of the patient’s needs, development and implementation of a plan of care, and evaluation of the care plan.

Some facts about transitions of care that policymakers should know:

- Among hospitalized patients 65 or older, 21 percent are discharged to a long term care or other institution.\(^{i}\)
- Approximately 25 percent of Medicare skilled nursing facility (SNF) residents are readmitted to the hospital.\(^{ii}\)
- Individuals with chronic conditions—a number expected to reach 125 million in the U.S. by 2020—may see up to 16 physicians in one year.\(^{iii}\)
- Between 41.9 and 70 percent of Medicare patients admitted to the hospital for care in 2003 received services from an average of 10 or more physicians during their stay.\(^{iv}\)

**Health and Economic Costs of Poor Transitions of Care**

The U.S. health care system often fails to meet the needs of patients during transitions because care is rushed and responsibility is fragmented, with little communication across care settings and multiple providers. A recent survey by the Agency for Healthcare Research and Quality (AHRQ) on Patient Safety Culture, found that 42% of the hospitals surveyed reported that “things fall between the cracks when transferring patients from one unit to another” and “problems often occur in the exchange of information across hospital units.”\(^{v}\) Poor communication during transitions from one care setting to another can lead to confusion about the patient’s condition and appropriate care, duplicative tests, inconsistent patient monitoring, medication errors, delays in diagnosis and lack of follow through on referrals. These failures create serious patient safety, quality of care, and health outcome concerns. Furthermore, they place significant financial burdens on patients and the U.S. health care system as a whole. All of these variables contribute to patient and family caregivers’ dissatisfaction with the U.S. health care system.

We need only to look at the high prevalence of hospital readmissions and medical errors to see the inadequacies of care transitions and their adverse economic implications to the U.S. health care system:

- Medication errors harm an estimated 1.5 million people each year in the United States, costing the nation at least $3.5 billion annually.\(^{vi}\)
- One study found that, on discharge from the hospital, 30% of patients have at least one medication discrepancy.\(^{vii}\)
- According to another study, one in five U.S. patients discharged to their home from the hospital experienced an adverse event within three weeks of discharge. Sixty percent were medication related and could have been avoided.\(^{viii}\)
- On average, 19.6% of Medicare fee-for-service beneficiaries who have been discharged from the hospital were readmitted within 30 days and 34% were readmitted within 90 days.\(^{ix}\) According to MEDPAC, hospital readmissions within 30 days accounted for $15 billion of Medicare spending.\(^{x}\)
Consensus on the Need to Reform

Health care experts have long identified the lack of connectivity and fragmentation in our health care system as barriers to the delivery of high quality and efficient health care. In 2001, the Institute of Medicine issued a report that called for increased care coordination across the health care system to improve quality of care and reduce errors.1 The Commonwealth Fund also urged improved care coordination as a primary strategy to reduce inefficiencies in the health care system.2 In 2008, the National Priority Partnership identified care coordination as one of six national priorities, noting that “increased communication between patients and providers, stronger record keeping, and more efficient, patient-centered care can reduce harm while making healthcare more reliable and accessible.”3

In 2010, enactment of the Patient Protection and Accountability Care Act (PPACA) put in place new programs aimed at improving the quality of the U.S. health care delivery system. In recognition of the value of proper transitions in leading to improved care and the social and economic costs of poor transitions, PPACA included several initiatives specifically designed to address gaps in care that occur between and among health care settings.

Improving Transitions of Care

The National Transitions of Care Coalition (NTOCC) and its multidisciplinary team of health care leaders are committed to improving the quality of transitions of care. NTOCC’s mission is to raise awareness about the importance of transitions in improving health care quality, reducing medication errors and enhancing clinical outcomes among health care professionals, government leaders, patients, and family caregivers. NTOCC has also developed a number of tools and resources for professionals, patients, and family caregivers to ensure safe transitions of care. As new policies, programs, and practices emerge that seek to improve care transitions, the experts at NTOCC believe the following considerations should be taken into account to achieve successful transitions of care:

- Improve communication during transitions between providers, patients and family caregivers;
- Implement electronic health records that include standardized medication reconciliation elements;
- Expand the role of pharmacists in transitions of care in respect to medication reconciliation;
- Establish points of accountability for sending and receiving care, particularly for hospitalists, SNFists, primary care physicians and specialists;
- Increase the use of case management and professional care coordination;
- Implement payment systems that align incentives; and
- Develop performance measures to encourage better transitions of care.

NTOCC has pulled together resources from across a spectrum of leading health care experts and stakeholders and seeks to be a resource not only to patients, clinicians and family caregivers, but also to policymakers as work continues to improve health care quality through effective transitions of care.

Improving Transitional Communications

The communication of timely and accurate information between providers, patients and family caregivers is critical to effective care transitions. Every episode of care involves various individuals and, oftentimes, multiple transfers between different health care settings. Poor communication during transitions leads to increased rates in hospital readmissions, medical errors, and poor health outcomes. Certain transitions, such as from the emergency department to outpatient care, require particular attention, because the round-the-clock care required by patients involves multiple physicians, nurses, social workers, and family or other caregivers, resulting in handoffs and other opportunities for communication breakdowns.

Most patients and family caregivers are not encouraged to play an active role when a transition in their care occurs, even though they are often the only constants in the transition. Few patients have the tools to effectively navigate the fragmented healthcare delivery system, while many mistakenly believe that information about their care is transferred in advance of appointments, even though direct communication between hospital and primary care physicians occurs 20 percent of the time. In addition, a patient’s own limited health literacy level, affected in part by cultural and ethnic barriers in language and understanding, can further impede communication.

The widespread adoption of electronic health records (EHR) has the potential to greatly increase the flow of information between providers and improve the “accessibility, accuracy, and completeness of clinical information.” However, only 10% of hospitals and 20% of physicians are currently using EHRs. NTOCC strongly supports the adoption of EHRs and believes that the data would ideally be used to populate a patient centered “Personal Health Record”, which is critical to better communication. In designing personal health records it is important to keep in mind that vulnerable patients may not have access to the internet or lack the necessary computer literacy skills to access and update records.

In order to bolster communications as patients move from one setting to another, we should:

- **Empower Patients and Family Caregivers to Navigate Transitions**
  - Patients should be provided with tools and resources to help make them informed consumers of care and identify questions to ask their care team during any transition. At a minimum, such tools should help patients and family caregivers understand who is involved in their care plan and clear time frames they can expect for steps in that care plan—such as tests and test results, follow up appointments, medication information and expectations.

  **Resources available to improve transitional communications:**

  **NTOCC’s Taking Care of My Health Care:** A guide for patients and their family caregivers to use so they can be better prepared when they see a healthcare professional on what kind of information and questions they need to ask. This guide can be found at: [http://www.ntocc.com/Portals/0/Taking_Care_Of_My_Health_Care.pdf](http://www.ntocc.com/Portals/0/Taking_Care_Of_My_Health_Care.pdf)

  **NTOCC’s Guidelines for a Hospital Stay:** This brochure helps guide the patient, family, and caregiver on how to provide safe and successful health care at the hospital. It includes guidance on what to bring for an anticipated hospital stay, questions to ask your health care team during your stay, and items to consider after discharge. This brochure can be found at: [http://www.ntocc.com/Portals/0/Hospital_Guide.pdf](http://www.ntocc.com/Portals/0/Hospital_Guide.pdf)
Transitions Toolkit from Consumers Advancing Patient Safety (CAPS): This toolkit provides patients with the tools and information they need to make a smooth transition from the hospital to their next destination. This includes a list that gives patients and their advocates advice and tips for making the most of their conversations with their doctor or nurse, as well as tools for providers on how to open the lines of communications with their patients. The CAPS Toolkit can be found at: http://www.patientsafety.org/page/transtoolkit/

Tools for Family Caregivers: The National Family Caregivers Association has developed a number of tools and educational materials ranging from national educational campaigns to Tips and Tools for family caregivers. These tools can be found at: http://www.thefamilycaregiver.org/caregiving_resources/

- **Teach Providers to Communicate Better**
  - Provider education typically does not emphasize communication or teamwork. These topics are not included in the curricula for most medical education programs and are infrequently among the topics of continuing education. A survey of over 1,000 physicians found that two-thirds thought they had received inadequate training in care coordination and patient education. NTOCC urges developers of university curricula and continuing education programs for all health care professionals to place greater emphasis on transition of care issues.

  **Resources available to improve provider communication:**

  NTOCC’s Provider Education and Tools: NTOCC has created information to help healthcare professionals understand how poor transitions impact care delivery and what they can do to help improve transitions. This includes the *Cultural Competence: Essential Ingredient for Successful Transitions of Care* which provides information about culture and cultural competence, as well as strategies and resources to enhance professionals’ capacity to deliver culturally competent services during transitions of care. These provider tools can be found at: http://www.ntocc.com/Home/HealthCareProfessionals/WWS_HCP_Tools.aspx

- **Improve Transitions from Emergency Departments**
  - NTOCC urges individuals to develop protocols or standards of practice to arrange the transition to outpatient care. In 2005, 85% of emergency room visits ended in discharges. To the extent possible, the emergency department should assist in setting up transition to a nursing home or assisted living facility, or if a patient is returning home, the department should schedule home visits, arrange for outpatient practitioner follow-up, plan for the acquisition of medications, and arrange the delivery of durable medical equipment and oxygen if needed.

  - NTOCC encourages the use of a standardized universal transfer tool to facilitate the transfer of necessary patient information during transitions of care. It is extremely difficult to reach the emergency department or hospital once a transfer is complete and use of a standardized universal transfer form at the time of transfer can help ensure that the patient information is transmitted fully and in a timely fashion. The Continuity Assessment Record and Evaluation Tool (CARE) developed by CMS for use at acute hospital discharge at post-acute care (PAC) admission and discharge could be considered.

  - NTOCC strongly believes that an appropriate coordinator of care in the outpatient setting would greatly improve the transition from the emergency department or acute hospital setting.

  **Resources available to implement a transitions of care plan:**

  NTOCC’s Implementation Plan: Guidebook for implementing and evaluating effective transitions of care plan, including modules for the Hospital to Home; Emergency Department to Home; and Hospital to Skilled Nursing Facility. In 2010, the NTOCC Implementation Plan was downloaded over 85,000 times. The guidebook can be found at: http://www.ntocc.com/Home/HealthCareProfessionals/WWS_HCP_Tools.aspx


Medication Reconciliation Through Electronic Health Records and an Expanded Role for Pharmacists

Medication reconciliation is the “process of comparing a patient’s medication orders to all the medications that the patient has been taking to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions”. An estimated 66 percent of medication errors occur during transitions: upon admission, transfer or discharge of a patient. NTOCC suggests two steps to improve medication reconciliation: one, the inclusion of standard medication data elements, codes, and personal medicine lists in electronic health records (EHRs), and the other, an expanded role for pharmacists.

In 2009, Congress approved The Health Information Technology for Economic and Clinical Health (HITECH ACT) which requires the Department of Health and Human Services to support the development of a secure health information infrastructure and provides incentive payments to providers and hospitals to use electronic health records (EHRs) in the delivery of care. In July of 2010, the Secretary of Health and Human Services issued the final regulations that defined the “meaningful use” requirements—the quality and process objectives—that providers would have to meet to qualify for incentive payments in 2011-2012. Subsequent regulations will govern later phases of implementation.

In order to reduce medication errors during transitions and successfully implement this new law, policymakers and providers should:

- Develop Standard Medication Reconciliation Elements
  - Every time a patient is exposed to a new care setting or level of care, a medication reconciliation form should be completed and providers in the new setting should receive key information about this patient’s medicine regimen. Towards that end, the HITECH “meaningful use” requirements require providers to perform medication reconciliation between settings and maintain active medication lists for patients.

  Resources available to develop standard reconciliation elements:

  *NTOCC’s Medication Reconciliation Elements*: NTOCC has developed a set of common essential data elements that should be incorporated into all medication reconciliation forms and electronic health systems nationwide. These elements can help all healthcare professionals collect, transmit, and receive the medication information they need when patients move from one practice setting or level of care to another. The key elements in this form include: demographics; medications (active and chronically); other medications (over the counter, herbal remedies, dietary supplements); medical history; primary physician; and validation. This can be found at: [http://www.ntocc.com/Portals/0/Medication_Reconciliation.pdf](http://www.ntocc.com/Portals/0/Medication_Reconciliation.pdf)

- Standardize the Patient’s Personal Medicine List
  - It is not enough to have a standard form for medication reconciliation if patients are unaware the medicines they take or the dosage of those drugs. NTOCC encourages widespread use of a personal medicine list by patients and family caregivers to track their own medications. This information should have standard elements to increase compatibility and comparability across providers and be included in an individual’s personal health record.
Resources available to increase awareness of medications:

NTOCC’s Personal Medicine List: NTOCC has developed a document for patients to carry with them at all times to help individuals track their medications. *NTOCC believes that this form should be adopted as a standard in all health care settings*. In 2010, the NTOCC’s Personal Medicine List was downloaded by over 40,000 individuals. It includes the prescriptions that patients have been prescribed and are currently taking along with information about their over-the-counter medications, vitamins, and nutritional supplements. The goal of the personal medicine list is to help patients improve their understanding of their current medicine regimens and assist healthcare providers in ensuring safe transference of medication information. This document can be found at: [http://www.ntocc.org/Portals/0/My_Medicine_List.pdf](http://www.ntocc.org/Portals/0/My_Medicine_List.pdf)

- **Pharmacists as Managers of Medication Reconciliation**
  - NTOCC believes that a pharmacist can help manage the medication reconciliation process and in doing so reduce errors and improve transitions of care. Pharmacists are an integral part of a patient’s health team during a transition as they can provide expertise in a patient’s drug therapy and improve safety by identifying duplication in medication regime and drug-to-drug interactions. Studies have shown that patient morbidity, as well as both indirect and direct costs may be reduced when pharmacists are actively involved in discharge planning.
  
  - As medication reconciliation managers, pharmacists should be empowered to:
    - oversee all of the patient’s medications;
    - have direct contact with patients and other health care providers to ensure medication is transferred accurately and completely;
    - perform the final review of current and discharge medications; and
    - ensure that the family caregiver understands how each medication is to be used, how to administer it, if or when to discontinue, and who to consult after discharge for questions or concerns.

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Establish Points of Accountability, Case Management, and Care Coordination

Key to the delivery of higher quality care is accountability across all settings and individuals, including patients. NTOCC believes that each member of the health care team must have a clearly delineated role and be held accountable for fulfilling his or her role in managing the patient’s care. Expectations need to be established for the health care team sending a patient as well for the team receiving a patient. Teams should focus not on patient discharge, but rather view themselves as part of the continuum of care in which they are responsible for ensuring a successful transfer. By shifting focus in this manner, teams will assume collective responsibility for completing transfer forms and medication records, communicating across settings and ensuring that patients understand their role in the process. Case management or other professional care coordination is also important to achieving successful transitions of care.

In order to improve transitions in care, we should:

- **Empower Institutional Based Physicians to Coordinate Care**
  - Hospitalists—physicians who primarily care for hospitalized patients—are one of the emerging key players involved in episodes of care. In fact, hospitalists are considered one of the fastest growing specialists, numbering under 1,000 in the mid-1990s to 30,000 today. “SNFists” are primary care physicians that practice specifically in skilled nursing facilities (SNF). They care for the chronically institutionalized patients found in nursing homes who are at high risk for care site transfers, as well as the ten percent of nursing home residents that are post-acute and sub-acute patients who are predominately admitted from the hospital.
  - In this new model of care, hospitalists and “SNFists” are the primary medical care providers, and must be equipped with the information necessary to ensure a successful transfer to the next setting. Therefore, NTOCC believes it is important that hospitalists and “SNFists” be encouraged to coordinate care when transferring patients from one institution to another.

- **Increase the Use of Case Management to Coordinate Care**
  - Case managers are licensed health care professionals responsible for providing patient assessment, treatment planning, health care facilitation, and patient advocacy. Case managers frequently arrange for the timely and accurate transfer of information as patients prepare to move from one level of care to another.

Resources available for establishing accountability in transitions:

*NTOCC’s Elements of Excellence in Transitions of Care:* A checklist to enhance communication—among health care providers, between care settings, and between clinicians and clients/caregivers—of patient assessments, care plans, and other essential clinical information. NTOCC firmly believes that the adoption of a set of guidelines with checklists, such as those included in this tool, can provide a framework for assessment and facilitate better communication, resulting in improved transitions of care. This checklist can be found at: [http://www.ntocc.org/Portals/0/TOC_Checklist.pdf](http://www.ntocc.org/Portals/0/TOC_Checklist.pdf)
NTOCC encourages policies and practices that increase the use of case managers as coordinators of a patient’s transitions of care. Case managers should play an integral role in the collaborative patient centered team model, particularly when it comes to assisting with patient communication and information transfers. Case managers can aid patients by providing support, advocacy, adherence assessment, motivational intervention, resource coordination, enhanced patient self management, and care planning. Other professionals, including nurses and social workers, can also be effective in assisting with care coordination, discharge planning, and home care.

Recently, the Case Management Society of America (CMSA) released the 2010 Standards of Practice for Case Management which establishes voluntary practices guidelines for case managers. These standards can be found at: [http://www.cmsa.org/SOP](http://www.cmsa.org/SOP)

- **Encourage Health Institutions, Providers and Care Givers to Utilize Best Practice Models**
  - There are a number of emerging models of care that aim to enhance patient safety and care through transitions. Each model brings a set of interventions, tools, and resources that help to address the issues of communication, transfer of patient information, accountability for sending and receiving information and improving quality of care. There is not one consistently accepted model, but NTOCC encourages health institutions and health care providers to use evolving models of care, including the following:

  - The Care Transitions Intervention (CTI), developed by Dr. Eric Coleman, is primarily a transitions self management model that provides coaching, skills and tools to help patients and caregivers assert a more active role during transitions. This intervention is low-cost, low intensity and has been shown to produce a sustained effect reducing hospital readmissions significantly for five months following the one-month intervention. It is also expected to result in nearly $300,000 in savings for the care of 350 chronically ill adults over 12 months.

  - The Transitional Care Model (TCM), developed at the University of Pennsylvania, establishes a multidisciplinary team that is led by a master’s prepared transitional care nurse (TCN) to treat chronically ill high risk older patients before, during and after discharge from the hospital. This model has proven to decrease preventable hospital readmissions, improve health outcomes and reduce health care costs.

  - Telehealth services, which make use of technology to monitor and deliver care between a medical provider and a patient at home, can also be used as a component of care coordination that can lead to improved transitions.

  - The Veterans Administration is currently implementing care coordination home telehealth (CCHT) on a widespread basis and seeing promising results. For example, data reported for a cohort of veterans, comparing pre-and-post CCHT outcomes, demonstrated a 20% reduction in hospital admissions.

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5. EA Coleman et al. The Care Transitions Intervention: Results of a Randomized Controlled Trial, Archives of Internal Medicine 166:1822-9 (2006), available at [http://www.caretransitions.org](http://www.caretransitions.org)
6. Mary Naylor, Transitional Care available at [www.transitionalcare.info](http://www.transitionalcare.info)
Payment Systems Incentives and Performance Measures

A wide criticism of Medicare’s payment system is that it encourages excessive care rather than cost effective, high quality care. This is because Medicare reimburses providers of health care for each unit of service (each office visit or test ordered) and rates do not vary based on the quality of service provided. Furthermore, Medicare typically does not provide reimbursement “for health services that are recognized as important contributors to quality,” such as care coordination, patient counseling, and team communication. Thus, the system provides incentives to increase the amount of care provided, but does little to incentivize care coordination or other activities that would lead to improved health outcomes.

Over the years, the dissatisfaction with the current system has yielded strong support for moving towards a “pay for performance” system in which payments to providers are based on measures of quality. The Patient-Centered Medical Home is, for example, a payment delivery approach that incentivizes the coordination of care through a team of providers. In 2006, the American Academy of Family Physicians developed a model for the patient-centered home and is currently testing it in practice sites across the country. To date, the model has produced promising results, demonstrating reduced hospital admissions and emergency room visits, improvements in health outcomes, and reductions in health care costs. In 2009, the Secretary of Health and Human Services launched the Multi-Payer Advanced Primary Care Practice Demonstration to test the patient medical home model on health outcomes and costs.

More recently, PPACA authorizes a number of demonstration projects to test new approaches for paying providers, including models aimed at improving care coordination through use of patient decision tools, community based health teams, and health information technology.

NTOCC believes that, in order to effectively change clinical behaviors and practices to improve transitions of care, payment systems should reward coordination over an entire episode of care. This includes providing incentives for communication and coordination, such as spending time educating patients, developing a plan of care, and engaging in provider collaboration.

In order to properly align payment systems to improve transitions of care, policymakers should:

- Introduce Performance Measures Relating to Transitions of Care
  - Part of creating a payment system that encourages better transitions of care involves the development and implementation of performance measures relating to care coordination. Recently, the National Quality Forum (NQF) recommended 25 preferred practices, and 10 performance measures for measuring and reporting care coordination among the following domains: healthcare home, proactive care plan or plan of care and follow-up, communication, information systems, and transitions.

Resources available to develop transitions of care performance measures:

NTOCC’s Proposed Framework Outline for Measuring Transitions of Care: The framework depicts the basic elements of structural quality and the common processes that should occur in any setting of care. They are applicable to all patients experiencing transitions, the outcomes and cost/resource utilization resulting from care, and the experience of patients and providers during transitions. This framework can be found at: http://www.ntocc.org/Portals/0/TransitionsOfCare_Measures.pdf
Develop Standards for Measurement Gaps
- NTOCC has convened a “Measures Work Group” to review, assess, and make recommendations on how to improve and expand the current state of quality measurement for transitions of care.

- After an environmental scan, the NTOCC Measures Work Group proposed the key elements of the framework for measuring care transition:
  - **Structure:** Accountable provider at all points of care transition; a tool for plan of care; and the use of health information technology integrated system that would be interoperable.
  - **Processes:** Care team processes such as test and referral tracking, medication reconciliation, transition planning, etc; information transfer between providers; patient and family/caregiver education and engagement.
  - **Outcomes:** Patient’s/family’s experience of care; providers’ experience and satisfaction with care; healthcare utilization such as reducing avoidable readmissions; health care outcomes such as improved functional status, reduced medical errors etc.

- The Work Group went further to recommend that the process measures for care transition should address both the sending and the receiving providers to promote shared accountability. Process measures that are applicable to the “sending” provider confirming that key information has been sent to the intended “receiving” provider should be paired with process measures that are applicable to the “receiving” provider documenting that key information received has been acted upon.

- NTOCC urges all recognized performance measure entities, including The Joint Commission, American Medical Association, National Quality Forum, National Committee on Quality Assurance and URAC, to develop more robust transitions of care quality measures using NTOCC’s framework as a guide.

- NTOCC also encourages policymakers and private health plan administrators to incorporate performance indicators for care coordination and care transitions into payment systems.

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1 Committee on Redesigning Health Insurance Performance Measures, Payment and Performance Improvement Programs, Board on Health Care Services, “Rewarding Provider Performance Aligning Incentives in Medicare,” Institute of Medicine National Academies, 2007:33.
