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Care Coordination

EXECUTIVE SUMMARY

Care coordination—a function that helps ensure that the patient’s needs and preferences for health services and information sharing across people, functions, and sites are met over time—is foundational to high-quality healthcare. All patients, but especially the growing number of Americans who suffer from multiple chronic conditions, can benefit from care coordination. Care coordination is an information-rich, patient-centric endeavor that seeks to deliver the right care (and *only* the right care) to the right patient at the right time. Unfortunately, the prevailing model of healthcare for most patients is poorly coordinated, to the detriment of the patient. This poses a threat to patients and the healthcare system in the form of heavy disease burden, safety concerns, and financial inefficiency.

Essential elements of care coordination include a written plan of care that anticipates routine needs and actively tracks up-to-date progress toward a patient’s goals, and a communications “feedback loop” consisting of open dialogue among members of the care team, the patient, and his or her family. The “healthcare home,” similar to but more expansive than the commonly known “medical home,” is a promising model that may achieve truly coordinated care on a vast scale. The healthcare home is a single, coordinating source of usual care selected by the patient, such as a large or small medical group, a single practitioner, a community health center, or a hospital outpatient clinic. Several demonstration projects currently are testing the viability of the healthcare home model for many Americans.

The National Quality Forum (NQF) has completed significant work to advance care coordination, including the endorsement of a definition and framework for care coordination; the NQF-convened National Priorities Partnership; the designation of care coordination as one of six “National Priorities” for national action; and the endorsement of preferred practices and performance measures for care coordination. Ultimately, achieving coordinated care will be possible only when healthcare entities collectively agree to place the patient at the center of care.

Introduction

AMERICA’S FRAGMENTED HEALTHCARE SYSTEM

Scientific and technological progress have transformed healthcare in the United States into a dynamic, advanced enterprise. Today, many Americans enjoy access to sophisticated, highly developed diagnostic tests and interventions delivered in state-of-the-art institutions. These treatments have, without doubt, extended the lives and improved the health of millions of people.

As a result, healthcare in the United States is intricate and highly specialized. Yet while care may be delivered in a technically correct fashion within silos, this intricacy also has led to fragmentation, in which one clinical provider often does not know what another is doing with the same patient. Further, the complexity of care today is such that patients frequently do not understand how to care for themselves after they leave the clinical setting, even following a primary care visit. This situation creates a dangerous, unnecessarily complicated, and bewildering environment for patients—putting at risk of harm the very people the system seeks to serve, with sometimes disastrous consequences.

Today, the average Medicare patient sees two primary care physicians and five specialists a year,¹ and patients with multiple chronic conditions may see up to 16 physicians a year.^{2,3} For one-third of patients, the assigned primary physician changes yearly.⁴ In the overwhelming majority of instances, clinicians are unaware of a patient’s history. The challenge of coordinating basic information—e.g., test results, allergies, prescription medications, diagnosis—among so many clinical providers is extreme. The resultant lack of communication among providers often means that critically important information is never conveyed, or is lost or ignored, to the patient’s detriment.

Even for patients without chronic conditions, the transfer of care responsibility from one clinician to another—the “hand-off”—is rife with error.⁵ Follow-up care for patients discharged from acute care hospitals or sent home from a practitioner visit after a diagnosis also presents a problem area, when patients are not fully instructed on what they should eat or avoid eating (and when), what medications they should take, or when to return to visit the clinician. For all patients, but especially for patients with chronic healthcare needs, poorly coordinated care often leads to medical errors, higher costs, and unnecessary pain.

CARE COORDINATION IS A FUNCTION THAT HELPS ENSURE that the patient's needs and preferences for health services and information sharing across people, functions, and sites are met over time. Coordination maximizes the value of services delivered to patients by facilitating beneficial, efficient, safe, and high-quality patient experiences and improved healthcare outcomes.

WHAT IS CARE COORDINATION?

Care coordination has emerged as a cornerstone of quality healthcare. “Healthcare cannot be of high quality without being delivered in a coordinated, efficient manner,” says Janet M. Corrigan, PhD, MBA, president and CEO of the National Quality Forum (NQF). “Any healthcare system that truly places the patient at the center of care must place among its highest priorities the reorganization of its processes and systems so that care is fully coordinated and responsive to patient needs and preferences.” Accordingly, the NQF-convened National Priorities Partnership has designated care coordination as one of six “National Priorities” for national action.

Care coordination has been defined as “a function that helps ensure that the patient’s needs and preferences for health services and information sharing across people, functions, and sites are met over time.”⁶ Under this definition, care coordination maximizes the value of services delivered to patients by facilitating beneficial, efficient, safe, and high-quality patient experiences and improved healthcare outcomes.

Care coordination is an information-rich, patient-centric endeavor that seeks to deliver the right care (and *only* the right care) to the right patient at the right time. It helps ensure that patients’ needs and preferences for healthcare services are understood and that they are shared as patients move from one healthcare setting to another or to home, as care is transferred from one healthcare organization to another or is shared among a primary care professional and specialists.⁷

“Since care coordination is the foundation of consistent delivery of patient-centered healthcare, we must promote it effectively,” says Donald E. Casey, MD, MPH, MBA, vice president, quality; chief medical officer, Atlantic Health System, Morristown, NJ; and co-chair of the Steering Committee for NQF’s Preferred Practices and Performance Measures for Measuring and Reporting Care Coordination project.

Essential elements of care coordination include patients’ ability to have consistent access to the same healthcare profes-

sional over time, formalized plans of care to ensure that all clinicians who care for a patient know the patient’s history and desires, and significant, accessible communications mechanisms. Care coordination does involve fundamental changes to the current healthcare delivery and payment systems. However, it is achievable, and projects are currently underway that may demonstrate models for implementing coordinated care across regions and systems.

CARE COORDINATION: The need, the benefit, essential elements

WHO NEEDS COORDINATED CARE?

In 2001, the Institute of Medicine defined quality healthcare as healthcare that is safe, timely, effective, efficient, equitable, and patient centered.⁸ Care coordination addresses all of these domains, particularly safety, effectiveness, efficiency, and patient-centeredness, because properly coordinated care can avoid waste; conflicting plans of care; and over-, under-, or misuse of prescribed medications, tests, and therapies.⁹ Thus, care coordination would benefit every American patient.

Care coordination is especially important for people with chronic conditions, such as diabetes, because such patients often receive care in multiple settings from numerous providers. In 2000, 125 million people in the United States were living with at least one chronic illness — a number that is expected to grow to 157 million by 2020. The number of patients with multiple chronic conditions is expected to reach 81 million by 2020.¹⁰ As these patients attempt to navigate the complex healthcare system and transition from one care setting to another, they often are unprepared or unable to manage their care. Incomplete or inaccurate transfer of information, poor communication, and a lack of appropriate follow-up care can lead to confusion and poor outcomes, such as medication errors and preventable hospital readmissions and emergency department visits.

“Care coordination would benefit every single patient, but especially vulnerable populations, such as the frail elderly or those with multiple chronic conditions,” says Gerri S. Lamb, PhD, RN, associate professor, Arizona State University College of Nursing & Health Innovation; visiting scholar, Emory University Nell Hodgson Woodruff School of Nursing; and co-chair of the Steering Committee for NQF’s Preferred Practices and Performance Measures for Measuring and Reporting Care Coordination project. “The dismaying fact is that if there is a potential for people to fall through the cracks of the system, they often will.”

The heavy disease burden posed by poorly coordinated care poses a serious threat to patients. Nearly one in five Medicare patients are readmitted to the hospital within 30 days, and three-quarters of those readmissions are potentially preventable.¹¹ Nearly 20 percent of patients admitted to the hospital with a preventable admission had at least one preventable readmission within six months,¹² and many patients do not receive timely follow-up with their primary source of care after being discharged from the hospital.¹³ The United States consistently ranks behind other industrialized countries in the frequency of emergency department use for conditions that could have been treated with appropriate primary care.¹⁴

Poorly coordinated care also is unsafe, whether the patient suffers from a chronic illness or is being hospitalized for an acute episode, because of the medical and medication errors that can follow. Nearly one in five patients discharged from the hospital to home experience an adverse event within three weeks, and two-thirds of them are due to adverse drug events.¹⁵ Annually, more than 700,000 patients were treated for adverse drug events in U.S. emergency departments in 2004 and 2005, and one of every six required admission, transfer to another facility, or an emergency department observation admission.¹⁶ The safety challenges posed at handoffs—transitions of care in which one clinician or unit assumes responsibility from another for the patient’s care—are acute, accounting for an estimated 35 percent of The Joint Commission’s sentinel events¹⁷ and leading to The Joint Commission’s creation of a National Patient Safety Goal to implement a standardized approach to handoff communications.¹⁸

Finally, poorly coordinated care is financially inefficient. The cost to Medicare of preventable hospital readmissions that occur within 30 days of discharge is estimated to be more than \$15 billion a year.¹⁹ For the aforementioned one-fifth of patients who have another preventable admission within six months, the costs skyrocket to \$729 million, or \$7,400 per readmission.²⁰

ESSENTIAL ELEMENT: THE PLAN OF CARE

A critical construct of coordinated care is the “plan of care”—the written plan that anticipates routine needs and tracks progress toward a patient’s goals. A proactive plan of care that emphasizes self-management, goals, and support should serve as a central care coordinating mechanism for all patients, families, and care team members.

Plans of care are important for all patients, but particularly those with chronic diseases, because management of chronic conditions can vary widely over time. Treatments and the care provided may change as the patient’s symptoms change.²¹

Therefore, the plan of care becomes an important guidepost between clinician-driven care and patient self-management. The plan of care also is vital during handoffs and transitions of care, because it can serve as the main communication document between clinicians and care settings and outline elements such as the medication list, follow-up steps, identification of care problem, and resources for nonclinical care.

ESSENTIAL ELEMENT: COMMUNICATION

Integrated with the plan of care, but distinct from it, is the critical role of the “feedback loop” in coordinated care.

Communication within the construct of care coordination consists of open dialogue among members of the care team, the patient, and his or her family. In a properly coordinated care environment, communication entails the care team, patient, and family agreeing upon and working within the plan of care, readily sharing consultation notes and progress reports, sharing decision making,²² and maintaining privacy with access to information. Communication strategies should involve health literacy, translators, and expert panels as appropriate and should be culturally competent.²³

Communication among primary care providers, hospital providers, specialists, and nonclinical resources in the community is critically important for optimal care.²⁴ Communication has become a vehicle of many hospital programs to improve transitions and reduce medical errors and rehospitalizations. Some hospitals have successfully implemented patient-centered strategies that address gaps in communication by including a family member, a caregiver, or a nurse care coordinator in the care of a patient in the hospital. Improved communication leads to a quicker reconciliation of care issues and a clearer understanding of follow-up protocols, both of which lead to better outcomes for the patient.

The Healthcare Home: A Potential Solution?

One potential vehicle to enhance care coordination is the healthcare home—a single, coordinating source of usual care selected by the patient, such as a large or small medical group, a single practitioner, a community health center, or a hospital outpatient clinic.²⁵

The definition of a healthcare home expands upon the popularly known medical home (sometimes known as the “patient-centered medical home”), which was introduced in 1967²⁶ and grew in popularity in the first decade of the 21st century. The medical home has evolved to be defined as “a physician practice committed to organizing and coordinating

care based on patients' needs and priorities, communicating directly with patients and their families, and integrating care across settings and practitioners."²⁷ Today, healthcare and industry coalitions such as the Patient-Centered Primary Care Collaborative²⁸ and the Future of Family Medicine Project²⁹ are advocating for the model's widespread adoption. The healthcare home definition is broader, such that the entity or endeavor need not be directed by a primary care physician. Nurses, psychiatric clinicians, or other healthcare clinical providers can serve the coordinating function envisioned in the healthcare home. While the term "medical home" remains commonly used, some healthcare organizations have endorsed defining the concept more broadly.³⁰

WHAT IS A HEALTHCARE HOME?

A healthcare home is a source of usual care selected by the patient (such as a large or small medical group, a single practitioner, a community health center, or a hospital outpatient clinic). The medical home also should function as the central point for coordinating care around the patient's needs and preferences. The medical home also should coordinate between all of the various team members, which include the patient, family members, other caregivers, primary care providers, specialists, other healthcare services (public and private), and nonclinical services as needed and desired by the patient.³¹

Fundamental to the concept of a healthcare home is comprehensive, coordinated care. Important characteristics of the healthcare home include an enduring relationship, a single point of access, information about the patient and origins of interpretation of information from many sources, and routine, acute, and chronic care coordination.

Much of the supporting evidence for healthcare homes and their components has emerged from research on physician-led medical homes. Through better coordination of care, the medical home model offers opportunities to improve the quality of care for patients, particularly those with multiple chronic illnesses. Research also has shown that other similar concepts may improve patient care and health outcomes, such as the nurse-managed health centers. In a pilot study of six

nurse-managed centers, the focus of services is on the needs of communities; healthcare is offered as well as nontraditional services, such as stress reduction and assistance in addressing adolescent and neighborhood violence and drug addictions.³²

The healthcare home, appropriately implemented respecting community and patient needs, should serve as the point of access for communication among the patient, family, and care providers—all information about the patient's health status and related activities should be filtered through the healthcare home—and it should promote continuous coordination for all services of care.

THE ROLE OF INFORMATION TECHNOLOGY

One key element of the healthcare home is that health information technology (HIT) must be used to support patient care, performance measurement, patient education, and enhanced communication. HIT can provide a foundation for the healthcare home, such as providing critical patient information to the entire care team across all stages of care; support meaningful clinician-patient communication; enable timely and accurate performance measurement and improvement; and improve accessibility of the practice to the patient.³³

Given the healthcare industry's rapid adoption of HIT, especially that encouraged by the American Recovery and Reinvestment Act of 2009, it stands to reason that HIT should be prominently featured in the healthcare home. Given the vulnerability of populations that the healthcare home seeks to serve, the Patient-Centered Primary Care Collaborative has proposed a beginning set of guidelines for the use of HIT within healthcare homes:

- ◆ Health data and information must be accessible to primary care medical home practices, physicians, and patients;
- ◆ Standards, protocols, and rules for health data exchange on the network should be fully open and supportive of data portability and interoperability;
- ◆ HIT should support the enhanced practice efficiency and quality of care that is required by the medical home model; and
- ◆ Confidentiality of data should be imperative.³⁴

NQF Work on Care Coordination

NQF, a nonprofit organization that aims to improve the quality of healthcare for all Americans, has recognized the essential role that care coordination plays in improving the quality of healthcare and thus has engaged in several projects intended to advance care coordination in the United States.

FRAMEWORK AND DEFINITION

In 2006, NQF endorsed, via its formal consensus development process, a standardized definition and framework for measuring care coordination, with the aim of facilitating urgently needed development of measures for this priority area.

The NQF-endorsed® definition underlies all ongoing NQF work in care coordination, including this issue brief. The framework encompasses five domains, or essential components and subcomponents for which performance measures should be developed if care coordination is to be comprehensively measured and improved.³⁵

FRAMEWORK FOR MEASURING CARE COORDINATION

Domains

1. Healthcare “home”
2. Proactive plan of care and follow-up
3. Communication
4. Information systems
5. Transitions or “hand-offs”

The framework also includes four principles, addressing overarching considerations in measuring care coordination. They are:

- ◆ care coordination is important for everyone;
- ◆ some populations (e.g., children with special healthcare needs, the frail elderly) are particularly vulnerable to fragmented, uncoordinated care;
- ◆ appropriate accountability for care coordination lies with the physician, the group, and the organization level; and
- ◆ surveys of experience of care are essential to measuring care coordination.

PREFERRED PRACTICES AND PERFORMANCE MEASURES

Following its endorsement of a definition and framework, NQF embarked on a full consensus project to endorse a set of preferred practices and performance measures for care coordination that are applicable across all settings of care and identify high-priority research areas to advance the evaluation of care coordination as a quality improvement tool. This project, completed early in 2010, led to the endorsement of a set of 25 preferred practices and 10 performance measures.³⁶ The preferred practices are suitable for widespread implementations; address the domains of the NQF-endorsed Care Coordination Framework and the NPP goals, and are applicable and

generalizable to multiple care settings, diverse patient populations—including parents or guardians when appropriate—and a broad spectrum of providers. (For a list of the NQF-endorsed preferred practices for care coordination, see appendix A.)

NEWLY NQF-ENDORSED PERFORMANCE MEASURES FOR CARE COORDINATION*

- ◆ Cardiac rehabilitation patient referral from an inpatient setting
- ◆ Cardiac rehabilitation patient referral from an outpatient setting
- ◆ Patients with a transient ischemic event ER visit who had a follow-up office visit
- ◆ Biopsy follow-up
- ◆ Reconciled medication list received by discharged patients (inpatient discharges to home/self-care or any other site of care)
- ◆ Transition record with specified elements received by discharged patients (inpatient discharges to home/self-care or any other site of care)
- ◆ Timely transmission of transition record (inpatient discharges to home/self-care or any other site of care)
- ◆ Transition record with specified elements received by discharged patients (emergency department discharges to ambulatory care [home/self-care])
- ◆ Melanoma continuity of care–recall system
- ◆ 3-Item Care Transitions Measure (CTM-3)**

* This list comprises the measures NQF endorsed or re-endorsed in 2010 in its preferred practices and performance measures project. NQF previously endorsed hospital readmission performance measures that are relevant to care coordination; those measures were not considered for re-endorsement in this project but retain their status as voluntary consensus standards.

** NQF initially endorsed the CTM-3 in 2006. It was re-endorsed as part of NQF’s broader care coordination project in 2010.

The 10 performance measures for care coordination expand NQF’s portfolio of measures for continuity of care, communication, transitions, information systems, and the healthcare home. The purpose of these consensus standards is to improve the quality of healthcare—via accountability and public reporting—by standardizing the quality measurement for transitions of care, patient engagement and involvement with care plans,

information systems, and the role of the setting in which patients receive their usual source of care. The consensus standards are intended for use at various levels of analysis, including individual clinicians, groups, plans, systems, and populations.

CTM-3

Among the performance measures that NQF endorsed in its 2010 report was the 3-Item Care Transitions Measure (CTM-3); this was a re-endorsement of a measure that NQF originally endorsed in 2006.³⁷ This consensus standard is of special significance as it is a measure of the patient’s perception of the quality of care coordination (specific to the hospital setting). This three-question survey is important because care can be provided in a technically coordinated fashion but is only truly coordinated if the patient perceives it as such.

3-ITEM CARE TRANSITIONS MEASURE

1. The hospital staff took my preferences and those of my family or caregiver into account in deciding what my healthcare needs would be when I left the hospital.
2. When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
3. When I left the hospital, I clearly understood the purpose for taking each of my medications.

For full specifications of the CTM-3, see NQF’s National Voluntary Consensus Standards for Hospital Care: Additional Priority Areas—2005-2006.

The CTM-3’s specifications are divided into five domains: the survey instrument (see text box), sampling, survey administration, scoring and patient-mix adjustment, and reporting data. When properly employed, use of the CTM-3 survey instrument will provide hospitals a snapshot of their care coordination performance. The CTM-3 was developed from a 15-item survey in order to reduce burden on providers;³⁸ the longer survey has been widely deployed as a precise measure of the quality of the post-hospital care transition experience from the patient’s perspective.³⁹

Prioritizing Care Coordination and Looking Ahead

In 2008, the National Priorities Partnership (NPP)—a diverse group of national organizations representing those who receive, pay for, deliver, and evaluate healthcare—released an action agenda to transform healthcare during a time of severe economic strain by better investing resources to fundamentally

improve patient care and outcomes. In 2008, the NQF-convened NPP selected care coordination as one of six “National Priorities” for national action to eliminate waste, harm, and disparities to create and expand world-class, patient-centered, affordable healthcare.⁴⁰ As a National Priority, the impact of well-coordinated care will reverberate across the Priorities. Increased communication between patients and providers, stronger record keeping, and more efficient, patient-centered care can reduce harm while making healthcare more reliable and accessible. “The designation of care coordination as a National Priority demonstrates that healthcare stakeholders from across the spectrum are very serious about addressing the myriad of issues associated with patient transitions in care,” says Rita Munley Gallagher, PhD, RN, senior policy fellow at the American Nurses Association.

The 32 major national organizations that comprise the NPP have shed their own self-interests not only to agree to a core set of National Priorities and Goals but also to take action to achieve specific, measurable progress. Members of the NPP have agreed to work toward the following goals:

- ◆ improve care and achieve quality by facilitating and carefully considering feedback from all patients regarding coordination of their care;
- ◆ improve communication around medication information;
- ◆ work to reduce 30-day readmission rates; and
- ◆ work to reduce preventable emergency department visits by 50 percent.

Accordingly, NPP’s Care Coordination Work Group—co-chaired by Gallagher and Nancy Foster, vice president for quality and patient safety policy at the American Hospital Association (representing the Hospital Quality Alliance)—convened a group in 2010 to discuss reducing readmissions. The activity focused on barriers to and drivers of change, important measure gaps, and implications for health information technology. “Care coordination is of critical importance to our members and, more importantly, to the patients we serve,” Foster says. “Hospitals are undertaking a variety of initiatives to improve coordination as we transition patients out of the hospital, but we realize that these efforts are just a beginning that will broaden, strengthen, and become much more effective through the efforts of the National Priorities Partnership.”

Projects and Demonstrations

Currently, several pilot and demonstration projects that hold promise for care coordination are underway. Most of these are either just being implemented or are in various stages of completion. Following are three noteworthy initiatives; while not meant to be a complete listing, these case studies are projects worth following.

MEDICARE-MEDICAID ADVANCED PRIMARY CARE DEMONSTRATION INITIATIVE

The Centers for Medicare & Medicaid Services (CMS) is in the process of implementing a demonstration project that will enable Medicare to join Medicaid and private insurers in innovative, state-based “advanced primary care” (i.e., medical home) initiatives. CMS is soliciting applications from states, which are the only entities permitted to apply. States must certify that they:

- ◆ have established effective medical home models in all or parts of their states that include their Medicaid program as well as private payers;
- ◆ can demonstrate that a majority of the primary care physicians in the demonstration areas would participate;
- ◆ have stringent requirements for designating medical home providers, including independent accreditation and requirements for the use of health information technology;
- ◆ have integrated public health services to emphasize wellness and prevention; and
- ◆ have secured the participation of a sufficient number of private payers.

CMS also is moving forward with a separate Medical Home Demonstration required under the Medicare Improvements for Patients and Providers Act and the Tax Relief & Health Care Act of 2006.⁴¹

MINNESOTA'S VISION: HEALTHCARE HOMES

In May 2008, Minnesota passed state health reform legislation that includes payment to primary care providers for partnering with patients and families to provide coordination of care.⁴² Since then, the state has built the foundation for healthcare homes by conducting a capacity assessment, developing certification standards and a certification process, conducting learning collaboratives, developing outcomes measures, and devising a payment methodology.⁴³ The state Department of Human Services has proposed paying an average of \$31.39 per month to clinicians for a patient receiving healthcare home care.⁴⁴ The state will start paying for medical homes in July 2010.

CIGNA AND DARTMOUTH-HITCHCOCK PATIENT-CENTERED MEDICAL HOME PILOT PROJECT

The managed care organization CIGNA and Dartmouth-Hitchcock, the New Hampshire-based integrated care organization, launched a medical home pilot program in 2008 with the goal of improving the quality, affordability, and patient satisfaction with care through collaboration and aligned incentives. The program includes 391 physicians in 5 sites and more than 17,000 covered lives in pediatrics, family practice, and internal medicine. It has three key components: clinical information, clinical collaboration, and a blended payment model.

Dartmouth-Hitchcock provides “embedded case management services”—a nurse who helps to coordinate the care of the patient with the goal of improving quality and reducing avoidable emergency department visits and hospitalizations.⁴⁵

HOSPITAL 2 HOME

The Hospital to Home (H2H) initiative, developed by the American College of Cardiology and the Institute for Healthcare Improvement (IHI), is seeking to reduce the 30-day, all-cause hospital readmission rates among patients discharged with heart failure or acute myocardial infarction by 20 percent nationally by December 2012. This “excellence in transitions” project, which is modeled after successful national initiatives by both organizations, is building a community of hospitals, healthcare systems, clinical practices, and collaborators dedicated to reducing preventable hospital readmissions; is providing straightforward, evidence-based recommendations for improving transitions; and will disseminate customizable ideas, tools, and strategies.⁴⁶

CARE TRANSITIONS QIOSC

Fourteen Medicare Quality Improvement Organizations (QIOs) across the nation are working on care transitions with support from the Care Transitions Quality Improvement Organization Support Center (QIOSC). QIOs will promote seamless transitions from the hospital to home, skilled nursing care, or home health care, and will work to reduce unnecessary readmissions to hospitals that may increase risk or harm to patients and cost to Medicare. CMS will look to QIOs to implement projects that effect process improvements to address issues in medication management, post-discharge follow-up, and plans of care for patients who move across healthcare settings.⁴⁷ The three-year project runs through July 2011.

Projects include:

- ◆ educating patients before discharge on their medicine, diagnosis, and the need for follow-up care;
- ◆ giving patients pill planners; and
- ◆ making follow-up calls to check on heart failure and pneumonia patients.⁴⁸

PROJECT BOOST

Project BOOST (Better Outcomes for Older adults through Safe Transitions) is an initiative of the Society of Hospital Medicine to improve the care of patients as they transition from the hospital to home. The project aims to reduce 30-day readmission rates for general medicine patients, with particular focus on older adults; improve flow of information between hospital and outpatient physicians; ensure that high-risk patients are identified and specific interventions are offered to mitigate their risk; and improve patient and family

education practices to encourage use of the teach-back process. The approach involves creating consensus for best practices, creating resources to implement those practices, and providing technical support. Thirty hospitals across the country are participating in two initial phases.⁴⁹

STAAR INITIATIVE

IHI and The Commonwealth Fund are sponsoring the State Action on Avoidable Rehospitalizations (STAAR) Initiative, a two-year, multistate project to reduce avoidable rehospitalizations. The initiative is composed of a multistate learning community to improve transitions of care and targeted technical assistance to address systemic barriers to reducing avoidable re-hospitalizations. In the first year, the initiative focuses on improving the transition out of the hospital for all patients—starting with a hospital-based team and including representatives from skilled nursing facilities, home health agencies, ambulatory practices, and patients and family caregivers as members of hospital-based “transitions” teams. IHI is supporting the improvement work in hospitals by creating a learning community across the states, hospitals, and teams working on process changes.⁵⁰

Conclusion

Despite unprecedented scientific achievements, healthcare in the United States often is a confounding and frustrating exercise for patients. The science of healthcare may be highly evolved and developing rapidly, but the American healthcare delivery system has not kept pace in a way that is meaningful to patients. The particularities of our pluralistic system, with its large numbers of small providers, magnify the number of venues patients need to visit. This system is fragmented, overly complex, and filled with barriers to complete care even for those who enjoy full access to care and particularly for those from vulnerable populations or suffering from multiple chronic conditions.

Coordinating care would restructure healthcare to place the patient at the center of care. This is a monumental challenge, involving fundamental changes both to how healthcare is delivered and how it is paid for. Addressing flaws in care coordination presents greater challenges than the quality-improvement work that takes place within a hospital or clinician’s office because it requires work to transcend the boundaries of one institution or organization. While healthcare reform can address aspects, no single piece of legislation can truly resolve the transformation issues that care coordination presents.

The size of the challenge must not discourage confronting it. Several proposals address methods of improving care coordination, including electronic referral, hospitalist- or advanced-practice nurse-initiated post-discharge care, and care coordination payment under Medicare. The healthcare home, which envisions a system of first-contact care, continuity of care over time, comprehensiveness, and responsibility to coordinate care throughout the health system, may hold the greatest promise for rapidly achieving care coordination for a large number of Americans, although significant payment and delivery system questions need to be resolved. These proposals, in their totality, may make significant progress toward restructuring the system in order to achieve coordinated care.

Several initiatives and demonstration projects, including but not limited to healthcare home demonstration projects, are underway. Many of these are initially limited in scope but show great promise. Collectively, the evidence they are gathering will point the way toward the formation of a healthcare system that is truly coordinated, to the ultimate benefit of the patient.

As San Francisco physician and care coordination advocate Thomas Bodenheimer, MD, has noted, improvement in care coordination requires that different healthcare entities, sometimes working in competition, perform together.⁵¹ This requires the setting aside of parochial interests and placing the patient at the center of care. Only then can all care be coordinated for every patient every day.

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For more information, contact info@qualityforum.org.

NQF’s mission is to improve the quality of American healthcare by setting national priorities and goals for performance improvement, endorsing national consensus standards for measuring and publicly reporting on performance, and promoting the attainment of national goals through education and outreach programs.

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Appendix A: NQF-endorsed® National Voluntary Consensus Standards for Care Coordination, Preferred Practices

National Voluntary Consensus Standards for Care Coordination
Preferred Practices: Healthcare “Home” Domain
Preferred Practice 1: The patient shall be provided the opportunity to select the healthcare home that provides the best and most appropriate opportunities to the patient to develop and maintain a relationship with healthcare providers.
Preferred Practice 2: Healthcare home or sponsoring organizations shall be the central point for incorporating strategies for continuity of care.
Preferred Practice 3: The healthcare home shall develop infrastructure for managing plans of care that incorporate systems for registering, tracking, measuring, reporting, and improving essential coordinated services.
Preferred Practice 4: The healthcare home should have policies, procedures, and accountabilities to support effective collaborations between primary care and specialist providers, including evidence-based referrals and consultations that clearly define the roles and responsibilities.
Preferred Practice 5: The healthcare home will provide or arrange to provide care coordination services for patients at high risk for adverse health outcomes, high service use, and high costs.
Preferred Practices: Proactive Plan of Care and Follow-up Domain
Preferred Practice 6: Healthcare providers and entities should have structured and effective systems, policies, procedures, and practices to create, document, execute, and update a plan of care with every patient.
Preferred Practice 7: A systematic process of follow-up tests, treatments, or services should be established and be informed by the plan of care.
Preferred Practice 8: The joint plan of care should be developed and include patient education and support for self-management and resources.
Preferred Practice 9: The plan of care should include community and nonclinical services as well as healthcare services that respond to a patient’s needs and preferences and contribute to achieving the patient’s goals.
Preferred Practice 10: Healthcare organizations should utilize cardiac rehabilitation services to assist the healthcare home in coordinating rehabilitation and preventive services for patients with a recent cardiovascular event.
Preferred Practices: Communication
Preferred Practice 11: The patient’s plan of care should always be made available to the healthcare home team, the patient, and their designees.
Preferred Practice 12: All healthcare home team members, including patients and their designees, should work within the same plan of care and share responsibility for their contributions to the plan of care and achieving the patient’s goals.
Preferred Practice 13: A program should be used that incorporates a care partner to support family and friends when caring for a hospitalized patient.
Preferred Practice 14: Assess and document the provider’s perspective of care coordination activities.
Preferred Practices: Information Systems
Preferred Practice 15: Standardized, integrated, interoperable electronic information systems functionalities essential to care coordination, decision support, and quality measurement and practice improvement should be used.
Preferred Practice 16: An electronic record system should allow the patient’s health information to be accessible to caregivers at all points of care.
Preferred Practice 17: Regional health information systems, which may be governed by various partnerships, including public/private and state/local agencies, should enable healthcare home teams to access all patient information.
Preferred Practices: Transitions
Preferred Practice 18: Decisionmaking and planning for transitions of care should involve the patient, and, according to patient preferences, family and caregivers (including the healthcare home team). Appropriate follow-up protocols should be used to ensure timely understanding and endorsement of the plan for patient and their designees.
Preferred Practice 19: Patient and their designees should participate directly in determining and preparing for ongoing care during and after transitions.
Preferred Practice 20: Systematic care transitions programs that engage patients and families in self-management after being transferred home should be used whenever available.
Preferred Practice 21: For high-risk chronically ill older adults, an evidence-based, multidisciplinary, transitional care practice that provides comprehensive in-hospital planning, home-based visits, and telephone follow-up, such as the Transitional Care Model, should be deployed.
Preferred Practice 22: Healthcare organizations should develop and implement a standardized communication template for the transitions of care process, including a minimal set of core data elements that are accessible to the patient and their designee during care.
Preferred Practice 23: Healthcare providers and healthcare organizations should implement protocols/policies for a standardized approach to all transitions of care. Policies and procedures related to transitions and the critical aspects should be included in the standardized approach.
Preferred Practice 24: Healthcare providers and healthcare organizations should have systems in place to clarify, identify, and enhance mutual accountability (complete/confirmed communication loop) of each party involved in a transition of care.
Preferred Practice 25: Healthcare organizations should evaluate the effectiveness of transition protocols and policies, as well as evaluate transition outcomes.

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601 13TH STREET, NW, SUITE 500 NORTH, WASHINGTON, DC 20005
202-783-1300 ♦ Fax 202-783-3434
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