

NATIONAL TRANSITIONS OF CARE COALITION



# Improving Transitions of Care

**THE VISION OF THE NATIONAL TRANSITIONS OF CARE COALITION**

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## SECTION I:

# EXECUTIVE SUMMARY

Patients' face significant challenges when moving from one health care setting to another. As currently structured, the United States' health and long-term care system fails to meet the needs of most patients during transitions between health care settings. This paper outlines the vision of the National Transitions of Care Coalition (NTOCC) to improve transitions of care, increasing quality of care and patient safety while controlling costs. Specifically, NTOCC suggests the following steps:

- Improve communication during transitions between providers, patients and caregivers;
- Implement electronic medical records that include standardized medication reconciliation elements;
- Establish points of accountability for sending and receiving care, particularly for hospitalists, SNFists (physicians practicing in skilled nursing facilities), primary care physicians and specialists;
- Increase the use of case management and professional care coordination;
- Expand the role of the pharmacist in transitions of care;

- Implement payment systems that align incentives; and
- Develop performance measures to encourage better transitions of care.

To successfully overcome the challenges of complex health tasks on top of mounting administrative and economic hurdles, patients require actively managed continuity of care. The changes cited above should alleviate the heavy burden of responsibility placed on patients and their families and caregivers, who are ill-equipped or unqualified to initiate their own follow-up care because they have a limited understanding of their conditions and the complexities of today's health and long-term care system. At the same time, NTOCC recognizes patients often are the only constant in a series of care transitions, thus they must play an active role in ensuring the quality of care and should have the necessary tools and support to successfully interface with the complex health and long-term care system. Although NTOCC wishes to facilitate the health care experience for patients, patients and caregivers must take active responsibility for and become involved in their health care to ensure seamless and safe transitions of care.

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1. Although the term "patient" is used most often throughout the paper, the same principles regarding transitions of care apply to all consumers of health and long term care services.

## SECTION II:

# INTRODUCTION

The United States health and long-term care system is plagued by problems of underuse, overuse, or misuse of health care.<sup>2</sup> Many episodes of care for serious illness or conditions involve numerous settings, both acute and long-term, and many highly specialized professionals, frequently with little connection or communication between the various components. The one constant in all episodes of care is the patient, who needs sufficient knowledge to proactively facilitate necessary communication and interaction between providers. To improve health care in this country, patients and providers must ensure better information exchange at all stages of the health care process.

Certain groups of patients are particularly vulnerable when care between settings is not provided in a coordinated, seamless manner. For example, individuals who speak a different language or are of a cultural background that is infrequently encountered by the relevant health care provider; “children with special health care needs; the frail elderly; persons with cognitive impairments; persons with complex medical conditions; adults with disabilities; people at the end of life; low-income patients; patients who move frequently, including retirees and those with unstable health insurance coverage; and behavioral health care patients” require particular attention to transitions of care to protect their health.<sup>3</sup> NTOCC recognizes the shortfalls of the current system, particularly with regard to

such vulnerable groups, but as this paper outlines, believes concrete steps can improve the quality of care.

Most individuals who have had an experience with the health and long-term care system are aware of the potential mishaps that can occur during a poor transition between care settings. Transition breakdowns or miscommunication between care providers can have multiple implications, including:

- Patient or caregiver confusion about the patient’s condition and appropriate care;
- Lack of follow-through on referrals;
- Medication errors, overuse of narcotics, and sub-optimal use of medicines;
- Inconsistent patient monitoring; and
- Increased financial impact and duplication of resource utilization.

The following vignettes illustrate some of these implications and the types of issues that can arise as a result of poor communication and fragmented care:

- An older man with atrial fibrillation who is taking warfarin for stroke prophylaxis is hospitalized for pneumonia. His dose of warfarin is adjusted during the hospital stay and is not reduced to his usual dose prior to dis-

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2. MR Chassin et al., *The Urgent Need to Improve Health Care Quality: Institute of Medicine National Roundtable on Health Care Quality*, JAMA, 280(11): 1000-05 (1998).

3. The National Quality Forum, *NQF-Endorsed™ Definition and Framework for Measuring Care Coordination* (May 2006).



charge. The new dose turns out to be double his usual dose, and within two days he is rehospitalized with uncontrollable bleeding.

- A woman with dementia is transferred from a skilled nursing facility (SNF) to the hospital. Upon arrival at the hospital, she is taken off her medication for dementia for two reasons: the medication is not on the hospital's formulary, and the hospital staff views her dementia as too advanced for her to benefit from continuation of her medication regimen. Neither the patient, the patient's caregiver, nor her other physicians are consulted prior to discontinuing the medication.
- An older woman has back surgery and is sent home without instructions on how to care for herself without home health care services. She has great difficulty getting out of bed, cannot take care of the surgical wound on her back, and cannot prepare her meals. She is told that a visiting nurse will arrive along with dressing materials, but no one ever arrives. She returns to the emergency room by ambulance with a weeping, infected wound covered by unchanged dressings. She explains that she is frightened and that no one had told her whom to call for help.
- A man goes to the neurologist to be evaluated for recurrent migraine headaches. The neurologist asks the patient to bring his MRI and, after multiple conversations with the radiologist's office, the patient obtains the films. When the patient arrives at the neurologist's office, films in hand, the neurologist says, "I need the written report to see what's really going on here."

Such scenarios make clear that much is at stake during transitions of care. Luckily, health

care professionals and government leaders are increasingly aware that improving the coordination of care among the various care settings could improve patient safety, quality of care, and health outcomes and also may lead to significant savings. Making such improvements is a challenging task, however, and will require significant and meaningful collaboration among health care providers, community members, and government regulators. In addition, patients and their families and caregivers will need to take a more active role in their health care and facilitate communication during transitions.

After identifying key gaps and barriers to improving transitions of care, NTOCC details issues to consider, including:

- Improving communication during transitions between providers, patients and caregivers;
- Implementing electronic medical records that include standardized medication reconciliation elements;
- Establishing points of accountability for sending and receiving care, particularly for hospitalists, SNFists, primary care physicians and specialists;
- Increasing the use of case management and professional care coordination;
- Expanding the role of the pharmacist in transitions of care;
- Implementing payment systems that align incentives; and
- Developing performance measures to encourage better transitions of care.

NTOCC believes that by addressing these issues, we can improve health outcomes as well as the overall health care experience for patients and their families and caregivers. Our goal is to improve transitions in a complex health care system that is challenged by: socioeconomic diversity and the need for cultural competency, barriers to accessing care, safety and quality concerns, the growth of technology, communication barriers, and other issues. We encourage policy makers, payers, and advocates to use this paper as a blueprint for change to move towards a more unified and integrated health and long-term care system.

## SECTION III: BACKGROUND

### A. ABOUT NTOCC

NTOCC and its multidisciplinary team of health care leaders are committed to improving the quality of transitions of care. Doing so requires attention to complex issues of health literacy, patient safety, medication therapy management, treatment interventions, standards, guidelines, and performance measures. NTOCC's mission is to raise awareness about transitions of care among health care professionals, government leaders, patients, and caregivers to increase the quality of care, reduce medication errors, and enhance clinical outcomes. To this end, NTOCC is developing consensus regarding recommended actions that all participants can take in the health care system to improve transitions of care. NTOCC strives to provide a channel of communication to consumers for information when choosing health care options and also serves as a clearinghouse for tools and intervention resources to support providers and consumers to achieve safer and better transitions. NTOCC is committed to working in collaboration with all stakeholders and eliminating silos of care that diminish the ability of patients, particularly older adults, to receive the care coordination to which they are entitled. Further information about NTOCC and the issues discussed in this paper is available on the organization's website at [www.ntocc.org](http://www.ntocc.org).

### B. WHAT ARE TRANSITIONS OF CARE?

The term “transitions of care” connotes the scenario of a patient leaving one care setting (i.e. hospital, nursing facility, assisted living facility, primary care physician care, home health care, or specialist care) and moving to another setting or to the patient's home. The transition of care frequently involves multiple persons, including the patient, family or other caregiver(s), nurse(s), social worker(s), case manager(s), pharmacist(s), physician(s), and other providers. Transitions of care affect not only the patient but the health care professionals as well. An optimal transition should be well-planned and adequately timed. More often, however, a lack of communication from one setting to the next threatens the quality of care.

Care coordination is a related, but distinct, concept. Although a transition of care refers to the actual transition between two particular care settings, care coordination involves the interaction of providers and health plan administrators across a variety of care settings 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 a patient's needs, development and implementation of a plan of care, and evaluation of the care plan.<sup>4</sup>

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4. Mathematica, for example, addresses the issue as follows:

Coordinated care programs, by our definition, are those that target chronically ill persons “at risk” for adverse outcomes and expensive care and that meet their needs by filling the gaps in current health care. They remedy the shortcomings in health care for chronically ill people by (1) identifying the full range of medical, functional, social, and emotional problems that increase patients' risk of adverse health events; (2) addressing those needs through education in self-care, optimization of medical treatment, and integration of care fragmented by setting or provider; and (3) monitoring patients for progress and early signs of problems.

A Chen et al., *Best Practices in Coordinated Care*, Mathematica Policy Research, Inc. (2000).

## SECTION IV:

# GAPS IN CARE AND THE COSTS OF FRAGMENTED CARE

The lack of connectivity between providers in the health and long-term care system stymies the delivery of quality care. The Institute of Medicine (IOM) emphasizes that health care quality suffers “due not to a lack of effective treatments, but to inadequate health care delivery systems that fail to implement these treatments.”<sup>5</sup> Fragmented care and inefficiencies in the current system unnecessarily increase costs to patients, providers, payers, and employers.

**Poor transitions of care can compromise patient safety and quality of care.** In 2001, the IOM issued a report that called for increased care coordination across the health care system to improve quality of care and reduce errors.<sup>6</sup> Since that time, numerous studies have sought to examine the issue of fragmented care and its impact, including a recent study of Medicare patients after hospital discharge that found nearly one-quarter “experienced complicated care transitions — a finding that has important implications for both patient safety and cost-containment efforts.”<sup>7</sup> Another study found 19 percent of discharged patients experienced an adverse event within three weeks of leaving the hospi-

tal and that simple strategies could have ameliorated or prevented 12 percent of these adverse events.<sup>8</sup> Medication errors harm an estimated 1.5 million people each year in the United States, costing the nation at least \$3.5 billion annually.<sup>9</sup> An estimated 60 percent of medication errors occur during times of transition: upon admission, transfer, or discharge of a patient.<sup>10</sup> Medication errors result in readmissions to the hospital as well as greater use of emergency, post-acute, and ambulatory services and duplication of services that needlessly increase the cost of care. Such errors can involve underuse, overuse, or misuse of medication. In other words, an important therapy can be missed or a prescribed therapy can contribute directly to patient harm. Contributing factors may include patient misunderstanding of instructions, drug-drug interactions, drug-food interactions, and duplicative therapy.

**Inefficient care transitions place a significant burden on patients and their families and caregivers.** Potentially detrimental to patients, fragmented care can result in unnecessary suffering, prolonged illness, and even death. If a provider does not have all necessary informa-

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5. IOM, *Priority Areas for National Action: Transforming Health Care Quality* (2003).

6. IOM, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, DC: National Academy Press (2001).

7. EA Coleman et al., *Posthospital Care Transitions: Patterns, Complications, and Risk Identification*, *Health Serv. Res.* 39(5): 1449–1466 (Oct. 2004).

8. AJ Forster et al., *The Incidence and Severity of Adverse Events Affecting Patients after Discharge from the Hospital*, *Ann. Internal Med.* 138(3): 161–67 (2003).

9. G Harris, *Report Finds a Heavy Toll From Medication Errors*, N.Y.TIMES (July 21, 2006) available at

<http://www.nytimes.com/2006/07/21/health/21drugerrors.html?ex=1189828800&en=be8e73b215716d8d&ei=5070>

10. JD Rozich & RK Resar, *Medication Safety: One Organization's Approach to the Challenge*, *J. Clin. Outcomes Manag.* 8:27–34 (2001).

tion in advance of a patient's visit, appointments may not address all relevant issues. Missing test results, discharge summaries, referrals, and medication lists may require patients to schedule redundant and avoidable appointments. In addition, copayments for patients may increase when they are placed on new medications duplicating drugs they already are taking. The financial burden of a new therapy can pose significant adherence barriers, potentially leading to therapeutic, safety, economic, and psychosocial problems. Finally, the lack of clear, consistent education, training, and instructions by providers decreases patient adherence to both medication therapy and lifestyle changes.

**Providers and payers also incur costs due to poor transitions of care.** Unnecessary hospital stays occur when transitions are flawed, increasing costs to payers significantly.<sup>11</sup> With hospital resources often spread thin, readmissions could be reduced significantly by

increasing patient understanding of discharge medications, follow-up appointments, and expectations for recovery. Duplicate visits to physicians and repetition of laboratory or other tests either result in payment for identical services or are not covered by payers, meaning that providers or patients must cover the cost.

**Employers also bear costs associated with a fragmented system.** Often bearing the additional cost of lost productivity when care is not coordinated, employers also feel the burden of fragmented care.<sup>12</sup> The health and long-term care system's routine failure to provide appropriate care leads to nearly 66.5 million avoidable sick days.<sup>13</sup> Poor quality health care caused by misuse, overuse, and waste costs employers an estimated \$1,700 to \$2,000 per covered employee each year, of which approximately \$350 to \$650 is due to indirect costs such as lost workdays.<sup>14</sup>

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11. This financial burden has been recognized by the federal government, and efforts are underway to measure preventable readmissions. 72 Fed. Reg. 47133, 47353 (August 22, 2007) (recognizing the importance of measuring and disseminating readmission rates and indicating efforts under way to develop relevant measures).

12. R Loeppke, *The Business Impact of Health and Health-related Productivity* (2003), available at [http://www.acoem.com/uploadedFiles/Career\\_Development/Tools\\_for\\_Occ\\_Health\\_Professional/Health\\_and\\_Productivity/AOHCPresentati on5-4-03.pdf](http://www.acoem.com/uploadedFiles/Career_Development/Tools_for_Occ_Health_Professional/Health_and_Productivity/AOHCPresentati on5-4-03.pdf).

13. G Pawlson et al., The National Committee for Quality Assurance, *State of Health Care Quality Report* (2004).

14. Midwest Business Group on Health, *Reducing the Costs of Poor Quality Care through Responsible Purchasing Leadership* (2002), available at <http://www.hanleytrust.org/leadership/reading/IntroExecSumm-MBGH.pdf>.

## SECTION V:

# POTENTIAL AREAS FOR IMPROVEMENT IDENTIFIED BY NTOCC

Numerous reports have recommended changes to the existing system in order to improve transitions of care and improve the overall quality of care while reducing costs. For example, IOM recommended four key strategies for improvement of transitions of care:

- Provide educational supports, including multi-disciplinary health professions education, that teach care coordination principles in all health care and academic settings and development of care teams;
- Institute patient-centered health records, supported by information and communications technology;
- Ensure accountability and define roles for care; and<sup>15</sup>
- Align financial incentives with quality measures.

Similarly, in late 2006, the Commonwealth Fund (CFW) released two reports on establishing a “high performance health system” in the United States. In the first report, CFW chronicles the fragmented, broken system of care that currently exists and recommends

improved care coordination as a primary strategy to reduce inefficiencies such as “waste due to duplication, poor processes, the provision of care that is known to be ineffective, and unacceptable variation in quality and safety.”<sup>16</sup> In addition, CWF calls for a system that is coordinated throughout the patient’s life, with a single provider responsible for a patient’s primary care as well as for serving as the coordinator for specialty and other care.

The second CWF report provides results from a national scorecard on health care performance in the United States. Patients in this survey reported that 18 percent of physicians unnecessarily repeated tests, and test results and medical records were missing when needed at 23 percent of follow-up appointments.<sup>17</sup> Similar to the IOM recommendations for addressing coordination, CWF’s recommendations include strategies and policies regarding information technology, quality measurement, payment structures that encourage increased communication with other providers, and professional education.

In this section, NTOCC builds upon the recommendations of these reports and identifies issues to consider to improve transitions of care in the health and long-term care system.

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15. IOM, 1st Annual Crossing the Quality Chasm Summit: A Focus on Communities (2004).

16. The Commonwealth Fund Commission on a High Performance Health System, *Framework for a High Performance Health System for the United States* (Aug. 2006).

17. The Commonwealth Fund Commission on a High Performance Health System, *Why Not the Best? Results from a National Scorecard on United States Health System Performance* (Sept. 2006).



## A. IMPROVE COMMUNICATIONS DURING TRANSITIONS BETWEEN PROVIDERS, PATIENTS AND CARE-GIVERS

### 1. The Problem

The transfer of timely and accurate information across settings is critical to the execution of effective care transitions. Every episode of care involves various individuals, including patients, caregivers, professionals, and non-health care professionals, and transfers between care settings, increasingly a standard practice in the health and long-term care system. These transitions also include a variety of often disconnected systems (hospitals, home health care providers, insurance companies, pharmacies, physician offices, long-term care facilities, etc.):

- 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;<sup>18</sup>
- Among hospitalized patients 65 or older, 23 percent are discharged to another institution, and nearly 12 percent receive home health care;<sup>19</sup>
- Among patients discharged from a SNF, 19 percent are readmitted within 30 days;<sup>20</sup> and

- On average, patients 65 or older with two or more chronic conditions see seven different physicians within one year, accounting for 95 percent of Medicare expenditures.<sup>21</sup>

Clinicians throughout the continuum generally lack training on how to execute effective transfers of patients and often do not recognize their own role in transition planning. Effective communication between the patient and providers, between providers and family members or other caregivers, and between multiple providers is vital to achieving desirable health outcomes.

As noted above, lack of communication can lead to poor outcomes, particularly from medication errors. A medication error is “any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient or consumer.”<sup>22</sup> Such adverse drug events can cause injury or even death. Medication errors involve underuse, overuse, or misuse.<sup>23</sup> Medication underuse means failing to provide a drug when it would have produced a favorable outcome for a patient. For example, failing to provide a steroid inhaler to an asthma patient or not giving aspirin, beta-blockers, or other proven medications to individuals after myocardial infarction. Medication overuse occurs when the potential harm is greater than

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18. E Fisher, *Performance Measurement: Achieving Accountability for Quality and Costs*. Paper presented at the 2006 Quality Forum Annual Conference on Health and Policy, Washington, DC (Oct. 2006).

19. AHRQ, *Outcomes by Patient and Hospital Characteristics for All Discharges* (1999).

20. AM Kramer et al., *Effects of Nurse Staffing on Hospital Transfer Quality Measures for New Admissions*, pp. 9.1-9.22, in *Appropriateness of Minimum Nurse Staffing Ratios for Nursing Homes*, Health Care Financing Administration (2000).

21. JL Wolff et al., *Prevalence, Expenditures, and Complications of Multiple Chronic Conditions in the Elderly*, *Archives of Internal Med.* 162: 2269-76 (2002).

22. National Coordinating Council for Medication Error Reporting and Prevention, *What is a Medication Error?* available at <http://www.nccmerp.org/aboutMedErrors.html>.

23. AHRQ, Patient Safety Network Glossary, *Underuse, Overuse, Misuse*, available at [http://psnet.ahrq.gov/popup\\_glossary.aspx?name=underuseoverusemisuse](http://psnet.ahrq.gov/popup_glossary.aspx?name=underuseoverusemisuse).

the potential benefit. For example, prescribing antibiotics to a patient with a viral infection constitutes overuse and could lead to an increase in antibiotic resistant bacteria. Finally, a preventable complication can reduce the benefit of an appropriate type of care if the treatment is misused. Thus, a patient with a known allergy to a drug will suffer a foreseeable complication and not benefit from receiving the usually effective treatment. If, on the other hand, medication is used appropriately, it can improve outcomes, shorten recovery time, and ultimately lead to cost savings due to more efficient treatment.<sup>24</sup>

These types of errors are more common if a transition of care does not involve good communication. For example, if a patient enters a hospital and its formulary does not include the patient's current medications, the provider inadvertently may make substitutions while the patient is receiving care. Information regarding the medication substitution rarely gets to the patient or caregiver, potentially leading to dispensing duplicative medicines or too many forms of similar medications being used by a patient upon discharge. Another complication arises upon discharge from the hospital, when some patients will need to obtain a prescription. If the medication does not appear on their health insurer's formulary, patients may need to seek the intervention of a primary care physician to avoid discontinuing the treatment or failing to take a critically important drug. It is imperative that patients and their families and caregivers take an active role in understanding their medication regimen and following it to assist providers in preventing medical errors.

## **2. Issues for Consideration**

To improve communication between providers, NTOCC believes additional education of patients and their caregivers as well as of providers is critical. Further, certain transitions, such as from emergency department to outpatient care, require particular attention.

- **Provide information to patients and caregivers**

A significant gap in education exists at the patient and caregiver level. Most patients and families are not encouraged to play a more active role in their care during transitions. Actually, most patients and their caregivers mistakenly believe that as a standard practice, information about their care is transferred in advance of appointments. In addition, patients may not know what information is important for them to share with a new provider. Low levels of patient education and the unwillingness of many providers to release patient information directly to the patient present transition barriers.<sup>25</sup> In addition, the patient's health literacy level, along with cultural and ethnic issues, can impede communication. All these factors need to be considered in ongoing efforts to engage patients and their caregivers because they are the only constant in every episode of care. NTOCC believes improving education will make patients and caregivers more informed consumers of care and therefore permit them to serve as the linchpin in a successful transition of care.

In addition, patients and their caregivers need to know how to access help in their own com-

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24. See, e.g., National Alliance on Mental Illness, *Access to Medication: NAMI Advocacy Goals and Strategies*, available at [http://www.nami.org/Template.cfm?Section=Issue\\_Spotlights&template=/ContentManagement/ContentDisplay.cfm&ContentID=7992](http://www.nami.org/Template.cfm?Section=Issue_Spotlights&template=/ContentManagement/ContentDisplay.cfm&ContentID=7992).

25. HMO Workgroup on Care Management, *One Patient, Many Places: Managing Health Care Transitions*, 23-28 (Feb. 2004).

munities. To have a successful transition of care, the first step is to identify, coordinate, and optimize existing resources. States, communities, and payers need to work together to alleviate the fragmentation of service delivery and the frustration among patients and their caregivers, extend services to patients and caregivers across the community, and develop partnerships with area educational institutions and service providers.

Patients without strong family and caregiver support and resources, may need the assistance of a community team. A team that might include the case manager, the Department of Aging, the Department of Social Services, the discharge planner from the hospital, and representatives of the various agencies could help reduce duplicative efforts, collaborate on solutions for those needing support, and ensure access to available services at appropriate levels of care. Another avenue to explore is setting up telehealth programs for patients at a high risk. Telehealth services could be used to model disease management, provide cost-effective support, reduce the number of visits to the emergency department, and delay the need for more costly and intensive transitions. Regardless of the vehicle for providing community support, it should focus on providing patients with the knowledge and tools they need to better meet their health needs.

- **Provide patients and caregivers tools and resources**

Patients and caregivers are often the only constant in a transition of care. The patient and

caregiver experience the processes and changes of providers, facilities, levels of care, and coverage constraints, yet they often lack the tools, resources, awareness, or knowledge to participate in and coordinate their care options. Navigating this fragmented process requires knowing what questions to ask about care options, how to work through the health and long-term care maze, what information to seek, and how to interact with the provider team in resolving health care needs.

To achieve a better level of care, NTOCC is developing a patient/caregiver transition of care checklist to identify questions patients and caregivers should ask the care team during any transition. The tool will identify key touch points that providers are coordinating during a transition and facilitate a dialogue between the patient and caregivers and all members of the care team. Several other organizations and facilities have developed or are in the process of developing such tools. At minimum these types of tools should address:

- Patient/caregiver’s understanding of who is responsible for doing what;
- Information that should be communicated and shared with other providers in what time frame;
- Care options and resources available;
- Follow-up care/visits;
- Medication reconciliation<sup>26</sup> requirements; and

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26. Medication reconciliation refers to “the process of creating the most accurate list possible of all medications a patient is taking — including drug name, dosage, frequency, and route — and comparing that list against the physician’s admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points.” Institute for Healthcare Improvement, *Reconcile Medication at All Transition Points*, available at <http://www.ihl.org/IHI/Topics/PatientSafety/MedicationSystems/Changes/Reconcile+Medications+at+All+Transition+Points.htm>.

- Patient's personal medicine list.

Equipping patients and caregivers with understandable tools and resources will help them be responsible for and participate in their health care decisions with providers and their health care team. Integrating patient and caregiver tools with provider tools will improve consistent information exchange and support of the transition process.

- **Improve education of providers**

Recognized as a national priority for health care quality, patient safety, and efficiency, care coordination issues need more attention at the provider level. Provider education does not typically emphasize communication and teamwork. These topics are not included in the curricula for most accreditation or certification programs and are infrequently among the topics of continuing clinical education programs. In fact, a survey of over 1,000 physicians found that two-thirds thought they had received inadequate training in care coordination and patient education.<sup>27</sup> NTOCC urges developers of university curricula and continuing education programs for all health professionals to place greater emphasis on transition of care issues.

- **Improve the transition between settings, such as from emergency department and acute care to long-term, assisted living, home, or hospice care**

Although all health care transitions require a certain amount of coordination, research indicates that certain transitions are particularly

problematic. One example is the transition from emergency department and acute hospital care to a long term care, assisted living, or home care setting.

Emergency departments deal with high patient volume, high acuity of care, a significant number of patients seeking primary care, frequent shortages of clinicians, and limited access to care coordination resources. The round-the-clock care required by emergency department patients necessitates coverage by multiple physicians, nurses, social workers, and other professionals, resulting in handoffs and potential for numerous care coordination problems, including medication issues.<sup>28</sup> Successful transitions of care for most emergency departments are limited by the time available for coordinating care and the lack of accurate information.

To address the typical issues encountered in the emergency department setting, NTOCC urges emergency department staff to consider the following questions:

- Do the patient and caregiver know what to expect regarding the hospital stay and post-discharge experience?
- Do the patient and caregiver know how to reach providers?
- Do the patient and caregivers understand and agree with the follow-up plan?
- Has the emergency department staff determined if patients and caregivers can afford prescribed medications?

27. G Anderson, *Chronic Care*, *Advanced Studies in Medicine* 3(2): 110-11 (2003).

28. R Behara et al., *A Conceptual Framework for Studying the Safety of Transitions in Emergency Care*, *Advances in Patient Safety* 2: 309-21 (2005), available at <http://www.ahrq.gov/downloads/pub/advances/vol2/Behara.pdf>.

- Do the patient and caregiver know how to take medications, handle equipment, or handle or manage wound care?
- Do the patient and caregivers understand their condition and treatment options?
- Have other functional arrangements been coordinated, including transportation, homemaker functions, and dietary counseling?
- Does the patient have the personal strengths or access to resources needed to carry through the plan of care?

Policy makers, health insurers, and hospital and other health care executives should provide emergency departments with the resources necessary to provide safe, high-quality care by addressing these and other transition issues.

The initial setup of services in the outpatient setting as a follow-up to emergency department care also requires specific attention to aid in the transition after discharge. NTOCC urges individual facilities to develop protocols or standards of practice to arrange the transition to outpatient care. To the extent possible, the emergency department should assist in setting up the 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.

Emergency departments providers or others could use a standardized universal transfer

form to improve communication between settings. NTOCC encourages use of a standardized tool to facilitate the transfer of necessary patient information during transitions of care. Patient transfers are fraught with the potential for errors stemming from the inaccurate or incomplete information relating to medical history and a course of hospitalization or emergency department visit. Because it is extremely difficult to reach the hospital or emergency department once the transfer is complete, 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.

Another tool to consider is the standardized patient assessment tool that CMS has developed for use at acute hospital discharge and at post-acute care (PAC) admission and discharge. The Continuity Assessment Record and Evaluation (CARE) tool measures the health and functional status of Medicare acute discharges as well as changes in severity and other outcomes for Medicare PAC patients. The tool is now being used to collect information from providers participating in the PAC payment reform demonstration.<sup>29</sup>

Finally, NTOCC strongly believes that an appropriate coordinator of care in the outpatient setting would greatly improve the transition out of the emergency department or acute hospital setting. A social worker, nurses, case managers, or discharge planner could initially coordinate care on the original unit. NTOCC encourages facilities to appoint such a single point of contact to be responsible for such coordination until follow-up care is initiated. Determining who will oversee coordination of services once the patient arrives at a SNF,

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29. *Overview of the Post Acute Payment Reform Initiative*, available at [http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PACPR\\_RT1\\_CMS\\_PAC\\_PRD\\_Overview.pdf](http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PACPR_RT1_CMS_PAC_PRD_Overview.pdf)

assisted living facility, or at home is critically important. This may require periodic visits by a case manager, nurse, social worker or home health nurse, but currently the health care system is not designed to provide such long-term services. Once a patient is in a nursing home, assisted living facility, or at home, however, wound care and durable medical equipment management, preparation of meals according to dietary restrictions, respiratory care, physical and occupational therapy, and other issues may arise that require the attention of a coordinator of care. This issue is further discussed in the case management section below.

## **B. IMPLEMENT ELECTRONIC MEDICAL RECORDS THAT INCLUDE STANDARDIZED MEDICATION RECONCILIATION ELEMENTS**

### **1. The Problem**

Health care continues to be “siloeed,” with different sets of professionals and settings focusing on specific types of care rather than a single team dealing with the patient in a holistic manner. This specialized approach to health care further exacerbates communication breakdowns. With few practices or tools in place to encourage communication across settings, this model of care is not ideal.

Implementation of electronic health records can assist greatly in fostering better flow of information between providers and can improve the “accessibility, accuracy, and completeness of clinical information.”<sup>30</sup> For information technology to help improve the

flow of information between different care settings, it must be interoperable or uniform across providers. Although technology is evolving to contain point-of-care and follow-up reminders, the majority of primary care providers do not use electronic health record systems.<sup>31</sup>

As electronic medical records become more common, it is important to consider the elements needed to best facilitate communication and improve care among multiple providers. To be effective, health information technology must include common data standards for drug and other information, including sets of terms, concepts, and codes, safety alerts, and mechanisms for overrides.<sup>32</sup> A complete electronic health record could aid in the important task of medication reconciliation, because it can help maintain accurate, current, and complete medication history and thus ensure patient safety.<sup>33</sup> Developing standards for the elements of electronic medical records would ideally involve various key stakeholders, including CMS and the insurance industry.

In addition, data contained in electronic medical records ideally would be used to populate a patient-centered Personal Health Record. Patient-centered records, fully accessible by patients, are critical to better communication.<sup>34</sup> In designing such a system of records, it is important to bear in mind the following issues:

- Vulnerable populations may not have access to computers and the Internet or may lack

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30. T Garrido et al., *Effect of Electronic Health Records in Ambulatory Care: Retrospective, Serial, Cross Sectional Study*, *BMJ*, 330: 581-84 (2005).

31. JD Anderson, *Increasing the Acceptance of Clinical Information Systems*, *MD Comput.* 16(1): 62-5 (1999).

32. IOM, *Preventing Medication Errors: Quality Chasm Series*, 13 (2007).

33. HS Lau et al. *The Completeness of Medication Histories in Hospital Medical Records of Patients Admitted to General Medicine Wards*, *Br. J. Clin. Pharmacol.* 49: 597-603 (2000).

34. IOM, *1st Annual Crossing the Quality Chasm Summit: A Focus on Communities*, 54 (2004).



the necessary computer literacy skills to access and update their records;

- Aging people may have difficulty adjusting to changes in computers and develop usability issues over time; and
- Patient tools need to be sensitive to cultural and ethnic issues.

## 2. Issues for Consideration

Patient records need to be standardized to facilitate communication between settings. Standardized inclusion of and presentation of information would assist providers in quickly and effectively reviewing records. One mechanism for accomplishing uniformity is use of a universal transfer form.<sup>35</sup> More importantly, NTOCC suggests inclusion of standard medication reconciliation data elements, codes sets and personal medicine list elements.

- **Develop standard medication reconciliation elements**

NTOCC strongly believes that every time a patient is exposed to a new care setting or level of care, a medication reconciliation form should be completed, and the new setting should receive key information about the patient's medication regimen. This listing would include prescription and non-prescription medications, dietary supplements, herbal remedies, a record of when the medication was taken and its route and frequency of administration, indication for use, patient

allergies, and other medication-related information. Facilities accredited by the Joint Commission require that a complete list of the patient's medications be communicated to the next provider of service when a patient is referred or transferred to another setting, service, practitioner, or level of care within or outside the organization.<sup>36</sup> In addition, upon discharge from a facility, patients should receive a literacy-sensitive medications list.<sup>37</sup>

NTOCC has developed a set of common, essential data elements for medication reconciliation. All medication reconciliation forms and systems nationwide should incorporate such elements. The key elements, detailed in Appendix A, include:

- Demographics;
- Medications (active, taken chronically);
- Other medications — over the counter (OTC), herbal remedies, dietary supplements and time-limited medications;
- Medical history;
- Primary physician; and
- Validation.

NTOCC will not develop a standard form for medication reconciliation, but rather urges all providers to ensure that their tools and systems include all the key medication reconciliation elements.

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35. Similar forms are being developed in other contexts. For example, as part of its Post Acute Care Payment Reform Demonstration, the Centers for Medicare and Medicaid Services (CMS) is developing a standardized patient assessment tool to be used by long-term care hospitals, inpatient rehabilitation facilities, SNFs and home health agencies to "measure the health and functional status of Medicare acute discharges and measure changes in severity and other outcomes for Medicare PAC patients." RTI International, *Overview of the Medicare Post Acute Care Payment Reform Initiative*, available at [http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PACPR\\_RTI\\_CMS\\_PAC\\_PRD\\_Overview.pdf](http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/PACPR_RTI_CMS_PAC_PRD_Overview.pdf).

36. Joint Commission, *Using Medication Reconciliation to Prevent Errors* (2006).

37. *Id.*

- **Standardize patient's personal medicine list elements**

It is not enough to have a standard form for medication reconciliation if patients are unaware of the medicines that they take and the dosage of those drugs. NTOCC encourages widespread use of a personal medicine list by patients to track their own medication use, such as the one included in Appendix B. As with medical records generally, this list should have standard elements to increase its compatibility and comparability across providers. A literacy-sensitive list will facilitate its use as a tool to stimulate discussion between patients and caregivers and providers about their medicines. Use of standard elements and a uniform, easy-to-follow format will increase the likelihood that an individual patient and his or her caregiver will be able to manage medication therapy personally on an ongoing basis. NTOCC hopes that its form, in Appendix B, can be adopted as a standard form, and plans to circulate it broadly among its member organizations and to the public through its website.

## **C. ESTABLISH POINTS OF ACCOUNTABILITY FOR SENDING AND RECEIVING CARE, PARTICULARLY FOR HOSPITALISTS AND SNFISTS**

### **1. The Problem**

Given the number of professionals involved in successfully managing chronic conditions and difficult cases, each member of the health

care team must have a clearly delineated role. Each team member then can be held accountable for fulfilling his or her role in managing the patient's care. The Robert Wood Johnson Foundation has supported the development of a chronic care model that defines roles, allocates care and follow-up tasks, provides for case-management as necessary, and ensures cultural sensitivity in care delivery.<sup>38</sup> In determining a plan for care, it is important to include professionals, patients, caregivers, and community members because everyone's collaboration is important to successful outcomes. The key to higher quality care is accountability across all settings and individuals, including patients.

One of the emerging key team players involved in episodes of care occurring in hospital settings is the hospitalist. Hospitalists are physicians, often internists or family physicians, who spend the bulk of their time caring for hospitalized patients. In 2003, the United States had approximately 1,415 hospital medicine groups and 11,159 hospitalists, and about 20 percent of hospitals had a hospital medicine group (55 percent at hospitals with 200 or more beds).<sup>39</sup> By 2010, the number of hospitalists is expected to reach 30,000.<sup>40</sup> The percentage of inpatients cared for by hospitalists varies, with some hospitals having up to 100 percent hospitalist coverage.<sup>41</sup>

Increased hospitalist use is driven by pressures affecting traditional hospital-physician relationships. As many physicians have increasing interest in sources of revenue besides inpa-

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38. Improving Chronic Illness Care, *ICIC: The Chronic Care Model: Delivery System Design* (2004), available at [http://www.improvingchroniccare.org/index.php?p=Delivery\\_System\\_Design&s=21](http://www.improvingchroniccare.org/index.php?p=Delivery_System_Design&s=21).

39. PD Kralovec et al., *The Status of Hospital Medicine Groups in the United States*, *J. Hosp. Med.* 1(2): 75-80 (Apr. 2006).

40. 2005–2006 Society for Hospital Medicine Survey: State of the Hospital Medicine Movement, available at: <http://www.hospitalmedicine.org/Content/NavigationMenu/ResourceCenter/Sruveys/Surveys1.htm>.

41. H Pham et al., *Health Care Market Trends and the Evolution of Hospitalist Use and Roles*, *J. Gen Intern Med.* 20(2): 101-07 (Feb. 2005).

tient care or emergency department consultations, primary care physicians and specialists have grown less dependent on hospital privileges, and hospital-based medicine has emerged as a new form of specialized practice.<sup>42</sup>

Primary care physicians that practice specifically in skilled nursing facilities are called SNFists. They attend the chronically institutionalized patients found in nursing homes (four-fifths of elderly people in nursing homes are long-stay residents), who are at high risk for care site transfers due to frailty and multiple disease processes.<sup>43</sup> SNFists also attend the 10 percent of nursing home residents who are post-acute and sub-acute patients, and who are predominantly (62 percent) admitted from the hospital.<sup>44</sup> Only a few years ago, many of these post-acute and sub-acute patients would have been under treatment in a hospital setting. They are a population with complicated orders and treatments, prone to care transition complications from the hospital move as well as re-admission to the hospital. This segment, often frail elders, may only stay days to weeks in the SNF before another transfer home or to an assisted living setting. The SNFist, like the hospitalist, deals with a highly mobile, medically labile group. Their presence in the SNF enables consultation with nurses, interdisciplinary teams, patients, and caregivers.

In addition to heavily involved physicians, such as hospitalists and SNFists, individual patients and their caregivers have a critical role to play in the success of transitions. As mentioned before, patients are the one con-

stant throughout care, and thus they must take some level of accountability for ensuring the flow of information by asking questions or otherwise being active participants in their own care.

## **2. Issues for Consideration**

NTOCC believes that quality of care can improve through the clear delineation of responsibility. During times of transition, existing resources, such as institution-based physicians, should be used to coordinate care.

- **Increase accountability**

To improve the quality of care during transitions, each clinician involved should know his or her role in the process. Expectations need to be established for both the health care team sending a patient and the team receiving a patient, such as from a SNF to a hospital or vice versa. The teams should focus not on patient discharge as an endpoint, but rather view themselves as part of a continuum of care in which they are responsible for ensuring a successful transfer.<sup>45</sup> By shifting focus in this manner, health care teams will assume responsibility for completing transfer forms, medication records, and medical records, assisting the receiving team and helping ensure patients and caregivers have a better understanding of their role in the process. Performance measurement focused on these issues and modification of existing payment systems can help encourage this shift in focus and ensure greater accountability, as discussed further in Section F below.

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42. 2005 Arizona Physician Workforce Study, available at [http://www.slhi.org/publications/studies\\_research/pdfs/AZ\\_Physician\\_Workforce.pdf](http://www.slhi.org/publications/studies_research/pdfs/AZ_Physician_Workforce.pdf).

43. Kaiser Commission on Medicaid and the Uninsured, *Changes in Characteristics, Needs, and Payment for Care of Elderly Nursing Home Residents: 1999-2004* (June 2007).

44. *Id.*

45. HMO Workgroup on Care Management, *One Patient, Many Places: Managing Health Care Transitions*, 5-10 (Feb. 2004).

- **Make better use of hospitalists and SNFists**

Research indicates that care by hospitalists improves clinical efficiency by reducing costs and shortening lengths of stay.<sup>46</sup> Additionally, hospitalist care is associated with reduced patient mortality.<sup>47</sup> Despite these advantages, the hospitalist model of patient care raises concerns. This new system, no longer directly involving the primary care physician as the point of contact in the hospital, can lead to disconnection in the timely transfer of information. No evidence indicates that hospitalists are the problem; rather, the hospitalist model creates transitions of care difficulties that may contribute to poor transitions. It is the goal of the NTOCC to address this issue and come up with strategies and interventions that help eliminate this “chasm of care.”

Hospitalists and SNFists, along with primary care and emergency room providers, should be encouraged to coordinate care when transferring patients from one institution to another. They are equipped with the information necessary to ensure a successful transfer to the next care setting – be it home, long-term care, assisted living, hospice or other community settings.

## **D. INCREASE THE USE OF CASE MANAGEMENT AND PROFESSIONAL CARE COORDINATION**

### **1. The Problem**

Another important element in a successful transition of care is case management or other professional care coordination. Case manage-

ment often is confused with discharge planning or other interventions. For purposes of this document, case managers are defined as licensed health care professionals responsible for providing patient assessment, treatment planning, health care facilitation, and patient advocacy.<sup>48</sup>

Case managers frequently arrange for the timely and accurate transfer of information as patients prepare to move from one level of care to another. When moving from one setting to another, the patient’s medical information is usually not available to the receiving health care providers. Many patients require care facilitation support that case managers provide by navigating through the maze of health care resources, communication, and services. Yet case managers often have to start at the beginning with the patient at each level of care because there is not appropriate transfer of clinical factors, psychosocial factors related to the patient and those pertaining to the family, medication lists, or other related assessments. Case managers realize that patients usually are not prepared for what to expect as they move from one level of care to another and therefore do not know what questions to ask or what information they should be prepared to share during the transition process.

Care coordination has resulted in positive outcomes for both patients and their caregivers. For example, many of the programs for older adults that include care coordination have produced positive outcomes for the patients served, such as improved functional ability, reduced hospital admissions, and fewer nurs-

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46. J Coffman, *The Impact of Hospitalists on the Cost and Quality of Inpatient Care in the United States: A Research Synthesis*, Medical Care Research and Rev., 62(4): 379-406 (2005).

47. *Id.*

48. Case Management Society of America, *CMSA & Case Managers*, available at <http://www.cmsa.org/Conference/tabid/244/default.aspx>.

ing home placements. Care coordination has been shown to decrease stress among informal caregivers<sup>49</sup> and reduce the unmet needs of community-dwelling older adults.<sup>50</sup> For example, hospital days for patients participating in the Wisconsin Partnership Program decreased from five days per year per thousand clients to 2.1 days,<sup>51</sup> and reduced hospital utilization also has been reported in four other programs.<sup>52</sup> Similarly, five programs reduced the length of nursing home stays.<sup>53</sup> In addition, the rate of unmet needs among community-dwelling older adults was reduced in the demonstration project, and reduction of unmet needs has been achieved in state point-of-entry programs.<sup>54</sup>

## 2. Issues for Consideration

NTOCC believes that case management and professional care coordination can aid greatly in improving transitions of care. NTOCC encourages increased use of case managers and other professionals to coordinate transitions of care.

### • Increase use of case management

Case managers assist patients by providing support advocacy, adherence assessment, motivational intervention, resource coordination, enhanced patient self-management, and care planning to address many of the concerns identified in this paper. Because the patient is a constant factor in all transitions, it is appropriate to create a patient-centered model of integration with the medical team to assist with improved communication and information transfers. The issue then becomes who, how, and when this information gets communicated to the patient, the patient's caregivers, and other members of the patient's health care team in a consistent and reliable manner.

Case managers can fill this role by ensuring that information related to the patient's current symptoms, medication list, advanced directives, adherence assessment, literacy, knowledge/comprehension, motivation, readiness to change, functional limitations,

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49. WN Leutz, *Social HMO Progress Report: 15 Years of Making a Difference in the Lives of the Frail Elderly*, Social HMO Consortium, Brandeis University (2001).
50. JB Christianson, The Evaluation of the National Long Term Care Demonstration: The Effect of Channeling on Informal Caregiving. *Health Services Research* 23(1): 99-117 (1988).
51. R Mollica & J Gillespie, *Care Coordination for People with Chronic Conditions*, Partnership for Solutions, Johns Hopkins University (2003).
52. P Chatterji et al., *Evaluation of the Program of All-Inclusive Care for the Elderly Demonstration: Final Report*, Abt Associates, Inc. (2000); S Anthony et al., *Medicaid Managed Care for Dual Eligibles: Case Studies of Programs in Georgia, Minnesota, and Pennsylvania*, Economic and Social Research Institute (2001); D Cadiz, *Social Work and Care Coordination in VA: The Right Care at the Right Time in the right Place*, presented at The New York Academy of Medicine Toward New workforce Strategies in Care for the Aging Conference (Oct. 19, 2005); JB Englehardt et al., *Long-Term Effects of Outpatient Geriatric Evaluation and Management on Health Care Utilization, Cost, and Survival*, *Research on Social Work Practice* 16(1): 20-27 (2006).
53. P Chatterji et al., *Evaluation of the Program of All-Inclusive Care for the Elderly Demonstration: Final Report*, Abt Associates, Inc. (2000); WN Leutz et al., *Utilization and Costs of Home and Community-Based Care within a Social HMO: Trends Over an 18-Year Period*, *International Journal of Integrated Care* 5(19): 1-14 (2005); S Anthony et al., *Medicaid Managed Care for Dual Eligibles: Case Studies of Programs in Georgia, Minnesota, and Pennsylvania*, Economic and Social Research Institute (2001); Cadiz, D., *Social Work and Care Coordination in VA: The Right Care at the Right Time in the Right Place*, presented at The New York Academy of Medicine Toward New Workforce Strategies in Care for the Aging Conference (Oct. 19, 2005); JB Englehardt et al., *Long-term Effects of Outpatient Geriatric Evaluation and Management on Health Care Utilization, Cost, and Survival*, *Research on Social Work Practice* 16(1): 20-27 (2006).
54. P Kemper, The Evaluation of the National Long Term Care Demonstration: Overview of the Findings, *Health Services Research* 23(1): 161-174 (1988); Long-Term Care Community Coalition, *Single Point of Entry for Long Term Care and Olmstead: An Introduction and National Perspective for Policy Makers, Consumers, and Advocacy Organizations* (2005).

cognitive ability, coping ability, informal caregiver information, and professional caregiver contacts are provided in an accessible record. Case managers working in a collaborative practice model with emergency department physicians, residents, hospitalists, community practitioners, managed care administrators, health plans, pharmacists, and employers have the opportunity to coordinate care by overseeing the transfer of information throughout the transition.

- **Introduce alternative professional care coordinators as needed**

Other professionals also can be effective in assisting with discharge planning and home care. For example, an advance practice nurse supported by a physician has been shown to be effective in improving post-discharge outcomes among high-risk elderly patients. One study found this type of discharge planning to reduce hospitalizations for medical cardiac patients for six weeks post-discharge.<sup>55</sup> A second major study on the subject demonstrated improved clinical outcomes and decreased hospital readmissions for common medical and surgical conditions.<sup>56</sup> In addition to advanced practice nurses, similar models should be evaluated using other types of professionals, such as case managers, nurses, social workers, or pharmacists. A competent coordinator is particularly important given the specialized role of various clinicians, including medication management (pharmacists), nutrition (dietitians, pharmacists, and primary care physicians), rehabilitation (physical therapists, occupational therapists, and speech

therapists), and wound care (nurses and physical therapists).

Dr. Eric Coleman, a member of the NTOCC advisory task force, directs the Care Transitions program ([www.caretransitions.org](http://www.caretransitions.org)) and has developed the Care Transitions Intervention. Unlike other models developed to date, the CTI is primarily a transitions self-management model that provides coaching skills and tools to help patients and caregivers assert a more active role during this vulnerable time. CTI not only prepares patients and caregivers for the immediate transitions but simultaneously prepares them for future transitions as well. The intervention is low-cost, low intensity and yet as been shown to produce a sustained effect reducing hospital readmissions significantly for five months following the one-month intervention. This intervention is expected to result in nearly \$300,000 in savings for the care of 350 adults with care needs.<sup>57</sup> NTOCC encourages health-care professional to work with models such as CTI.

Although the Care Transitions model is one that NTOCC recognizes as a quality tool, we note that 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 use of the evolving

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55. M Naylor, *Transitional Care*, available at [www.nursing.upenn.edu/centers/hcgne/TransitionalCare.htm](http://www.nursing.upenn.edu/centers/hcgne/TransitionalCare.htm).

56. *Id.*

57. EA Coleman et al. *The Care Transitions Intervention: Results of a Randomized Controlled Trial*, *Archives of Internal Medicine* 166:1822-8 (2006), available at <http://www.caretransitions.org>.



models to break down the individual silos of care and address the needs of transition for patients and their caregivers. Only through collaboration and aligned incentives will health care benefit from the excellent work NTOCC sees in each of these models.

In addition, NTOCC has developed its own Elements of Excellence in Transitions of Care (TOC) Checklist, included as Appendix C. NTOCC firmly believes that the adoption of a set of guidelines with checklists such as those included in the TOC Checklist can provide a framework for assessment and facilitate better communication, resulting in improved transitions of care.

## **E. EXPAND THE ROLE OF THE PHARMACIST IN TRANSITIONS OF CARE**

### **1. The Problem**

The role of the pharmacist has expanded to include a patient-centered care approach known as pharmaceutical care. The American Society of Health-System Pharmacists defines pharmaceutical care as the direct, responsible provision of medication-related care for the purpose of achieving definite outcomes that improve a patient's quality of life. Pharmacists are an integral part of establishing a smooth transition of care and can provide expertise in a patient's drug therapy regimen.

Many of the concerns about transitions of care include patient safety and efficacy as it pertains to medication use. When patients are moving from one care setting to another and are using different pharmacies, pharmacists are concerned with who is monitoring the patient's medications. Studies have shown

that patient morbidity and indirect and direct costs may be reduced when pharmacists are actively involved in discharge planning. Pharmacists are not only an important component to the patient care team during transition, but also assume the responsibility for improving patient safety in regards to medications as patients move across the health care settings.<sup>58</sup> Because a pharmacist is able to identify duplication in a medication regimen, drug-to-drug interactions, medication schedule, and multiple medications, he or she is a critical member of a patient's health care team.

### **2. Issues for Consideration**

There is a need for increased use of pharmacists as part of the patient care team during a patient's transition of care. The medication reconciliation should be a part of each pharmacist's responsibility. Pharmacists should have direct contact with patients and other health care providers to ensure medication information is transferred accurately and completely. Pharmacists should educate the patient and caregiver during the patient's discharge from one health care setting to another. Pharmacists also should be used to identify medication safety concerns and to prevent morbidity associated with improper drug selection, sub-therapeutic dosage, failure to receive medication, excessive dosage, drug interactions, and drug use without indication and treatment failures.

- **Managers of medication reconciliation**

Medication reconciliation is critical during transitions of care. This process includes a pharmacist review of all over-the-counter, prescription, vitamin, and herbal medications. If

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58. Eckel et al, *Insights & Issues: Continuity of Care in Pharmacy Practice* (June 30, 2005).

there are gaps that exist during the medication reconciliation process, it can lead to medication errors or rehospitalization due to adverse events. The process is particularly important given that a reported 46 percent of medication errors occurred when new orders were written at patient admission or discharge.<sup>59</sup>

According to the Joint Commission, every transition of care should include medication reconciliation. A report issued by the United States Pharmacopeia found that 66 percent of medication errors occurred during the patient's transition or transfer to another level of care, 22 percent occurred during the patient's admission to the facility, and 12 percent occurred at the time of discharge.<sup>60</sup> The majority of these errors were due to omission and prescribing errors. Other types of errors reported were wrong drug, wrong time, extra dose, wrong patient, mislabeling, wrong administration technique, and wrong dosage form. NTOCC believes that medication reconciliation with a pharmacist managing the process may reduce errors and improve transitions of care. While other health professionals can conduct the initial medication reconciliation, the pharmacist should be responsible for overseeing the patient's medications, including all over-the-counter drugs, prescription drugs, vitamins, and herbal medications, and ensure that new orders are made and filled properly.

It may be most effective to have a pharmacist serve as a counselor on all the patient medications. When a patient is admitted for acute or post-acute care, the pharmacist can review the medications that the patient was taking

prior to admission. Once the patient is discharged, a pharmacist should perform the final review of current and discharge medications. The most important step is to ensure that the patient or 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. Also, pharmacists can include information on adverse events and what to do in case one occurs. This process should include a personal health record to ensure that the health care provider or pharmacist has a record of the patient's medication history. Encouraging a patient to have a medication therapy management session would allow the pharmacists to perform a complete medication review and identify any medication-related problems. A follow-up call with the patient should occur a few days later to ensure that patients understand their new or continued drug regimens.

## **F. IMPLEMENT PAYMENT SYSTEMS THAT ALIGN INCENTIVES AND INCLUDE PERFORMANCE MEASURES TO ENCOURAGE BETTER TRANSITIONS OF CARE**

### **1. The Problem**

Since the establishment of coordination of care as a national priority by IOM in 2001, little progress has been made to modify payment systems to align incentives that encourage improvements in transitions of care. In recent years, however, the federal government has focused on implementing quality reporting and moving towards a payment system

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59. D Bates et al., *The Costs of Adverse Drug Events in Hospitalized Patients*, JAMA 277: 307-11 (1997).

60. United States Pharmacopeia, *MEDMARX*, available at <http://www.usp.org/hqi/patientSafety/medmarx/>.

based on pay-for-performance.<sup>61</sup> This could present an opportunity for such modifications.

In November 2001, the Department of Health and Human Services announced the creation of a National Health Care Quality Initiative that seeks to “(a) empower consumers with quality of care information to make more informed decisions about their health care and (b) encourage providers and clinicians to improve the quality of health care.”<sup>62</sup> Through a greater emphasis on evidence-based medicine, the initiative aims to ensure that providers are delivering care according to national guidelines by developing and having different types of providers report sets of performance measures.

These quality reporting efforts may result in improved care in point-of-service settings across the country, but they do not address the critical interruptions in patient care that occur at transitions across the continuum. According to the Joint Commission, poor communication continues to be the most frequent cause for sentinel events.<sup>63</sup> The communication between staff in one setting is complex, but when adding communication across settings, the chances of a patient being treated according to national standards is further reduced. Although the guidelines tend to be very clear on how patients should be treated, they do not usually identify who will manage each aspect of care. Adopting both evidence-based

medicine and process improvements will enhance care coordination and improve the variable rates of provider adherence to evidence-based therapies.

The existing payment structure requires practices to move patients through quickly, with little time for working with team members, scheduling follow-up, developing a plan of care, and conveying changes to other providers. Pay for many patients are on a per-visit basis, as opposed to episodic care across providers. No incentive exists for communicating, and there is no disincentive for not doing so. Duplicate tests are ordered and get reimbursed without having to consider whether another provider already has performed a similar service. A new approach will require a redesigned payment structure to change the behavior of providers.

## **2. Issues for Consideration**

NTOCC urges the Centers for Medicare and Medicaid Services (CMS) and private payers to implement performance measures relating to transitions of care and to develop payment systems that align incentives for improvements in communication. We agree with the assessment of IOM that “Pay-for-performance mechanisms should recognize, promote, and reward improved coordination of care among a patient’s multiple providers and during entire episodes of illness.”<sup>64</sup>

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61. As part of this initiative, quality data has been or will be reported by different types of providers, including hospital outpatient departments and physicians. Hospital inpatient departments have been required to provide data on hospital performance, and a pay-for-performance system is being considered. Most recently, the Tax Relief and Health Care Act of 2006 (H.R. 6111) expanded quality reporting to physicians and authorized the expansion to hospital outpatient departments and ambulatory surgical centers.

62. CMS, *Hospital Quality Initiative Overview* (Dec. 2005), available at <http://www.cms.hhs.gov/HospitalQualityInits/downloads/HospitalOverview200512.pdf>.

63. Joint Commission, *2007 National Patient Safety Goals, 2* (2007) available at [http://www.jointcommission.org/NR/rdonlyres/8912113B-72C6-409F-82A9-77F187424C34/0/07\\_bhc\\_npsgs.pdf](http://www.jointcommission.org/NR/rdonlyres/8912113B-72C6-409F-82A9-77F187424C34/0/07_bhc_npsgs.pdf).

64. IOM, *Rewarding Provider Performance: Aligning Incentives in Medicare Report Brief, 2* (Sept. 2006).

- **Modify payment systems to encourage better transitions of care**

CMS has taken initial steps towards modifying payment systems in productive ways. For example, in November 2006, CMS announced that “2007 payment rates will pay physicians more for the time they spend talking with Medicare beneficiaries about their health care.”<sup>65</sup> By rewarding physicians for spending more time with patients, such a change could provide the opportunity for greater patient education and greater efforts on the part of physicians to coordinate care. In addition, CMS recently began permitting use of new codes for non-physician providers to bill for team conferencing. NTOCC hopes that further changes of this type will be adopted to improve the incentives for greater coordination of care during episodes of care and transitions of care.

A number of important groups also have been calling for similar reforms. Earlier this year, the American College of Physicians (ACP) released a proposal to “pay primary care physicians based on their coordination of care for patients.”<sup>66</sup> The advanced medical home model proposed by the ACP to accomplish such payment also has been adopted by the American Academy of Family Physicians. In addition, CMS is developing a Medicare medical home demonstration project, as authorized under the Tax Relief and Health Care Act of 2006. The Medicare demonstration project aims to “redesign the health care delivery sys-

tem to provide targeted, accessible, continuous and coordinated, family-centered care to high-need populations” through the payment of care management fees to personal physicians and incentive payments to physicians participating in medical homes.<sup>67</sup> Medical societies also are working with the Patient-Centered Primary Care Collaborative (www.pcpcc.net) concept.

- **Introduce performance measures relating to transitions of care**

Part of creating a payment system that encourages better transitions of care involves the creation and implementation of performance measures relating to care coordination. The National Quality Forum (NQF), in its efforts to develop and implement a national strategy for health care quality measurement and reporting, has identified care coordination as a priority area and has endorsed both a standard definition of care coordination and a framework for measuring its quality. Unfortunately, due to a general paucity of existing care coordination measures, NQF has, to date, endorsed only one such consensus standard.<sup>68</sup> As such, NTOCC suggests that the federal government, including CMS, encourage consensus organizations to develop care coordination measures to address the following areas, identified as essential by NQF:<sup>69</sup>

1. **Health care “home.”** The source of “usual care” that functions as the central point for coordinating care around the patient. This

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65. CMS, *Medicare Announces Final Rule Setting Physician Payment Rates and Policies for 2007: New payment rates will encourage increased physician/ patient communication* (Nov. 1, 2006).

66. American College of Physicians, *Restructuring Payment Policy to Support Patient-Centered Care* (Jan. 2007).

67. Tax Relief and Health Care Act of 2006, H.R. 6111, § 204.

68. The National Quality Forum, *NQF-Endorsed™ Definition and Framework for Measuring Care Coordination* (May 2006); The National Quality Forum, Press Release, *National Quality Forum Endorses Voluntary Consensus Standard for Care Coordination* (May 22, 2006) (endorsing the 3-Item Care Transition Measure (CTM-3)).

69. The National Quality Forum, *NQF-Endorsed™ Definition and Framework for Measuring Care Coordination* (May 2006).

is the clearinghouse of all patient information and is responsible for coordinating acute, episodic, and chronic care.

- 2. Proactive plan of care and follow-up.** A care plan that ensures tracking of progress to goal, is developed with the care team and patient, and includes information on evidence-based referrals, follow-up tests, self-management support, and community resources.
- 3. Communication.** Medical and psychosocial information is available to all relevant team members, including the patient. Communication is encouraged and is reimbursed appropriately.
- 4. Information systems.** Seamlessly interoperable systems available to all providers and patients, using evidence-based plan of care management, decision support tools, patient reminders, etc.
- 5. Transitions or “hand-offs.”** Emphasis on medication reconciliation, follow-up tests/services, changes in plan of care, involvement of a team during hospitalization, communication between care settings, and transfer of current/past health information from old to new home in a timely manner.

With its primary focus on transitions of care, however, NTOCC has created and convened a “Measures Work Group” to review, assess, and make recommendations on how to improve and expand the current state of quality measurement within this more narrowly

defined scope. The NTOCC Measures Work Group has been charged with the following tasks:

1. Developing a measurement framework specific to transitional care (as opposed to NQF’s broader Care Coordination Framework);
2. Conducting an environmental scan for existing transitional care performance measures, evaluating these measures, and identifying existing measurement gaps; and
3. Developing recommendations on how to fill identified measurement gaps.

In pursuing the first goal delineated above, the NTOCC Measures Work Group determined that the care transitions framework should describe the basic components of optimal transitional care rather than recommend a particular model or approach to transition of care. Thus the proposed framework, based on key elements of the few existing relevant policy statements,<sup>70,71,72,73</sup> 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 care transitions, the outcomes and cost/resource utilization resulting from care transitions, and the experience of patients and providers during transitions, as included in the proposed framework for measuring transitions of care, in Appendix D.

To achieve its remaining goals — the identification and assessment of existing care transition measures and the elucidation of measure-

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70. NQF. *NQF-Endorsed™ Definition and Framework for Measuring Care Coordination*. May 2006.

71. Coleman E. *Background Paper on Transitional Care Performance Measurement*. 2005. The Institute of Medicine.

72. The American Geriatric Society. *Improving the Quality of Transitional Care for Persons with Complex Care Needs*. May 2002.

73. The HMO Care Management Work Group. *One Patient, Many Places: Managing Health Care Transitions*. February 2004.

ment gaps — the NTOCC Measures Work Group agreed that it would be necessary to seek partners that are, or can be contributors or creators of such measures and will pursue such input as its work proceeds. A preliminary environmental scan has revealed several important measurement gaps for which NTOCC suggests that standards be developed for NQF endorsement consideration:

- The use of an integrated pharmacy data set to facilitate coordination and medication management;
- Success on therapeutic endpoints (such as Hemoglobin A1c);
- Monitoring for adverse drug events;
- Monitoring for medication adherence and persistence;
- Simplification of medication regimen to meet the patient's therapeutic, safety, and lifestyle needs;

- Assessment to ensure patient can afford medication;
- Assessment and teaching to ensure that patients understand how to use their medicines and identify adverse events; and
- Monitoring of the transfer of patients to higher levels of care due to failure to comply with treatment plan.

In addition to the measures noted above, the National Health Policy Group (NHPG) has made recommendations to CMS about performance indicators for coordination of care and care transitions specific to elderly populations<sup>74</sup> and the National Committee for Quality Assurance (NCQA) 2007 Accreditation Standards includes several elements designed to measure care coordination practices from the health plan perspective.<sup>75</sup> NTOCC encourages CMS and private plans to adopt these care coordination measures as part of their pay-for-performance systems.

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74. *SNP Alliance Recommendations on SNP Performance Measurement* (Jan. 2006). The indicators proposed, however, are relevant to all populations and match the identified barriers of the CICV Coordination of Care Project. Suggested measures include:

1. Member of the health care team facilitates communication between providers in a timely manner to ensure safe and effective transitions.
2. Degree to which families/caregivers are included in care planning process consistent with patient preferences.
3. Member of the health care team communicates with patient within 72 hours of discharge to a new setting.
4. Patient medications are reviewed within 24 hours of discharge/transition.
5. The outpatient medical record acknowledges medication changes after discharge in a timely manner.

If a member is transferred between emergency departments, acute care facilities, or long-term care facilities, the medical record at the receiving facility should include medical records from the transferring facility or should acknowledge transfer of such medical records.

75. *NCQA 2007 Accreditation Standards*. QI 10 is the measure set linked to accreditation for Managed Care Organizations and includes: (1) Does the plan monitor the continuity and coordination of care between practitioners; for example, between a primary care physician and a specialist?; and (2) Does the plan measure its performance in these areas and make improvements



## SECTION VI:

# CONCLUSION

To improve quality of care and medical outcomes in this country, a number of steps must be taken to improve communication during transitions of care. In particular, NTOCC suggests and calls on all stakeholders to consider:

- Improving communications during transitions between providers, patients, and caregivers;
- Implementing electronic medical records that include standardized medication reconciliation elements;
- Establishing points of accountability for sending and receiving care, particularly for hospitalists, SNFists, primary care physicians, and specialists;
- Increasing the use of case management and professional care coordination;
- Expanding the role of the pharmacist in transitions of care;
- Implementing payment systems that align incentives; and
- Developing performance measures to encourage better transitions of care.

By addressing these critical issues, we firmly believe that we can greatly improve the health care system and the standard of care in this country while also controlling costs.

**APPENDIX A:**  
**MEDICATION RECONCILIATION**  
**ELEMENTS**



NATIONAL TRANSITIONS OF CARE COALITION

Suggested Common/Essential Data Elements for Medication Reconciliation

ASSESSMENT ON ACCESS TO CARE SETTING (E.G, HOSPITAL ADMISSION, NURSING HOME ADMISSION)				
Category	Element	Source(s)	Barrier(s)	Comments
Demographic	Name	Patient/caregiver	Cognitive status	Universally available unique identifier information
	Date of birth			
	ID Number			
	Gender			
	Contact information			
	Caregiver name and contact information	Caregiver	Caregiver knowledge of patient	
	Allergies/intolerances	Patient/caregiver		
	Date of assessment	Interviewer		May also include time of transport of info
Medications (active, taken chronically)	Name – generic/trade	Patient/caregiver	Patient/caregiver knowledge of complete medication list, cognitive status	NDC will be used in automated systems – name + dose
	Dose			
	Form			
	Frequency			
	Reason for use			
Other medications/OTC/herbal remedies/nutritional supplements/time-limited medications	Name – generic/trade			Stop dates for short term medications
	Dose			
	Form			
	Frequency			
<b>Other elements for consideration</b>				
Demographic	Primary language	Patient/caregiver	Patient/caregiver knowledge of complete medication list, cognitive status	Variety of methods to provide info on compliance
	Religious, cultural factors			
Medications	Prescriber			
	Compliance level			
Medical history	Known medical conditions			
Primary health care provider	NPI#			

Category	Element	Source(s)	Barrier(s)	Comments
Patient access to medications	Prescription benefits, out-of-pocket costs, public and manufacturers' pharmaceutical assistance programs, patient/caregiver access to pharmacy (e.g., in rural areas or in neighborhoods where pharmacies won't carry certain drugs, such as pain medications)	Patient/caregiver, health care setting personnel	Patient/caregiver lack of knowledge regarding, or difficulty navigating, benefit plans or programs, lack of patient/caregiver financial resources, gaps in public and manufacturers' pharmaceutical assistance	To ensure patients will be able to obtain prescribed medications.
<b>ASSESSMENT/RECONCILIATION ON TRANSFER OF CARE</b>				
Medications (to be continued at home, in long term care facility, etc.)	Name – generic/trade	MAR, health care setting personnel, physicians orders, universal order sheet	Incomplete documents, missing information, poor communication among care providers	Transfer information can serve as admission information on subsequent access to care. For home care or other self care setting, should include a plan to enhance adherence.
	Dose			
	Form			
	Frequency			
	Reason for use			
	Expected duration of use (chronic, time limited)	Patient/caregiver		Assign specified duration of use as appropriate for selected medication (e.g., end date, number of days). Examples include high risk medications such as anticoagulants following surgery, antibiotics, and steroids
Ability to self medicate	Patient/caregiver should be able to reconcile new medication list with previous list if self medicating at home			
Allergies/intolerances				
Validation	Name/date/signature	Health care provider, other	Poor coordination of transfer, provider/other not available to validate	Person taking responsibility for accuracy of list on transfer and communication with patient and caregivers

<b>Other elements for consideration</b>				
Category	Element	Source(s)	Barrier(s)	Comments
Medications	Reason for use	Health care provider	Time to provide information, gather documents	Could be provided in portable document file, printed documents
	Monitoring parameters, frequency			
Patient access to medications	Payer or other source	Patient/caregiver or health care personnel	Patient/caregiver/health care setting personnel lack of knowledge	To ensure patient will be able to obtain medications prescribed on transfer
Point of contact	Person/department	Health care provider, other	Poor coordination of transfer	Who to contact in the previous health care setting regarding medication issues

NTOCC realizes that health care systems vary in their method of data collection, access, and communication. This list of essential data elements is an attempt to provide a list of variables one should commonly and routinely consider when an individual is entering and leaving a different system or level of health care. Other elements are also offered for completeness when the resources and technology are available to complete the medication record.

Some important questions to consider with implementation of a medication reconciliation program are:

1. How is the information transferred or “harmonized” within the permanent medication record?
2. Who is responsible for signing off on the reconciliation tool?
3. Who is responsible to close the list and pass this document on to the next provider?
4. How is a provider reimbursed for completing this medication reconciliation form?
5. How is the information from the medication reconciliation tool at the provider’s level to be transferred to the patient’s personal medication list?

Rev. 4/17/08

**APPENDIX B:**

**PERSONAL MEDICINE LIST**



## How to use My Medicine List:

“My Medicine List” can help you and your family keep track of everything you take to keep you healthy—your pills, vitamins, and herbs. Having all of your medicines in one place also helps your doctor, pharmacist, hospital, or other healthcare workers take better care of you.

Start using “My Medicine List” today!

1. With help from your healthcare professional, fill out the form.
2. In order to fill out the form, you need a list of all of your medicines or everything you take in front of you. Be sure you include medicine you take from all pharmacies that you use as well as any over-the-counter medicines, vitamins, herbs or minerals you may take.
3. Next, think about what you take in the morning, afternoon, around dinner time, and before you go to bed.
4. For every medicine (including ones you get without a prescription), vitamin or herb you take, you need to write down these things:
  - The name of what you take (like Tylenol, Acetaminophen 500 mg)
  - How much you take of this (1 pill, 3 drops, 2 puffs)
  - What it looks like (round, white and red, clear liquid)
  - How you take it (by mouth, with food, with a needle)
  - You started taking this on: (Sept. 15, 2007)
  - You will stop taking this on: (Sept. 30, 2007)
  - Why you take it (for my arthritis, for my heart, to lower cholesterol)
  - Who told me to use it (my internist, my rheumatologist)

*Here's an example:*

Drug name (brand name, generic name, dose)	This looks like	How many?	How I take it	I started taking this on
Zocor, Simvastatin, 40 mg	yellow pill	1 pill	with water	June 2001

5. Always keep this card with you. Fold it and keep it in your wallet or purse, so you will have it in case of an emergency.
6. Whenever you stop taking something or start taking something new, be sure to update “My Medicine List”.
7. When you: go see the doctor, your pharmacist, have a test, or have to go to the hospital or emergency room, take this form with you.
8. If you have any questions about your medicines, contact your doctor or pharmacist.



My Medicine List was developed by the American Society of Health-System Pharmacists (ASHP) and the ASHP Research and Education Foundation through a sponsorship from sanofi-aventis, US, LLC. 10/2007



## My Medicine List



### This medicine list is for:

Name: \_\_\_\_\_ Birth date: \_\_\_\_\_

*If you need to get in touch with me, use:*

this phone number: \_\_\_\_\_

this e-mail: \_\_\_\_\_

Emergency contact: \_\_\_\_\_

*The best way to get in touch with my emergency contact is:*

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

I am allergic to: \_\_\_\_\_

I also have some other problems with medicines: \_\_\_\_\_

### Keeping My Medicine List up-to-date:

It is very important to keep this information current. Use the chart below to review and update your “My Medicine List”. You can do this with your doctor, pharmacist, nurse, or other health care professional.

Reviewed by:	Reviewed on:	Updated on:	Updated by:



### Questions for my doctor or pharmacist:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Use the guide on the back to fill out  
My Medicine List





**When I get up, I take:**

Drug name (brand name, generic name, dose)	This looks like	How many?	How I take it	I started taking this on:	I stop taking this on:	Why I take it	Who told me to take it



**In the afternoon, I take:**




**In the evening, I take:**

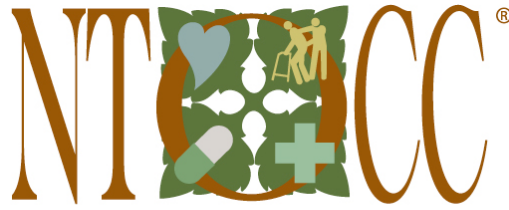



**Before I go to bed, I take:**


**Other medicines that I do not use every day:**


**APPENDIX C:**

**ELEMENTS OF EXCELLENCE IN  
TRANSITIONS OF CARE (TOC)**



NATIONAL TRANSITIONS OF CARE COALITION  
Elements of Excellence in Transitions of Care (TOC)

**TOC Checklist**

\*The purpose of this checklist is 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. The checklist can serve as an adjunct to each provider’s assessment tool, reinforcing the need to communicate patient care information during transitions of care. This list may also identify areas that providers do not currently assess but may wish to incorporate in the patient’s record. Every element on this checklist may not be relevant to each provider or setting.

\*For purposes of brevity, the term *patient/client* is used throughout this checklist to describe the client and client system (or patient and family). The *patient/client system* (or family), as defined by each patient/client, may include biological relatives, spouses or partners, friends, neighbors, colleagues, and other members of the patient/client’s informal support network. Depending on the setting in which this checklist is used, providers may wish to substitute *resident, consumer, beneficiary, individual*, or other terms for *patient/client*.

**Overarching Concepts**

**Engagement**

- Maximize patient/client involvement in all phases of intervention by promoting self-determination and informed decision-making.
- Provide educational information to support the patient/client’s participation in the plan of care.
- Protect patient/client’s right to privacy and safeguard confidentiality when releasing patient/client information.
- Affirm patient/client dignity and respect cultural, religious, socioeconomic, and sexual diversity.
- Assess and promote the patient/client’s efforts to participate in the plan of care.

**Collaboration**

- Define multidisciplinary team participants.
- Build relationships with all team members, with the patient/client at the center of the collaborative model.
- Communicate with other professionals and organizations, delineating respective responsibilities.
- Create awareness of patient/client and provider accountability for receiving and sending patient/client care information to and from care settings.
- Provide services within the bounds of professional competency and refer patient/client as needed.

**Strengths-based assessment**

- Use respect and empathy in patient/client interactions.
- Recognize patient/client’s strengths and use those abilities to effect change.
- Help patient/client use effective coping skills and insights to manage current crises.
- Recognize and help resolve patient/client’s difficulties.
- Distinguish cultural norms and behaviors from challenging behaviors.

### **Assessment as an ongoing process**

- Keep assessments flexible, varying with presenting problem or opportunity.
- Regularly reassess patient/client's needs and progress in meeting objectives.
- Facilitate goal-setting discussion based upon the patient/client's needs during all phases of care.
- Assess effectiveness of interventions in achieving patient/client's goals.
- Communicate changes in assessment and care plan to the health care team.

### **Common Elements for Assessment and Intervention**

#### **Physiological functioning**

- Assess patient/client's understanding of diagnosis, treatment options, and prognosis.
- Evaluate patient/client's life care planning and advance directive status.
- Evaluate impact of illness, injury, or treatments on physical, psychosocial, and sexual functioning.
- Evaluate patient/client's ability to return to or exceed pre-illness or pre-injury function level.

#### **Psychosocial functioning**

- Assess past and current mental health, emotional, cognitive, social, behavioral, or substance use/abuse concerns that may affect adjustment to illness and care management needs.
- Assess effect of medical illness or injury on psychological, emotional, cognitive, behavioral, and social functioning.
- Determine with patient/client which psychosocial services are needed to maximize coping.

#### **Cultural factors**

- Affirm patient/client dignity and respect cultural, religious, socioeconomic, and sexual diversity.
- Assess cultural values and beliefs, including perceptions of illness, disability, and death.
- Use the patient/client's values and beliefs to strengthen the support system.
- Understand traditions and values of patient/client groups as they relate to health care and decision-making.

#### **Health literacy and linguistic factors**

- Provide information and services in patient/client's preferred language, using translation services and interpreters.
- Use effective tools to measure patient/client's health literacy.
- Provide easy-to-understand, clinically appropriate material in layperson's language.
- Use graphic representations for patients/clients with limited language proficiency or literacy.
- Check to ensure accurate communication using teach-back methods.
- Develop educational plan based upon patient/client's identified needs.
- Evaluate caregiver's capacity to understand and apply health care information in assisting patient/client.

#### **Financial factors**

- Identify patient/client's access to, type of, and ability to navigate health insurance.
- Identify patient/client's access to and ability to navigate prescription benefits.
- Evaluate impact of illness on financial resources and ability to earn a living wage.
- Provide feedback on financial impact of treatment options.
- Educate patient/client about benefit options and how to access available resources.
- Assess barriers to accessing care and identify solutions to ensure access.

#### **Spiritual and religious functioning**

- Assess how patient/client finds meaning in life.
- Assess how spirituality and religion affect adaptation to illness.

#### **Physical and environmental safety**

- Evaluate patient/client's ability to perform activities of daily living and meet basic needs.

- Assess environmental barriers that may compromise the patient/client’s ability to meet established treatment goals.
- Determine with patient/client the appropriate level of care.
- Assess ability of family or other informal caregivers to assist patient/client.
- Assess for risk of harm to self or others.

**Family and community support**

- Identify patient/client’s formal and informal support systems.
- Assess how patient/client’s illness affects family structure and roles.
- Provide support to family members and other informal caregivers.
- Assess for, and if appropriate help resolve, conflicts within the family.
- Evaluate risk of physical, emotional, or financial abuse or neglect, referring to community social services as needed.

**Assessment of medical issues**

- Patient/client diagnosis
- Symptoms
- Medication list and reconciliation of new medications throughout treatment
- Adherence assessment and intention
- Substance use and abuse disorders
- Lab tests, consultations, x-rays, and other relevant test results

**Continuity/Coordination or Care Communication**

- Specific clinical providers
- Date information sent to referring physician, PCP, or other clinical providers
- Necessary follow-up care

**Example of Assessment & Coordination of Care Communication Checklist & Tool**

**Medication Assessment:**

- Review all prescribed medications, over-the-counter medications, and health/nutritional supplements

Name of Medication  
 Dose  
 Route  
 Frequency  
 Next Refill

Can the patient/client tell you:

- Reason she or he is taking medication
- Positive effects of taking medication
- Symptoms or side effects of taking medication
- Where the medication is kept at home
- The next refill date for the medication
- How long she or he needs to remain on the medication

Modified Morisky Scale – a validated, evidence-based tool (Morisky 1983)

Question	Motivation	Knowledge
1. Do you ever forget to take your medicine?	Yes(0) No(1)	
2. Are you careless at times about		



taking your medicine?	Yes(0) No(1)	
3. When you feel better do you sometimes stop taking your medicine?		Yes(0) No(1)
4. Sometimes if you feel worse when you take your medicine, do you stop taking it?		Yes(0) No(1)
5. Do you know the long-term benefit of taking your medicine as told to you by your doctor or pharmacist?		Yes(1) No(0)
6. Sometimes do you forget to refill your prescription medicine on time?	Yes(0) No(1)	

**Table 4. Modified Morisky Scale (1)**

**1. CMAG 2006**

**Hand off all assessments to the next level of care coordination**

**CONTINUITY/COORDINATION OF CARE:**

Y N	Does the patient/client have a primary care physician? (if appropriate) Send assessment information to PCP – Date
Y N	Does the patient/client have a specialty physician, e.g., cardiologist? (if appropriate) Send assessment information – Date
Y N	Does the patient/client have a psychiatrist or other mental health provider? (if appropriate) Send assessment information – Date
Y N	Does the patient/client have an outpatient case manager who should be notified? Send assessment information – Date
Y N	Ensure all transition services and care (medications, equipment, home care, SNF, hospice) are coordinated and documented – Date verified
Y N	Ensure patient/client and caregiver understand all information and have a copy of the care plan with them – Date verified

**Glossary**

**Advance directive** Describes two types of legal documents, a living will and medical power of attorney (also called a health care proxy or agent), that enable an individual to plan for and communicate her or his end-of-life wishes in the event that she or he is unable to communicate

**Care coordination** Process that typically encompasses the assessment of a patient/client's needs, development and implementation of a plan of care, and evaluation of the care plan

**Clinician** Health professionals who come into contact with patients/clients, including physicians, nurses, social workers, pharmacists, physician assistants, dieticians,

physical therapists, and occupational therapists

**Health literacy**

The ability to read, understand, and act on health information. Poor health literacy can cause medication errors, impair one's ability to remember and follow treatment recommendations, and reduce one's ability to navigate the healthcare system.

**Mental health provider**

Professional, such as a social worker, psychiatric nurse, psychologist, psychiatrist, or licensed counselor, who provides one or more of a variety of mental health services

**Misuse**

Failure to achieve full benefit of an appropriate treatment or service due to preventable complication or misapplication of care

**Overuse**

Providing a medication or other type of care when the potential harm is greater than the potential benefit

**SNFists**

Primary care physicians who spend a substantial portion of their practice caring for postacute or subacute patients/clients in skilled nursing facilities

**Transitional care**

Care involved when a patient/client leaves one care setting (i.e. hospital, nursing home, assisted living facility, SNF, primary care physician, home health, or specialist) and moves to another

**Underuse**

Failure to provide a service, such as medications or preventive services, which would have produced a favorable outcome for a patient

## **APPENDIX D:**

# **PROPOSED FRAMEWORK OUTLINE FOR MEASURING TRANSITIONS OF CARE**

## **I. STRUCTURE:**

**A. Accountable provider at all points of transition.** Patients should have an accountable provider or a team of providers during all points of transition. This provider(s) should be clearly identified and will provide patient centered care and serve as central coordinator of his/her care across all settings, across other providers.

**B. Plan of care.** The patient should have an up-to-date, proactive care plan that includes clearly defined goals, takes into consideration patient's preferences, and is culturally appropriate.

**C. Use of health information technology (HIT).** Management and coordination of transitional care activities is facilitated through the use of integrated electronic information systems that are interoperable and available to patients and providers.

## **II. PROCESSES:**

### **A. Care Team Processes:**

- Medication reconciliation.
- Test tracking (lab and diagnostic procedures).
- Referral tracking.
- Admission and discharge planning.
- Follow up appointment.

### **B. Information transfer/communication between providers.**

- Timeliness, completeness and accuracy of information transferred.
- Protocol of shared accountability in effective transfer of information.

### **C. Patient education and engagement.**

- Patient preparation for transfer.
- Patient education for self-management.
- Appropriate communication with patients with limited English proficiency and health literacy.

## **III. OUTCOMES**

- Patient experience (including family or care giver).
- Provider experience (individual practitioner or health care facility).
- Patient safety (medication errors, etc)
- Health care utilization and costs (reduced avoidable hospitalizations)
- Health outcomes (clinical and functional status; intermediate outcomes, therapeutic endpoints).

## APPENDIX E:

# GLOSSARY

The following definitions are how the words are used in the context of this paper, based on the sources as originally cited above.

**Advance directive.** Describes two types of legal documents, a living will and medical power of attorney (also called a health care proxy or agent), that enable an individual to plan for and communicate her or his end-of-life wishes in the event that she or he is unable to communicate.

**Care coordination.** Process that typically encompasses the assessment of a patient/client's needs, development and implementation of a plan of care, and evaluation of the care plan.

**Caregivers.** Caregivers are family, friends, partners and neighbors that provide vital services to the chronically ill, elderly, and disabled.

**Clinician.** Health professionals who come into contact with patients/clients, including physicians, nurses, nurse practitioners, social workers, pharmacists, physician assistants, dietitians, physical therapists, speech therapists, and occupational therapists.

**Health literacy.** The ability to read, understand, and act on health information. Poor health literacy can cause medication errors, impair one's ability to remember and follow treatment recommendations, and reduce one's ability to navigate the healthcare system.

**Hospitalist.** Physician whose primary professional focus is the general medical care of

hospitalized patients. Activities include patient care, teaching, research and leadership related to hospital medicine.

**Mental health provider.** Professional, such as a social worker, psychiatric nurse, psychologist, psychiatrist, psychotherapist, or licensed counselor, who provides one or more of a variety of mental health services.

**Misuse.** Failure to achieve full benefit of an appropriate treatment or service due to preventable complication or misapplication of care.

**Overuse.** Provision of a medication or other type of care when the potential harm is greater than the potential benefit.

**Patient/Consumer.** The terms patient and consumer are used interchangeably throughout this paper and refer to anyone who is receiving healthcare services.

**SNFists.** Physicians who spend a substantial portion of their practice caring for post acute or sub acute patients/clients in skilled nursing facilities.

**Transitional care.** Care involved when a patient/client leaves one care setting (i.e. hospital, nursing home, assisted living facility, SNF, primary care physician, home health, or specialist) and moves to another.

**Underuse.** Failure to provide a service, such as medications or preventive services, which would have produced a favorable outcome for a patient.

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