Massachusetts State Quality Improvement Institute

Massachusetts Strategic Plan for Care Transitions

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TABLE OF CONTENTS

Executive Summary

The healthcare system in the United States reflects significant patient safety and quality deficiencies (Snow et al, 2009). Most health policy experts agree that the US does not receive good value for the money spent. The US spends more on healthcare than any other country in the world, and expenditures are soon expected to grow to more than 20 percent of the Gross Domestic Product (GDP). Unlike the past, when it was generally agreed that higher costs signaled better quality of care, emerging research by researchers at The Dartmouth Institute and elsewhere is beginning to show that higher cost regions of the country experience worse quality of care and lower patient satisfaction. The opportunity therefore exists to make significant changes in the health care system that can enhance both quality and efficiency at the same time.

One aspect of health care influencing both quality and cost is the effective transition of patients from one setting of care or one set of providers to another during an episode of care. Settings of care include hospitals, sub-acute and post-acute nursing facilities, the patient's home, primary and specialty care offices, community health centers, rehab facilities, home health agencies, hospice, long-term care facilities, and other institutional, ambulatory, and ancillary care providers. In each setting, multiple clinicians care for each patient, sometimes independently and other times as part of an interdisciplinary team. Improving care transitions has the potential to save lives, reduce adverse events and disability due to gaps or omissions in care, and reduce unnecessary costs.

Massachusetts shares many of the care transitions challenges that the rest of the country faces. Governor Deval Patrick and Secretary JudyAnn Bigby, MD have identified care fragmentation as a key problem in the Massachusetts healthcare system. Patients and families are unassisted as they navigate across different providers and care settings, and state leaders believe that poor communication and lack of clear accountability for a patient among multiple providers lead to medical errors, waste, and duplication.

After publishing its State Scorecard on Health System Performance (Scorecard) in 2007, The Commonwealth Fund and AcademyHealth launched the State Quality Improvement Initiative (SQII) in 2008 in order to facilitate efforts by states to address perceived quality deficiencies, and to engage in an intensive process of state-level planning.[1] The program was extended until May 2010. As part of its core grant activities, the SQII Team created a State Action Plan in August 2009 (http://www.academyhealth.org/Programs/ProgramsDetail.cfm?ItemNumber=3148&navItemNumber=2502). Chapter 3 of the plan is entitled, “Reduce Readmissions and Improve Care Transitions”, and one of the strategies is the creation of this Strategic Plan.

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[1] State Quality Improvement Institute: Overview and Progress Report, Year One, February 2009, http://www.academyhealth.org/files/SQII/MassachusettsFebruary09.pdf

Given the range of care settings and the number of healthcare providers involved in treating patients, it is not surprising that communication problems and other errors in treatment persist as patients move across the continuum of care. Adverse events often occur during care transitions, most often with complex, chronically ill, and vulnerable patients. Failure to communicate critical information related to a person's medical care, safety, medications, advance directives, in-home support services and social situation can result in adverse events. Failure to identify issues such as health literacy, cultural barriers, and educational issues may also lead to higher rates of hospitalization, particularly in vulnerable populations. The result is high Medicare expenditures for the chronically ill, driven primarily by hospital admissions and readmissions, as well as total costs per Medicare beneficiary.

We envision a future in which care in Massachusetts is organized around regions and communities, with integrated and coordinated systems of care across settings, and where flow of patient information is seamless and secure among all of a patient's providers, insurers and patients themselves. In order to accomplish this transformational change, the Massachusetts healthcare community will require collaboration, effective partnerships, and commitment to a paradigm shift: the creation of a patient-centered care model delivered to populations that encompasses the entire continuum of care. This Strategic Plan, developed under the auspices of the Massachusetts Statewide Quality Improvement Initiative (SQII) is designed to be a useful tool for the Massachusetts healthcare community to help realize a vision of integrated, high-quality, coordinated, and efficient health care delivery.

In this plan, we describe the problems with quality of care and high costs in the US healthcare system and the potential role for effective care transitions to achieve performance improvements at the state and national levels. We review why transitions fail, and what is known about effective transitions based on national models and randomized trials. We outline current projects in Massachusetts that form the infrastructure for future work and state health policy among providers, insurers, patients and policy makers. Finally, we present principles, recommendations, action steps and measures for consideration by the Health Care Quality and Cost Council, legislators and other state leaders. We believe that Massachusetts can lead the nation in improving care transitions and reducing avoidable hospitalizations.

Introduction

We envision a future in which person-centered care in Massachusetts is organized around regions and communities, with integrated and coordinated systems of care across settings, and where flow of patient information is seamless and secure among all of a patient's providers and accessible, in a secure fashion, to patients. In order to accomplish this transformational change, the Massachusetts healthcare community will require collaboration, effective partnerships, and commitment to a paradigm shift: the creation of a patient-centered care model delivered to populations that encompasses the entire continuum of care, and a system of care that engages patients/caregivers and seeks out and follows the patient, not the other way around.

This Strategic Plan, developed under the auspices of the Massachusetts Statewide Quality Improvement Initiative (SQII), is designed to be a useful tool for the Massachusetts healthcare community to realize a vision of integrated, high-quality, coordinated, and efficient health care delivery. This community includes providers across the continuum of care, health plans, government agencies, professional organizations, researchers, vendors, advocates, and consumers.

We anticipate that this plan will constitute a dynamic, working document, and will be used by health policy makers, government agencies, insurers and health care providers to implement and monitor new models of care. We include recommendations, goals, action plans, performance measures, and targets for achievement.

The Massachusetts State Quality Improvement Initiative

After publishing its State Scorecard on Health System Performance (Scorecard) in 2007, The Commonwealth Fund and AcademyHealth launched the State Quality Improvement Initiative (SQII) in 2008 in order to facilitate efforts by states to address perceived quality deficiencies, and to engage in an intensive process of state-level planning.[2] The program was extended until May 2010. As part of its core grant activities, the SQII Team created a State Action Plan in August 2009 (http://www.academyhealth.org/Programs/ProgramsDetail.cfm?ItemNumber=3148&navItemNumber=2502). Chapter 3 of the plan is entitled Reduce Readmissions and Improve Care Transitions, and one of the strategies is the creation of this Strategic Plan.

Members of the Massachusetts State Quality Improvement in 2009 team were:

- Co-Team Leader: Dr. JudyAnn Bigby, Secretary, Executive Office of Health and Human Services (EOHHS)

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[2] State Quality Improvement Institute: Overview and Progress Report, Year One, February 2009, http://www.academyhealth.org/files/StateQI/SQIReport2009.pdf

- Co-Team Leader: Joel S. Weissman, Ph.D., Senior Health Policy Advisor to the Secretary
- Dolores L. Mitchell, Executive Director, Group Insurance Commission
- Lynn Nicholas, President and CEO, Massachusetts Hospital Association
- James Roosevelt Jr., President and CEO, Tufts Health Plan
- Katie Barrett, Administrative Director, Health Care Quality and Cost Council
- David Polakoff, MD, CMO, MassHealth
- Alice Bonner, Director, MA DPH Bureau of Health Care Safety and Quality
- Proxy Member: Elaine Kirschenbaum, Massachusetts Medical Society

Statement of the Problem

Definition of Care Transitions

For the purposes of this document, care transitions are defined as "the transfer of a patient from one setting of care or one set of providers to another during the course of an episode of care" **(**https://www.NTOCC.org **).**

Settings of care include hospitals, sub-acute and post-acute nursing facilities, the patient's home, primary and specialty care offices, community health centers, rehab facilities, home health agencies, community-based settings, hospice, long-term care facilities, and other institutional, ambulatory, and ancillary care providers. In each setting, multiple clinicians care for each patient, sometimes independently and other times as part of an interdisciplinary team. The terms "avoidable/unnecessary/preventable" rehospitalization are often used interchangeably in the literature and are inconsistently defined. For the purposes of this document, we will use the term avoidable rehospitalization and will adopt the definition from the STAAR project (see page 43).

Quality, Cost, and the Role of Transitions in Care

The healthcare system in the United States faces significant patient safety and quality deficiencies (Snow et al, 2009). For example, patients receive recommended care in barely half of all clinical interactions (McGlynn et al, 2003). Compared with other developed countries, the US lags in practice accessibility, ability to pay for medications, access to insurance, use of written guidance to treat chronic conditions, care management for chronic conditions, and electronic medical record use (Schoen et al, 2009).

In addition, most health policy experts agree that the US does not receive good value for the money spent. The US spends more on healthcare than any other country in the world, 16 percent of Gross Domestic Product (GDP) in 2007, with the second highest figure among OECD countries in France at only 11 percent (OECD 2009). Per capita spending has grown from $2814 in 1990 to $8160 today and is projected to increase to over $13,000 by 2018, when national expenditures could grow to more than 20 percent of GDP (Kaiser Family Foundation 2009).

Unlike the thinking of the past, when it was generally agreed that higher costs signaled better quality of care, emerging research from The Dartmouth Institute and elsewhere is beginning to show that higher cost regions of the country experience worse quality of care and lower patient satisfaction (Fisher et al, 2009; Fu and Wang, 2008). The explanation for this phenomenon is that more spending is associated with patients seeing a complex array of care providers, in more settings, without good coordination of care. Medicare beneficiaries see an average of 6.4 providers a year (Everhart, 2009), and according to David Blumenthal, the new National Coordinator for Health Information Technology "…the average 65-year-old with five chronic conditions has 14 doctors and is on multiple medications" (http://www.technologyreview.com/computing/23546/).

Given the range of care settings and the number of healthcare and long term care providers involved in treating patients, it is not surprising that there are communication problems and other errors in treatment as patients move across the continuum of care. Adverse events often occur during care transitions, most often with complex, chronically ill, and vulnerable patients (Halasyamani et al, 2006). Failure to communicate critical information related to a person's medical care, support services, safety, medications, advance directives, and social situation can result in adverse events. Indeed, three-fifths of medication errors occur during transition, costing a total of $2.1 billion (Care Transitions Performance Management Set, 2009).

Research has shown that 28 percent of hospitalizations are avoidable. Failure to identify issues such as health literacy, cultural barriers, and educational issues are factors that may lead to higher rates of rehospitalization, particularly in vulnerable populations (Greenwald, J, Denham, C and Jack, B, 2007). Among Medicare patients, 20 percent are rehospitalized within 30 days, and more than one-third are rehospitalized within 90 days**.** Such rehospitalizations account for 25 percent of Medicare hospital costs, or $15 billion per year. MedPAC estimates that fully 76 percent of Medicare rehospitalizations are avoidable (Boutwell et al, 2009). The result is high Medicare expenditures for the chronically ill, driven primarily by hospital admissions and readmissions (Peikes et al, 2009).

Avoidable hospitalizations or rehospitalizations can occur from the community, home care or institutional (nursing home) setting. About 40 percent of nursing home-to-hospital transfers are considered inappropriate, which means that they should have been handled by an outpatient work-up, the patient should have remained in long-term care, or the patient's conditions did not warrant inpatient care (Grabowski, 2007). Home health care has a hospitalization rate of 30 percent, but certain demonstration projects have lowered this rate to 20 percent. The rates also vary by illness: heart failure patients have a 27 percent rehospitalization rate within 30 days and 50 percent within 90, more than half of which are considered avoidable (Boutwell et al, 2009).

Communication between providers is an essential component of effective care transitions, especially during handoffs at admission and discharge from hospitals. Barriers to effective care transitions include cultural, educational, and language differences; provider fatigue, time constraints, interruptions, complex medical conditions, ineffective communication, incompatible information systems, lack of privacy, misinterpretations of privacy concerns related to HIPAA, illegible writing, and nonstandard abbreviations. It is not surprising, then, that twenty percent of seniors reported that their health suffered due to poor communication among their providers. Acute and long term care support services are often poorly coordinated for many of the reasons cited above. Given that Medicare beneficiaries comprise 46 percent of hospital admissions, such communication problems can have a substantial impact on cost and quality (Yeh, 2009).

Barriers to Effective Care Transitions

- **Lack of integrated care systems**
- **Lack of longitudinal responsibility across settings**
- **Lack of standardized forms and processes**
- **Incompatible information systems**
- **Ineffective communication**
- **Failure to recognize cultural, educational or language differences**
- **Compensation and performance incentives not aligned with goal of maximizing care coordination and transitions**
- **Payment is for services rather than incentivized for outcomes**
- **Care providers do not learn care coordination and team-based approaches in school**
- **Lack of valid measures of the quality of transitions**

Patients and families can be resources for identifying gaps in the transition process (Coleman, 2002). These inconsistencies and deficiencies in the system include inadequately preparing for the next care setting, failing to insure patient/caregiver involvement in creating and fully understanding the treatment plan and next steps, conflicting advice for illness management, the inability of patients and caregivers to know which provider is responsible at any given time and/or to reach the right provider, and repeatedly leaving follow-up or coordination assistance undone. An interview with rehospitalized patients and their families can be helpful in gathering this information, and development of a diagnostic chart review contributes to the analysis of the failures that led to rehospitalization.

Massachusetts shares many of the care transitions challenges that the rest of the country faces. Governor Deval Patrick and Secretary JudyAnn Bigby, MD have identified care fragmentation as a key problem in the Massachusetts healthcare system. Patients and families are unassisted as they navigate across different providers and care settings, and state leaders believe that poor communication and lack of clear accountability for a patient among multiple providers lead to medical errors, waste, and duplication (EOHHS, April 2009).

Massachusetts, which in many respects offers superior quality of care relative to other states, is not immune from the problems with care transitions. While Massachusetts ranked seventh overall for health system performance in 2009 (first in access, fifth in prevention and treatment, sixth in healthy lives, and seventh in equity), the state ranked only 33rd in avoidable hospital use and costs (http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2009/Oct/2009-State-Scorecard.aspx), partly due to high rates of hospital admissions for ambulatory care-sensitive conditions among Medicare beneficiaries which have persisted over time. The state was also in the bottom quartile for hospital readmissions from home health settings, as well as Medicare 30-day readmissions (McCarthy et al, 2009).

We have described the problems with quality of care and high costs in the US healthcare system and the potential role for effective care transitions to achieve performance improvements. It appears that poor communication and vague coordination of responsibilities are major components of such problems that can be addressed by well-implemented care transitions. Perhaps the greatest potential for care transitions is in preventing avoidable hospitalizations, rehospitalizations and unnecessary placement in long term care facilities. In the next section we examine a case study of a patient suffering from a problematic transition, discuss a number of recognized models for care transitions, and summarize national policies, guidelines, and consensus statements.

Why Transitions Fail – A Case Study

There are many reasons why transitions fail (See Text Box, Barriers to Effective Care Transitions, below). These factors may be best be illustrated by examining the difficulties that one patient faced as he tried to navigate the system.

> Alberto Jiminez is a Spanish-speaking 82 year old retired taxi cab driver living with his wife in Dorchester. He has heart failure, atrial fibrillation, arthritis and suffers from depression. He receives his health care at the Community Health Center, but generally only goes when he needs his medications renewed. He has Masshealth and Medicare insurance.
>
> Mr. Jiminez has been hospitalized 3 times in the past year for heart failure. His wife tries to get him to limit his salt intake, but he prefers foods that typically have a high sodium content. Mr. Jiminez also runs out of medication periodically, so he sometimes goes several days without his heart failure medications.
>
> One Saturday night at 11:00 pm, Mr. Jiminez complains of chest pain and shortness of breath. His wife calls 911 and he is transported to nearest hospital. In the ED, physicians determine that he may have had a cardiac event. They are unable to access his medical records from the CHC and he has a battery of tests, some of which he's already had in the past few weeks at the CHC. Mr. Jiminez is admitted to the CCU to r/o an MI…

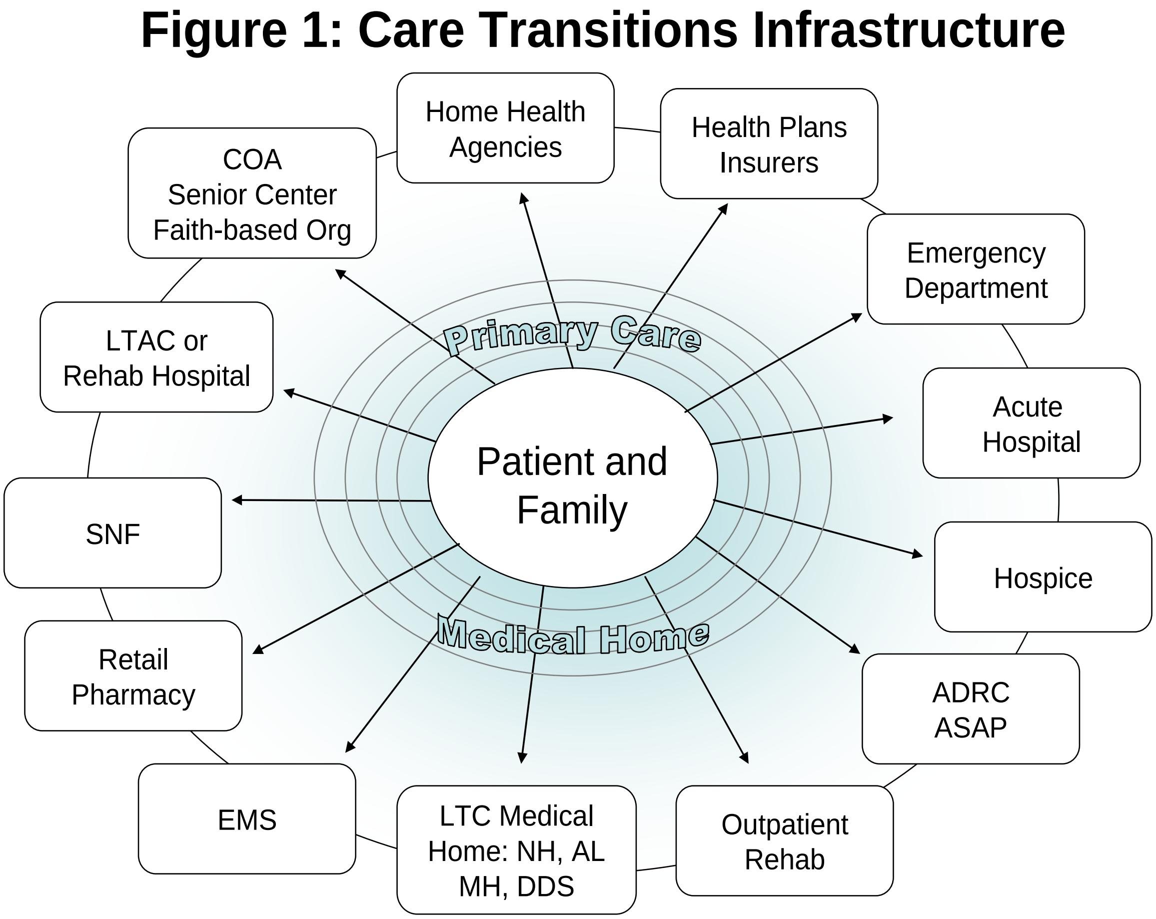
The case of Mr. Jimenez points to inadequate or absent communication among health care providers, between health and LTC providers, and failure to transfer critical data in a timely manner, lack of provider engagement in determining the patient's ability for self-management and lack of patient engagement as some of the problems in care transitions that lead to poor outcomes. Evidence of this quality gap is the fact that a hospital discharge summary is unavailable for the first post-discharge visit in 66-88 percent of cases, and that this affected a physician's ability to deliver quality of care in 25 percent of follow up visits (Kripalani et al, 2007).

Effective Care Transitions: What is Known?

(See Figure 1 Care Transitions Infrastructure)

The primary objective of a transfer is an accurate handoff of a complete set of information about the patient's status and care plan, and the transfer of authority and responsibility from one set of providers to the next. It should be noted that improving the process of care transitions is not only important for the elderly – the higher quality, lower costs, and enhanced patient-centeredness are valuable to the chronically ill, for pediatric patients, and temporary acute care patients as well. Figure 1 depicts the various settings and interdependencies as patients and families move among those settings during care transitions.

Figure 1. Care Transitions Infrastructure



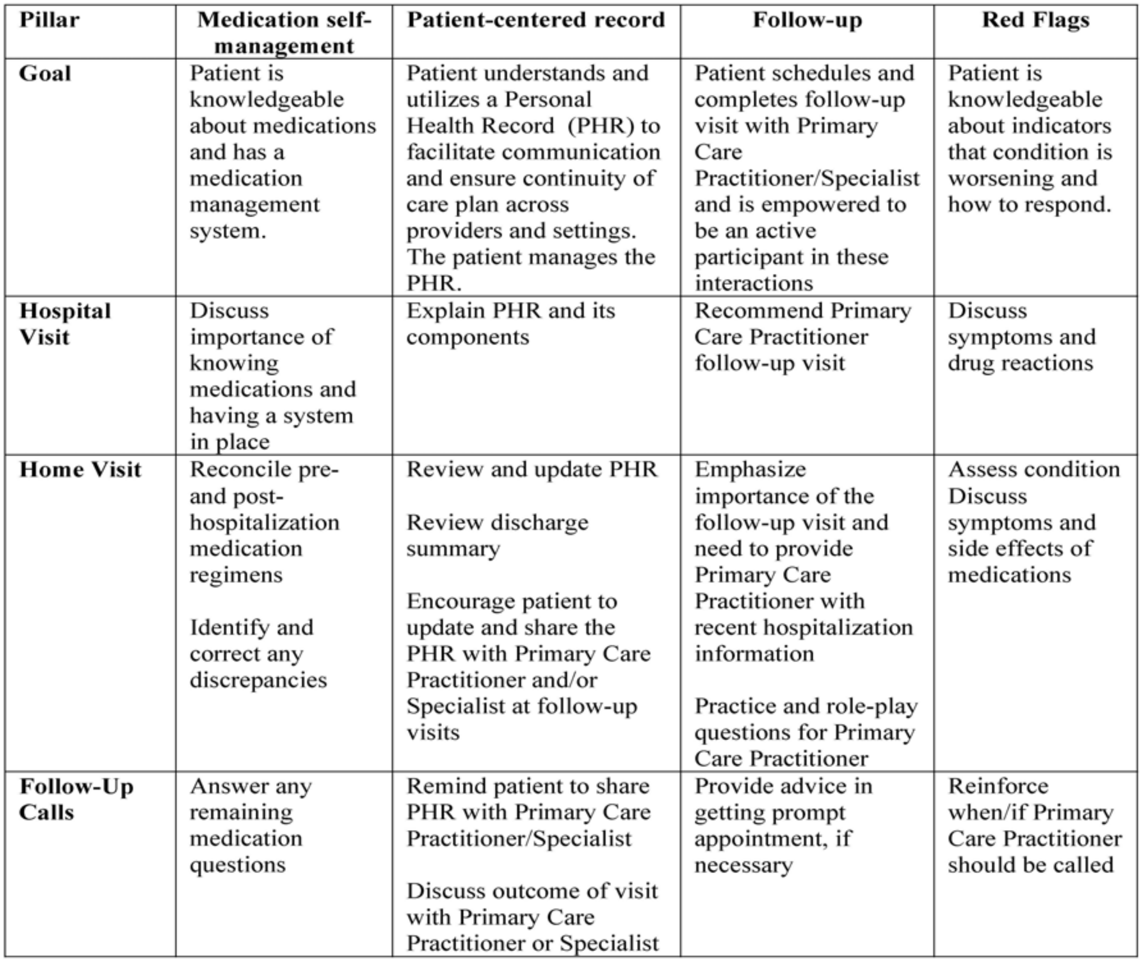
In this section we begin by reviewing some of the national models for improved care transitions. Several of those programs are being implemented as demonstration projects or disseminated more widely in Massachusetts. In some cases these are evidence-based models based on one or more randomized clinical trials (Naylor, Coleman); in other cases, they are consensus-based models (INTERACT II, STAAR). At the end of this section we provide a summary about what represents a high quality care transition.

National Examples of Best Practices

The Care Transitions Intervention

The University of Colorado Care Transitions Intervention tested a patient-centered interdisciplinary team model using a transitions coach. During a 4-week program, patients with complex care needs and family caregivers received specific tools and worked with a "Transitions Coach," to learn self-management skills to ensure their needs would be met during the transition from hospital to home. This is a low-cost, low-intensity intervention comprised of a home visit and three phone calls. The intervention focuses on four conceptual domains referred to as pillars: 1) medication self-management; 2) use of dynamic patient-centered record, the Personal Health Record; 3) timely primary care/specialty follow up; 4) knowledge of red flags that indicate a worsening in their condition and how to respond. The Care Transitions Intervention was developed and tested by the Care Transitions Program (www.caretransitions.org) at the University of Colorado, and funded by the John A. Hartford Foundation and The Robert Wood Johnson Foundation.

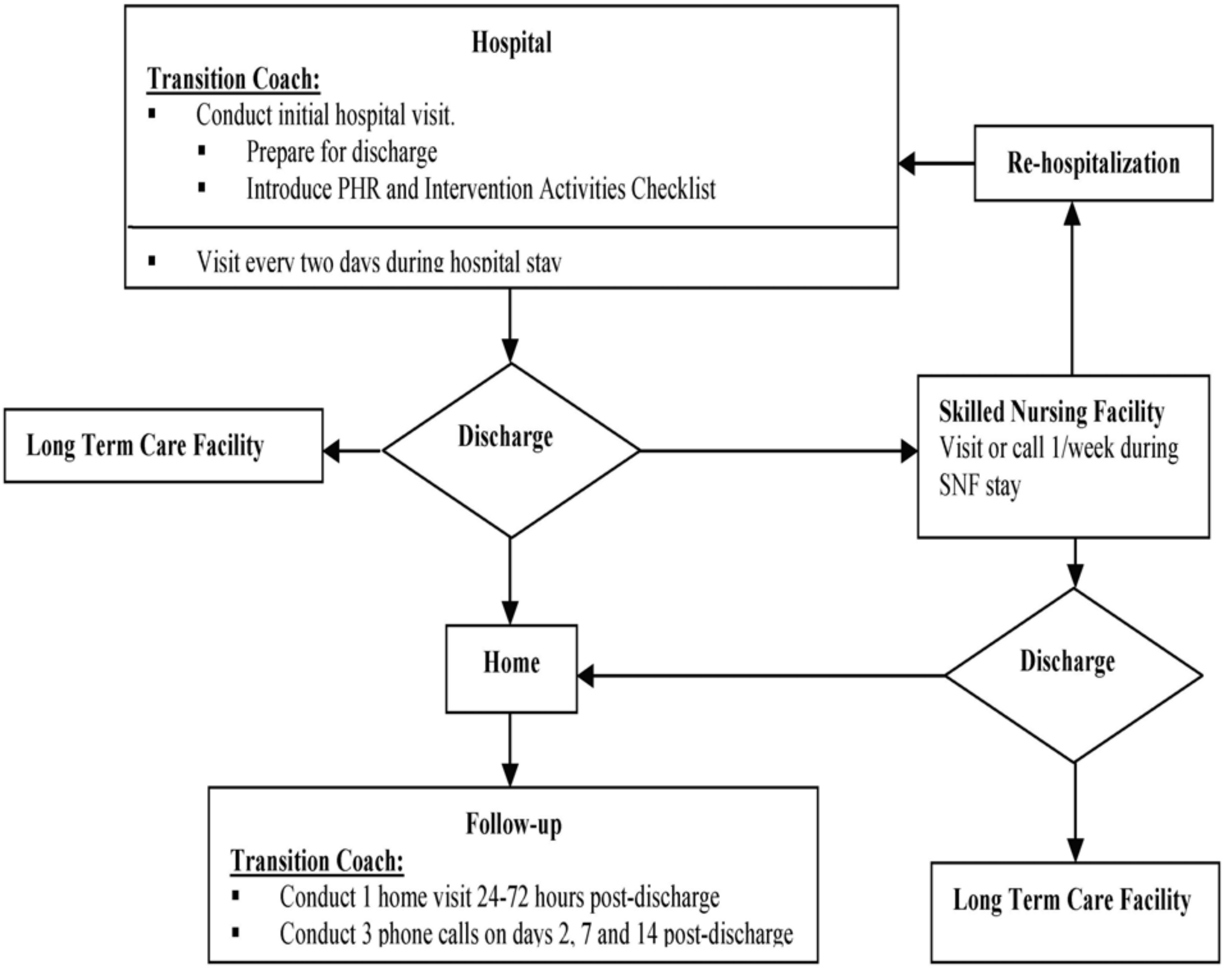
Table 1. Care Transitions Intervention Activities by Pillar and Stage of Intervention



Pillar	**Medication self-management**	**Patient-centered record**	**Follow-up**	**Red Flags**
Goal	Patient is knowledgeable about medications and has a medication management system.	Patient understands and utilizes a Personal Health Record (PHR) to facilitate communication and ensure continuity of care plan across providers and settings. The patient manages the PHR.	Patient schedules and completes follow-up visit with Primary Care Practitioner/Specialist and is empowered to be an active participant in these interactions	Patient is knowledgeable about indicators that condition is worsening and how to respond.
Hospital Visit	Discuss importance of knowing medications and having a system in place	Explain PHR and its components	Recommend Primary Care Practitioner follow-up visit	Discuss symptoms and drug reactions
Home Visit	Reconcile pre- and post-hospitalization medication regimens Identify and correct any discrepancies	Review and update PHR Review discharge summary Encourage patient to update and share the PHR with Primary Care Practitioner and/or Specialist at follow-up visits	Emphasize importance of the follow-up visit and need to provide Primary Care Practitioner with recent hospitalization information Practice and role-play questions for Primary Care Practitioner	Assess condition Discuss symptoms and side effects of medications
Follow-Up Calls	Answer any remaining medication questions	Remind patient to share PHR with Primary Care Practitioner/Specialist Discuss outcome of visit with Primary Care Practitioner or Specialist	Provide advice in getting prompt appointment, if necessary	Reinforce when/if Primary Care Practitioner should be called

The model was tested on 750 patients 65 years of age or older at the University of Colorado Health Sciences Center, and randomized at the time of hospitalization to receive either the coaching intervention or usual care. Intervention patients had significantly lower rehospitalization rates at 30 and 90 days than control subjects, and lower rates of rehospitalization for the condition precipitating the index admission at 90 and 180 days. Mean hospital costs were lower for intervention patients than controls at 180 days (Coleman et al, 2006).

Figure 2. Structure of the Care Transitions Intervention



Source: University of Colorado Health Sciences Center, Division of Health Care Policy and Research, “An Interdisciplinary Team Approach to Improving Transitions Across Sites of Geriatric Care.”

The Centers for Medicare & Medicaid Services (CMS) contracted with the Colorado Foundation for Medical Care to conduct a special study to develop a framework for improved transitional care processes in order to reduce readmissions. The framework is the Care Transitions Intervention (CTI), which is an evidence-based interdisciplinary team approach to transitional care that was developed by Eric Coleman, MD, MPH and the Division of Health Care Policy and Research at the University of Colorado at Denver and Health Sciences Center. The study found that what impairs successful transitions is inadequate information transfer, lack of focus on patient and caregiver preparation, insufficient support for patient self-management, and lack of patient empowerment to assert preferences (Coleman et al, 2006).

The Transitional Care Model

Mary Naylor (2008) defines transitional care as the range of time-limited services and environments designed to ensure healthcare continuity and avoid preventable poor outcomes among at-risk populations as they move from one level of care to another, among multiple providers, and/or across settings. The components of the Transitional Care Model (TCM) are screening, engaging the elder/caregiver, managing symptoms, educating and promoting self-management, collaborating, assuring continuity, coordinating care, and maintaining relationships. The model is implemented by a single advanced practice nurse using evidence-based protocols, and with a focus on long-term outcomes.

The model was initially tested in a randomized controlled trial of 276 older adults at the University of Pennsylvania Hospital (Naylor et al, 1994). In that study, intervention patients had fewer hospital readmissions, fewer total days rehospitalized, lower readmission charges and lower charges for health care services after discharge. A follow up study in 1999 looked at outcomes over time with more intensive follow up of hospitalized elders at risk for poor outcomes (Naylor et al, 1999). More recently, the model has been tested in a randomized controlled trial of older adults with heart failure (Naylor et al, 2004).

AARP pilot project

AARP is conducting the Health Care Management Pilot Program, a Medigap fee-for-service project, in New York City, Cleveland, Tampa, Los Angeles, and central North Carolina. The project focuses on seniors at risk of coronary artery disease, diabetes, heart failure, and depression. Case management is provided for high risk patients with multiple conditions. A total of about 4300 people were enrolled as of August 2009. The model includes transition coaching from a nurse, patient participation in health risk assessment, and discussion of advance directives and hospice (Yeh 2009).

Quality Improvement Organization Support Center (QIOSC)

Colorado healthcare organizations developed a Continuum of Care Record (CCR) with 23 elements. These elements include labs and tests, medication changes, new problems and an updated problem list, presence of lines and catheters, oxygen requirements, current cognitive status and whether it has changed, skin condition and pressure ulcer status, secondary insurance, and power of attorney information. Three specific types of information flow need to occur for ideal transitions: a personal health record, the CCR, and a handoff management dataset (Colorado Foundation for Medical Care, 2007).

The quality improvement organizations were asked to address Patient Pathways (Care Transitions) in their Ninth Scope of Work contract with CMS. Medicare beneficiaries report greater dissatisfaction in discharge-related care than in any other aspect of care that CMS measures. Considerable work was also done in the 8th Scope of Work with QIOs and home health agencies. The CMS Home Health Quality Improvement Campaign produced a Toolkit on Reducing Rehospitalizations (www.qualitynet.org). The newly relaunched Home Health Quality Initiative (in 2010) includes a package on care transitions (www.homehealthquality.org) with educational materials for all members of the health care team.

The CMS contract with the QIOs identified the following possible intervention strategies for the QIOs to perform: medication management; post-discharge plan of care; post-discharge follow-up established with an identified provider; accountability, responsibility, and capability for sending and receiving providers; use of a transitions coach (the Coleman model); bridging nurse support (an advanced practice nurse according to the Naylor model); use of clinical protocols and best practices; having electronic health and medical records along with personal health records for the patient; telemedicine; patient and caregiver education; feedback to the sending provider as to adequacy; a multidisciplinary team with multifaceted interventions; revising payment incentives; community supports (e.g., Meals on Wheels); palliative care consultation and support; and implementation of the IHI "Moving the Dot" approach (CMS, 2008).

The Continuity Assessment Record and Evaluation (CARE) Tool

The Post-Acute Care Payment Reform Demonstration (PAC-PRD) was mandated by the Deficit Reduction Act of 2005. A demonstration project began in 2008 with report due to Congress by 2011. The goal of the initiative is to standardize patient assessment information from post-acute care settings. CMS contracted with RTI to develop a standardized patient assessment tool for use at acute hospital discharge and at PAC admission and discharge – the Continuity Assessment Record and Evaluation (CARE) tool. The CARE tool is a comprehensive tool designed to eventually replace OASIS, MDS, and IRFPAI.

Four major domains are included in the tool: medical, functional, cognitive impairments, and social/environmental factors. These domains either measure case mix severity differences or predict outcomes.

The Aging & Disability Resource Consortium (ADRC) Model

CMS has identified Aging & Disability Resource Consortiums (ADRCs) as "key facilitators in care coordination" to increase opportunities for people who are at risk of institutionalization to live in the community post hospitalization. Nationally, CMS has granted several ADRCs Real Choice System Change Grants for Community Living to develop "Person Centered Hospital Discharge Planning Models." The primary purpose of these models is to actively engage consumers and their informal caregivers in the hospital discharge planning process to ensure they have the post-hospital care instructions and resources they need to avoid institutionalization. ADRCs create the community-based infrastructure for care coordination that can assist consumers, PCPs and Community Health Centers looking for care management for their patients in the community.

Care Transition Models Used in Massachusetts

A number of health care organizations, government agencies and not-for-profit entities have joined forces to engage in pilot or demonstration projects related to care transitions in Massachusetts. Although most do not have the national recognition or peer review success as the Naylor or Coleman models (RED is an exception), we believe some of these initiatives will form the basis for a statewide strategy to improve transitions. The following models are described in more detail in Appendix A:

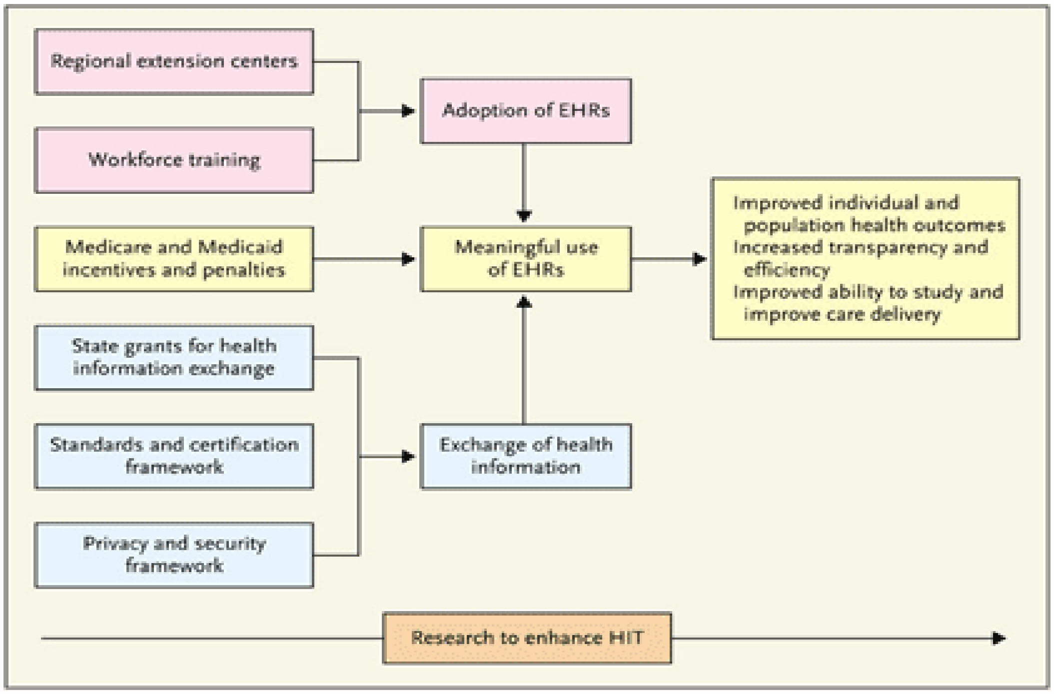
INTERACT II (Interventions to Reduce Acute Care Transfers)
MOLST (Medical Orders for Life-Sustaining Treatment)
Potentially Preventable Readmissions (PPR)
STAAR (State Action on Avoidable Rehospitalizations Initiative)
LifeBox
BOOST (Better Outcomes for Older Adults Through Safe transitions)
RED (Reengineering discharge)
Partners HealthCare System Clinical Transitions Project
Somerville Hospital Study
Massachusetts Pressure Ulcer Collaborative
Aligning Forces for Quality Project
Patient-Centered Medical Home
ADRC Model Development and LTC Options (nursing home pre-admission counseling and assessment)
(Pending – information on Medicare High Cost Beneficiaries Demo at MGH/Tim Ferris)

HIT, HIE and Data Needs

Health information technology (HIT) and health information exchange (HIE) are valuable tools for improving care transitions. In this report, we use HIT to refer to the use of a variety of electronic methods for managing information about the health and medical care of individuals and groups of patients (Blumenthal et al, 2006); while HIE refers to the electronic movement of health-related information among organizations according to nationally recognized standards (National Alliance for Health Information Technology, 2008). We believe that ubiquitous electronic health records and personal health records have the ability to transform the delivery of healthcare and the patient's role in maintaining health, and that these tools should be an integral part of the Strategic Plan for Care Transitions.

HIT and HIE also need to become integral components of healthcare workflow. The potential for health information technology to improve quality and reduce costs is well documented (Jha, 2009). Regarding HIE, according to federal officials, "[w]hen the exchange of health information is performed well, care provision can achieve positive health outcomes. When information exchange is not performed well (e.g., it is untimely, inaccurate, or absent) potentially costly inefficiencies may occur or it may result in adverse events" (US DHHS, 2007). Figure 3 depicts the HITECH framework for meaningful use.

Figure 3. The HITECH Act's Framework for Meaningful Use of Electronic Health Records



Source: Blumenthal, David, "Launching HITECH," *New England Journal of Medicine*, downloaded from nejm.org on January 4, 2010.

The hierarchy of HIE has been established by the federal government as follows: level 1 is non-electronic data (e.g., mail or phone); level 2 is machine transportable data (fax or PC-based exchange); level 3 is machine-organizable data (the receiving computer translates data from the sending computer); and level 4 is machine-interpretable data (the exchange of structured messages that contain standardized and coded data (US DHHS, 2007).

Despite their potential for quality improvement, very few physicians and hospitals have fully functional electronic health record systems (Jha et al, 2006). The American Recovery and Reinvestment Act of 2009 will invest $46 billion of federal funds in promoting HIT and HIE during the next several years, and this provides an enormous opportunity to transform the delivery of care in Massachusetts. The Massachusetts e-Health Institute (MeHI) is responsible for developing a plan for statewide deployment of EHRs and interoperable health information exchange (www.masstech.org). We would like to see MeHI's plan informed by this Care Transitions Strategic Plan.

The American Recovery and Reinvestment Act of 2009 (popularly known as the stimulus bill) created payments for hospitals and physicians for electronic health records systems, as long as the providers meet criteria for the meaningful use of such systems. Draft meaningful use guidelines were issued by the National Coordinator for Health Information Technology in August 2009, and an interim final rule was expected to be released by the end of 2009. There are five Health Outcomes Policy Priorities in the draft meaningful use guidelines, and "Improve Care Coordination" is one of them. "Transition of care" is defined as moving from one healthcare setting or provider to another. Another one of the five Policy Priorities is "Engage Patients and Families," and this includes a meaningful use measure in 2013: the "percent of transitions where summary care record is shared."

Each of the Policy Priorities in the draft guidelines specifies care goals, objectives for 2011, and measures for 2011. The Improve Care Coordination Policy Priority care goal is to exchange meaningful clinical information among the professional healthcare team. The 2011 objectives for physicians are the capability to exchange key clinical information (e.g., problem list, medications list, allergies, test results) among providers of care and patient-authorized entities electronically; and to perform medication reconciliation at relevant encounters and each transition of care. Similarly, the 2011 objectives for hospitals are the capability to exchange key clinical information (e.g., discharge summary, procedures, problem list, medication list, allergies, test results) among providers of care and patient-authorized entities electronically; and to perform medication reconciliation at relevant encounters and each transition of care. The 2011 measures are to report the 30-day readmission rate; the percent of encounters where medication reconciliation was performed; whether the provider has implemented the ability to exchange health information with an external clinical entity (specifically labs, care summary, and medication lists); and the percent of transitions in care for which a summary care record is shared (e.g., electronic, paper, or e-fax).

In addition to HIT and HIE, a data resource to facilitate the exchange of claims and clinical data is necessary to implement our vision of excellent transitions of care and a system of accountable care organizations paid based on value. Fortunately, the HCQCC has begun this effort by establishing an all-payer claims database.[3]

Currently the state's database is limited to private fully insured products, but there are plans to expand this data to include third party administered plans, Medicare, and Medicaid. A resource of claims data across all-payers and all-settings of care would be enormously valuable. The next step in the data process would be to have clinical data available to clinicians. The care transitions paradigm would be completely transformed if

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[3] For more information about these databases, see www.raphic.org and www.nahdo.org

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the receiving provider of care could access the patient’s medical history, claims, lab, radiology, and other treatment data in real time at the point of care.

The Division of Health Care Finance and Policy anticipates having a more robust all-payer database by 2011, including Medicare data. This will enable Massachusetts government agencies and researchers to track data on rehospitalizations, patient treatment for episodes of care, and other measures. However, sufficient funding for analyses of this data will be required.

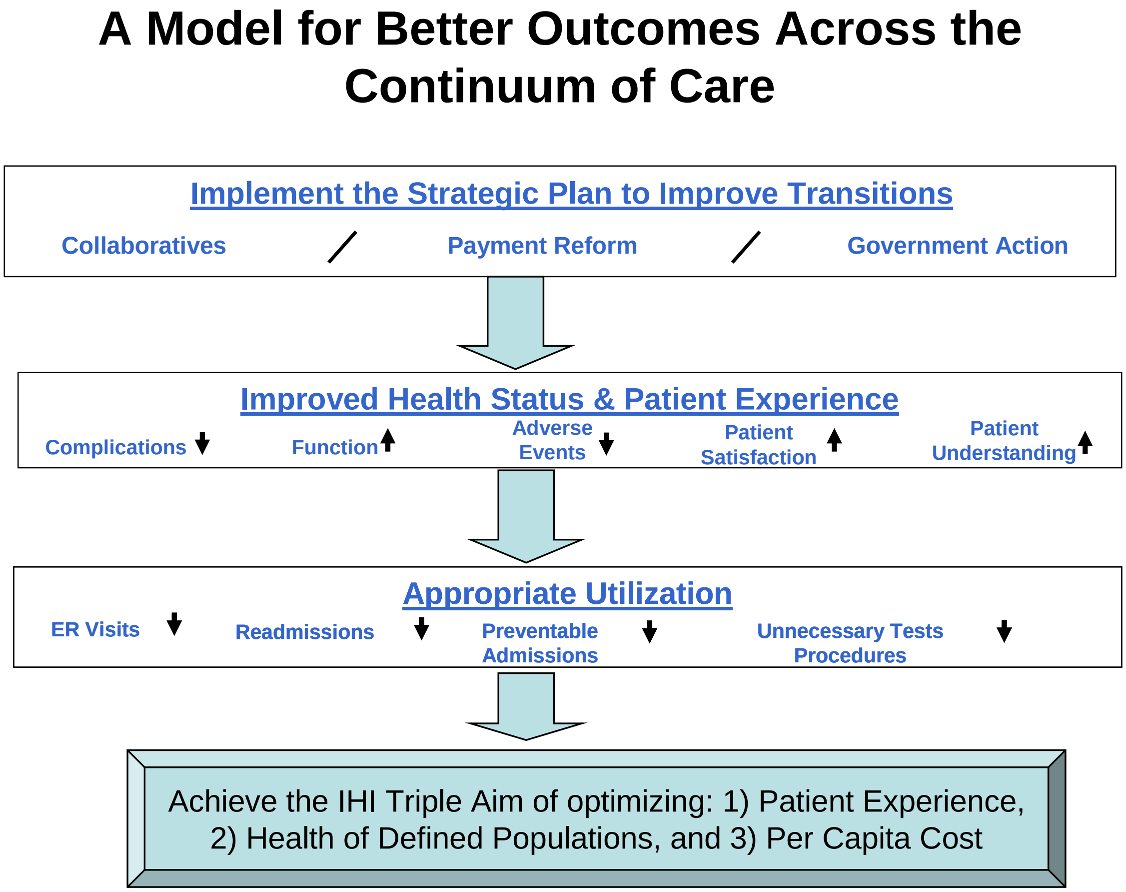
With a robust all-payer claims database, the infusion of $15 million in state money, and the state’s share of federal ARRA funding, “comprehensive inpatient-to-outpatient communication could become a precondition for discharge, whereas electronic prompts could facilitate telephone contact with patients immediately upon discharge. Such innovations could help to further the goal, advocated by the Institute of Medicine, that high-quality medical care be uniformly delivered by failsafe medical systems” (Balaban et al, 2008). In fact, the widespread use of these tools will assist in the effort to measure the success of our recommended initiatives.

Measuring Success

The State Strategic Plan for Care Transitions must include a means to track progress and measure successes and challenges. We believe that performance measurement is essential for the best practices and lessons learned from state demonstrations and national research and care models to be effectively implemented on a statewide basis. The measures described in the section below have been endorsed by recognized national and state panels of experts. This strategic plan presents a menu of options for measurement, and proposes that a selection process that will involve providers, payers, and patients/advocates to insure that measurement is balanced and reflects the essential roles of providers, insurers and patients in improving the process.

Following the Donabedian model for assessing quality of care, the measures fall generally into three categories: structure, process, and outcomes (See Figure 4). No tools exist to our knowledge that assess structural elements associated with good process and outcomes. However, several systems exist that measure processes and outcomes of care. A selection process is in development, to guide the state in choosing initial process and outcome measures, and using those measures for program accountability, feedback and evaluation. A collaboration between the HCQCC Expert Panel on Performance Measurement and the Quality and Safety Committee is proposed to guide this selection process.

Figure 4. Model of Care Transitions Environment



Five national scorecard indicators were chosen by the SQII team, two of which may be considered relevant to care transitions improvement efforts: Medicare hospital admissions for ambulatory care-sensitive conditions per 100,000 beneficiaries 65 or older, and Medicare 30-day hospital readmissions as a percent of admissions.[4] The SQII Action Plan sets the goals to reduce 30-day, 60-day, and 90-day hospital readmissions; to decrease readmissions due to CHF by 10 percent a year over three years; to decrease ambulatory care-sensitive conditions due to CHF by 10 percent a year over three years; and to reduce Medicare 30-day hospital readmissions as a percent of overall admissions (EOHHS, August 2009).

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[4] Readmissions are not true outcomes, because they are not an indicator of health status, but rather a measure of utilization. However, they are often considered proxy outcomes since they signal a serious change in health status.

The Care Transitions Performance Management Set identifies several indicators of success in improving outcomes for patients undergoing transitions. These indicators are the reduction in adverse drug events, the reduction in patient harm related to medical errors of omission and commission, the reduction in avoidable healthcare encounters (e.g., hospital readmissions), the reduction in redundant tests and procedures, the achievement of patient goals and preferences, and an improved patient understanding of and adherence to the treatment plan (ABIM Foundation et al, 2009).

A key component of the Care Transitions Model is the Care Transitions Measure (CTM), a 3 or 15 item instrument used to assess the quality of the transition from the patient's perspective. The CTM was found to have high internal consistency and reliability, and scores were associated with undesirable utilization outcomes. The CTM may therefore be helpful to clinicians, hospital administrators, and third party payers (Coleman, Mahoney and Parry, 2005). The CTM was developed by the Care Transitions Program (www.caretransitions.org).

NQF has endorsed several measures for care transitions: the three-item CTM, the 30-day all-cause risk standardized readmission rate following hospitalization for heart failure developed by the Centers for Medicare & Medicaid Services (CMS), the 30-day all-cause risk standardized readmission rate following hospitalization for acute myocardial infarction developed by CMS, the CMS 30-day all-cause risk standardized readmission rate following hospitalization for pneumonia, and the all-cause readmission index (total inpatient readmissions within 30 days from discharge to any hospital, developed by the health plan PacifiCare) (National Quality Forum. Safe Practices for Better Healthcare 2006 Update, A Consensus Report. http://www.qualityforum.org/pdf/projects/safepractices/SafePractices2006UpdateFINAL.pdf. Published 2007. Accessed February 10, 2009). Certain process measures are linked to successful outcomes: the timely transfer of information across settings and professionals involved in care transitions; the effective coordination of transition across settings and professionals; the timely delivery of care; improvement of patient understanding of and adherence to the treatment plan; improvement of patient awareness of emergency provider contact information; and improvement of patient engagement in care (ABIM Foundation et al, 2009).

The American Board of Internal Medicine Foundation, the American College of Physicians, the Society of Hospital Medicine, and the Physician Consortium for Performance Improvement jointly formed a Care Transitions Workgroup to identify and define quality measures for improving outcomes for patients undergoing transitions in care. The Care Transitions Workgroup has several recommendations for process measures: a reconciled medication list received by a discharged patient; a transition record with specified elements received by discharged patients; the timely transmission of the transition record to either the receiving facility or the PCP for follow up care; a transition record with specified elements received by discharged patients for emergency department discharges; and the timeliness of post-discharge care for heart failure patients. They also recommend that care transitions performance measures should be integrated into electronic health record systems (ABIM Foundation et al, 2009).

Several other groups are examining ways to measure success in improving care transitions. In particular, The HMO Workgroup on Care Management (http://www.ahip.org/content/default.aspx?bc=38|72|69|5743), a group representing health plans and group practices that are capitated by plans supports including standardized measures in care transitions, including: The Assessing Care of Vulnerable Elders (ACOVE) survey tool to measure the process of care coordination and continuity developed by Rand and UCLA (Wegner and Young, 2003); The Care Transitions Measure (CTM) by the University of Colorado Health Sciences Center assesses the quality of care transitions from the patient/proxy perspective (Coleman et al, 2002); The Patients' Evaluation of Performance in California (PEP-C) Survey designed by the California Healthcare Foundation for the purposes of pay-for-performance addresses the quality of care during transitions (California Health Foundation, 2003).

The Centers for Medicare & Medicaid Services established several process and outcomes measures for the 12 quality improvement organizations that are participating in the current three-year contract. The interim measures include the percent of transitions attributable to providers who agree to participate; the percent of transitions that are the subject of an intervention that addresses hospital and community system-wide processes; the percent of transitions that are the subject of an intervention that addresses AMI, CHF, or pneumonia; and the percent of transitions that are the subject of an intervention that addresses the specific reasons for readmissions.

The outcome measures specified in the QIOs' contract are the percent of patients who rate hospital performance for meeting the H-CAHPS performance standard for medication management; the percent of patients discharged and readmitted within 30 days who are seen by a physician between discharge and readmission; the percent of transitions for which implemented and measured interventions show an improvement; the percent of patients rehospitalized within 30 days; the specific diagnosis discharge all-condition 30-day readmission rates for HF/AMI/pneumonia (the "all cause" measure); and the percent of patient transitions for which a CARE (Continuity Assessment Record and Evaluation) instrument was used (CMS 2008).

For a summary of proposed Massachusetts care transitions process and outcome measures to be developed with input from the HCQCC Performance Measurement Committee and Safety and Quality Committee, see Appendix B.

Synthesis of the Literature: What Constitutes an Effective Care Transition, and how will we know it when we see it?

How do we overcome the potential for problems that occur as a patient transfers from one set of clinicians or one setting to another? Effective care transitions require the transfer of clinical responsibility with the information needed to discharge that responsibility safely and effectively. There are five parts to a safe discharge process: essential clinical information at discharge, the opportunity to ask questions, a seamless clinical envelope with a responsible clinician ("a seamless clinical envelope" means that the patient is always enclosed in and surrounded by the health care system, there are no lapses in care, and at all times in the transfer there is an identifiable knowledgeable available clinician who is responsible for managing the patient's clinical issues), logistical and management support for patients and families, and quality measurement to improve the process (O'Malley, 2009).

Achieving effective care transitions involves breaking down the silos that currently exist among healthcare settings, some of which are payment silos (see Figure 5). A move to global payments will incentivize organizations to work together within communities and populations, and will incentivize insurers to find new strategies to reward effective transitions to optimize care and minimize unnecessary costs. Thus improved care transitions will include both clinical and payment components. One indicator of progress toward improved care transitions will be when every community in Massachusetts has a cross-continuum team of providers and patients meeting on a regular basis to develop, implement and evaluate tools and processes around care transitions across settings in that community. Furthermore, ongoing discussions between insurers and policy makers at the state level will be essential during the transformation to ACOs.

The Policy Landscape

National Policies, Guidelines and Consensus Statements

While Massachusetts is one of the first states to develop a strategic plan to improve transitions, the issue has been gaining traction with a number of national quality and policy making bodies. These efforts tend to focus on broad principles and policy recommendations for effective care transitions. We summarize these undertakings below. The principles and best practices are described elsewhere in the Strategic Plan (See Section on National Models and Best Practices, p. 13)

Joint Commission

The Joint Commission has identified lack of communication as the top contributing factor of medical error, and this finding spurred a national movement to improve communication within and between healthcare teams to ensure patient information is communicated effectively during transitions. The Joint Commission's National Patient Safety Goal Requirement 2E for 2007 was to implement a standardized approach to handoff communications (Joint Commission, 2007). The attributes of effective handoff communications are to allow questions between the giver and receiver of patient information, up-to-date information on care and treatment, prevention of interruptions in communication, a process for verification of information, and opportunity for the receiver to review the patient data (Joint Commission, 2007).

Transitions of Care Consensus Conference (TOCCC)

The American College of Physicians, the Society of Hospital Medicine, the American Geriatric Society, the American College of Emergency Physicians, and the Society for Academic Emergency Medicine collaborated to develop consensus standards to address quality gaps in transitions. The Transitions of Care Consensus Conference (TOCCC) held in the Fall-Winter of 2006, developed principles and clinical standards for care transitions. The TOCCC principles are accountability, communication of treatment plans and follow-up expectations, timely feedback, involvement of the patient and family, respecting the hub of coordination of care, the patient being able to identify a medical home, patients should know who is responsible at every point along the transition, national standards for transitions in care, and standardized metrics for continuous quality improvement and accountability (Snow et al, 2009).

The basis of the TOCCC clinical standards are that there needs to be communication between the medical home and the receiving clinician, and that the communication must be timely and occur when the transitions occur. The Consensus Conference determined that care plans and the transition record should contain a standardized minimal data set of elements (these data elements are enumerated in Snow et al, 2009).

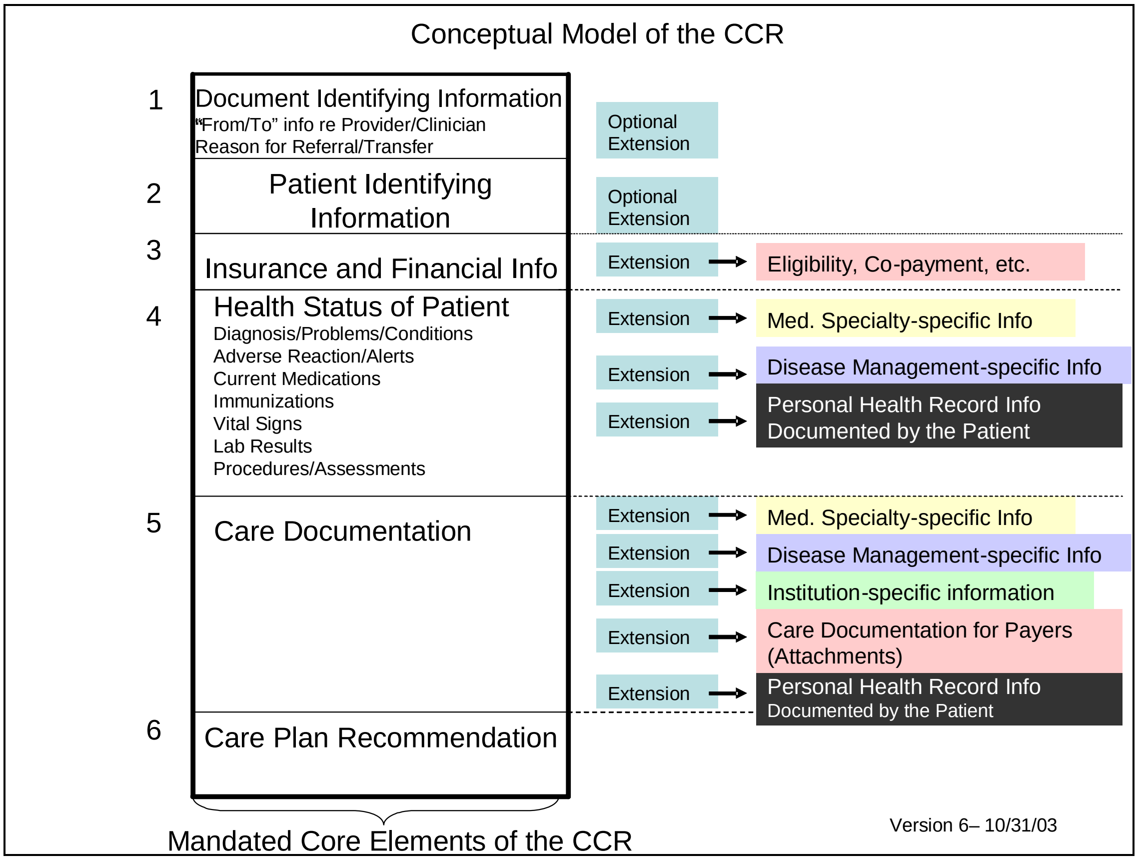
National Quality Forum

The National Quality Forum is currently in the process of developing performance measures for care coordination, and a draft for comment was circulated on October 26, 2009. Of the 25 preferred practices listed, eight are in the category of care transitions: involve the patient, patient participation in post-transition care, systematic care transitions programs, deployment of a Transitional Care Model for high-risk older adults, a standardized communication template for the transition process, protocols/policies for a standardized approach to transitions, mutual accountability for parties involved in the transition, and evaluation of effectiveness of the protocols/policies and outcomes. Each of these preferred practices is associated with several specific measures. This program is under development.

Continuity of Care Record

ASTM International, the Massachusetts Medical Society, HIMSS, and the American Academy of Family Physicians collaborated to develop a Continuity of Care Record (CCR, www.astm.org/COMMIT/E31_ConceptPaper.doc). The contents of a CCR are patient and provider information, insurance information, patient's health status, recent care provided, and recommendations for future care and the reason for referral or transfer. Such a minimum dataset would enhance continuity of care by communicating the most relevant information about a patient, and may be included in an electronic health record. The ideal is for the CCR to be a vehicle to exchange clinical information among providers, as well as for the patient as a summary of care delivered (ASTM et al, 2003).

Figure 5. Conceptual Model of the Continuity of Care Record



Note: Mandated core elements are in the box on the left. Source: ASTM International, Massachusetts Medical Society, Health Information and Management Systems Society, and American Academy of Family Physicians, "Continuity of Care Record: The Concept Paper of the CCR," 2003.

Physician Consortium for Performance Improvement (PCPI) Care Transitions Workgroup

As an outcome of the Transitions of Care Consensus Conference process, the participating organizations (The American Board of Internal Medicine Foundation, the American College of Physicians, the Society of Hospital Medicine, and the Physician Consortium for Performance Improvement) formed a Care Transitions Workgroup to identify and define quality measures for improving outcomes for patients undergoing transitions in care. The PCPI recommended several best practices for achieving effective care transitions. They suggest that a Care Transitions Workgroup should be formed to identify and define quality measures toward improving outcomes for patients undergoing transitions in care.

Indicators of success in improving care transitions are: reduction in adverse drug events, reduction in patient harm related to medical errors of omission and commission, reduction in avoidable healthcare encounters (e.g., hospital readmissions), reduction in redundant tests and procedures, achievement of patient goals and preferences (e.g., functional status, comfort care), and improved patient understanding of and adherence to treatment plan.

They assert that outcome measures should be implemented and tracked. National Quality Forum-endorsed measures include the three-item Care Transition Measure (CTM-3), the 30-day all-cause risk standardized readmission rate following heart failure hospitalization (the 30-day all-cause risk standardized readmission rate measure also applies to care for acute myocardial infarctions and pneumonia), and the all-cause readmission index (the number of total inpatient readmissions within 30 days from discharge to any hospital). In addition, process measures should include: having a reconciled medication list received by discharged patients, a transition record with specified elements received by discharged patients, the timely transmission of the transition record (to the facility or primary care physician for follow up care), a transition record with specified elements received by discharged patients for emergency department discharges, and the timeliness of post-discharge care for heart failure patients.

Medicare Coordinated Care Demonstration

The Medicare Coordinated Care Demonstration was conducted at 15 sites between 2002 and 2006 with Medicare beneficiaries who had congestive heart failure, coronary artery disease, or diabetes. The care coordination interventions differed widely among the demonstration sites, and included assigning patients to a care coordinator (usually a registered nurse); educating patients about adherence to medication, diet, exercise, and self-care regimens; behavior change models; transmission of patient reports to physicians; increasing physician adherence to evidence-based or guideline-based care; arranging for patient support services such as home-delivered meals or transportation; home telemonitoring devices for daily transmission of physiological readings and symptoms; and teaching patients to communicate more effectively with their physicians. Patients were contacted between one and two and a half times per month, but three of the programs contacted the patients four to eight times a month. The evaluation determined that the factors that influence success include the number of in-person contacts per month, targeting patients at high risk, teaching patients how to take medications, and having care coordinators work closely with hospitals and interact with physicians (Peikes et al, 2009).

National Healthcare Reform

Federal healthcare reform efforts have begun to address the importance of care transitions and avoidable rehospitalizations. The original Senate Finance Committee bill would have funded hospitals and community-based organizations to provide patient-centered and evidence-based transitional care services, for Medicare beneficiaries at high risk of avoidable rehospitalization. The bill would also have reduced payments by 20 percent in 2011 for hospitals with readmission rates above a certain threshold for avoidable readmissions within seven days (Baucus, September 2009). However, the final Senate bill did not have the payment cut, but instead calls for development of quality measures for care transitions and subsequent public reporting of these measures, and for patient safety organizations to work with certain hospitals to improve their readmission rates. (US Senate, December 2009).

The House bill echoes the provision to change payments to discourage avoidable readmissions. It goes further than the Senate bill in promoting bundled payments to encourage providers to coordinate patient care across the continuum of care, and establishes a program for accountable care organizations (House, October 2009). President Obama's FY2010 budget and MedPAC also address readmissions.[5]

The Massachusetts Health Policy Landscape

Massachusetts has world-class healthcare organizations, a uniquely non-profit orientation, and an innovative state policy-making approach. The landmark state healthcare reform legislation, a subsequent related bill, and the leadership of Governor Patrick have created a number of initiatives to increase access to care, improve quality, and reduce costs. We discuss several of the bodies that are overseeing these initiatives,

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[5] President Obama's FY2010 budget states that hospitals will receive bundled payments that will include the hospitalization and any care within 30 days after the hospitalization (U.S. OMB, 2009, p. 28BP-29). Also, his budget states that hospitals with high rates of readmission will be paid less if patients are readmitted to the hospital within 30 days (U.S. OMB, 2009; IHA, 2009, p. 28BP-29).

MedPAC made the following recommendations in their June 2008 report to congress (MedPAC, 2008, p. XIIIBRC-XIV):

1. The secretary of HHS should report to hospitals and physicians about readmission rates and about how to use resources effectively for hospital episodes of care
2. Medicare should reduce payments to hospitals that have relatively high readmission rates for selected conditions, coupled with gainsharing between hospitals and physicians
3. Medicare should implement pilot demonstrations of bundled payments concurrently with the second recommendation

MedPAC also recommend that hospital readmission rates would be an appropriate quality measure for pay-for-performance (P4P), especially for medical home models (MedPAC, 2008, p. 96 RS in Chapter 4). In addition, MedPAC defines efficiency as low mortality, readmissions, and inpatient cost (MedPAC, March 2009, p. XIV BRC).

and then discuss the next frontier for Massachusetts: a potentially transformative effort to fundamentally reform the payment system.

Statewide Policy Initiatives

The **Executive Office of Health and Human Services** (EOHHS) is the state agency with oversight for healthcare. It includes multiple agencies that have relationships with care transitions, including the Departments of Elder Affairs, Masshealth, Mental Health, Public Health, Department of Developmental Services, the Division of Health Care Finance and Policy, and others. EOHHS oversees several initiatives related to care transitions, including projects to develop patient-centered medical homes, the STAAR initiative, the health care payment reform commission, and the development of this Strategic Plan.

The **Health Care Quality and Cost Council (HCQCC)** (http://www.mass.gov/?pageID=hqcchomepage&L=1&L0=Home&sid=Ihqcc) is mandated under Massachusetts General Law chapter 6A and established by Chapter 58 of the Acts of 2006 to establish statewide goals for improving health care quality, containing health care costs, and reducing racial and ethnic disparities in health care. The Council is administered within, but not subject to the authority of, EOHHS. The HCQCC's goals include: 1) Reduce the costs of healthcare; 2) Reduce the annual rise in healthcare costs to no more than the unadjusted growth in GDP by 2012; 3) Ensure patient safety and effectiveness of care; 4) Improve the screening for and management of chronic illness in the community; 5) Develop and provide useful measurement of or approaches to quality in areas of healthcare for which current data is inadequate or current approaches are unsuccessful (e.g., End of Life care); 6) Eliminate racial and ethnic disparities in health and in access to the utilization of healthcare. This Strategic Plan will be presented to the Quality and Safety Committee as well as the full HCQCC for endorsement in early 2010.

The **Healthy Massachusetts Compact** was established in December 2007, and is comprised of EOHHS, the Executive Office for Administration and Finance, the Commonwealth Health Insurance Connector Authority, the Group Insurance Commission, the Division of Insurance, the Massachusetts Health and Educational Facilities Authority, the Attorney General, Massachusetts Development Finance Agency, and the Department of Correction. The Compact's goals are to: coordinate purchasing and contracting strategies across programs; reduce administrative costs by encouraging the use of technology; seek the highest quality health care standards; promote transparency; use payment systems to encourage cost-efficient; support communities' efforts to promote wellness; and eliminate racial and ethnic disparities. (Commonwealth of Massachusetts, 2007)

The **End of Life Expert Panel** was chartered by Chapter 305 of the Acts of 2008 to identify best practices for end of life care, including those that minimize disparities in care delivery and variations in practice or spending among geographic regions. The group consists of about 40 experts from multiple organizations, and began meeting in spring 2009. Its recommendations for legislative, regulatory, and other policy changes were presented in November 2009, and future versions of this strategic plan will incorporate those recommendations *[recommendations to be provided by end of February]*

In addition to these governmental efforts, Massachusetts is fortunate to have a highly collaborative healthcare community, with leading providers and health plans willing to work together to address complex and challenging issues. These world-class providers and health plans are supported by an array of non-profit organizations and multi-stakeholder coalitions. For details on these organizations, their roles, and specific projects that they are working on, please see The Landscape of Massachusetts Non-Profit Health Information Technology Organizations and Coalitions at www.mahealthdata.org (MHDC 2009).

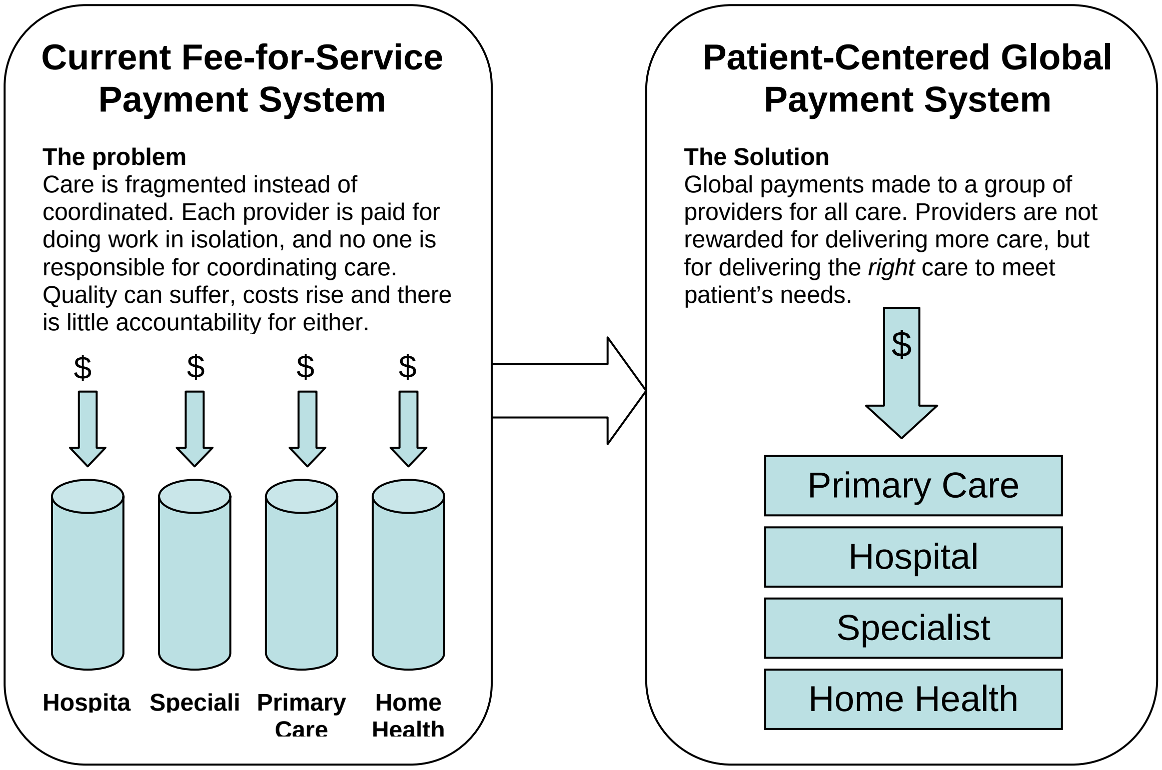
These collaborative relationships contributed to the establishment of the **Care Transitions Forum**. In early 2008 three separate initiatives evolved simultaneously to improve care transitions: the Massachusetts Senior Care Foundation formed the Care Transitions Task Force, the Massachusetts Health Data Consortium created a Continuum of Care Forum, and the Health Care Quality and Cost Council initiated a Transitions Workgroup. Rather than duplicate efforts, two of the groups merged into the Care Transitions Forum. Subsequently, the HCQCC added key members of its Patient Safety Committee to the Forum. As of October 2009, the Forum comprised approximately150 people representing over 100 different organizations. The Care Transitions Forum represents a community of interest and facilitates communication among the various demonstration projects in Massachusetts (see Appendix A). The Care Transitions Forum reports regularly to the HCQCC through the new HCQCC Quality and Safety Committee.

Payment Reform

Improving care transitions is seen as part of a grander vision for improving the healthcare delivery system in the Commonwealth. A critical aspect of this vision is payment reform. Payment reform is expected to move the system away from "disorganized, poorly coordinated, and inefficient care; care that fails to take into consideration patient preferences, resulting in unnecessary and unwanted procedures and interventions; policies that result in an undersupply of primary care providers and an oversupply of specialists; and care that is delivered without attention to clinical science" (EOHHS, April 2009).

Chapter 305 of the Acts of 2008 created a Special Commission on the Health Care Payment System to make recommendations for reforming and restructuring the payment system to make care more patient-centered and to reduce variations in quality and cost. The potential for savings in Massachusetts are enormous: about $1.5 billion by eliminating potentially avoidable ED visits, hospitalizations, and readmissions (Bailit, 2009).

Figure 6. Global Payments Model. Source: Michael Bailit, Presentation to the Care Transitions Forum, September 11, 2009.



Current Fee-for-Service Payment System

The problem
Care is fragmented instead of coordinated. Each provider is paid for doing work in isolation, and no one is responsible for coordinating care. Quality can suffer, costs rise and there is little accountability for either.

Patient-Centered Global Payment System

The Solution
Global payments made to a group of providers for all care. Providers are not rewarded for delivering more care, but for delivering the *right* care to meet patient's needs.

The Special Commission recommended that global payments become the predominant reimbursement methodology within five years (Kirwan and Iselin, 2009).

The implications of this recommendation for care transitions are profound: if fee-for-service results in fragmented care with no incentives for coordination, then a patient-centered global payment system will require the silos of healthcare organizations to coordinate across the continuum of care.

In addition to the Special Commission, the HCQCC is examining cost containment approaches. The HCQCC contracted with Bailit Health Purchasing to develop and write a Roadmap to Cost Containment to achieve the HCQCC goal of having the rise in the costs of health care equal the rise in the gross domestic product by 2012. The HCQCC adopted the Roadmap in October 2009. The Roadmap contains discreet strategies that HCQCC believes, if implemented strategically, will allow the Commonwealth to meet its goal of sustainably containing cost growth in health care. These strategies are consistent with the quality agenda of HCQCC.

Specifically, HCQCC recommends:

- Comprehensive payment reform
- Support of system-wide redesign efforts
- Widespread adoption and use of health information technology (HIT)
- Implementation of evidence-based health insurance coverage informed by comparative effectiveness research (CER)
- Implementation of additional health insurance plan design innovations to promote high-value care
- Development of health resource planning capabilities
- Enactment of malpractice reform and peer review statutes
- Implementation of administrative simplification measures
- Consumer engagement efforts
- Emphasis on the prevention of illness and the promotion of good health
- Increased transparency

(HCQCC 2009).

The recommendations of the Commission and the Council will be considered by the Legislature in 2010, and if payment reform is enacted, we believe that care transitions will be a consideration of the policy makers.

Patient-Centered Medical Home (PCMH) Initiatives in Massachusetts

The PCMH is an attempt to apply theories of primary care to actual practice in order to improve quality, reduce costs, and reduce disparities. PCMHs embrace the following principles: each patient receives individualized care from a team of primary care providers including physicians and nurses; the team is responsible for a patient's ongoing care, for the "whole person"; a patient's care is coordinated across the health system and community; quality and safety are hallmarks of the practice; enhanced access to care is offered through open scheduling, expanded hours, and new care options, such as group visits; and the payment structure recognizes the enhanced value provided to patients (EOHHS August 2009, citing The Commonwealth Fund 2008). Thus, the PCMH concept includes both the transformation of primary care practice and supplemental and modified payments to practices. PCMHs have an important role in care transitions, as the primary care physician is responsible for managing specialist care and transfers from the community to hospitals and other settings of care. Because the PCMH concept promotes both payment reform and practice transformation, they are a linchpin in any plan to improve transitions in care. The critical role of PCMHs is indicated by the fact that they were mentioned 63 times in the Payment Commission's report.

EOHHS developed a strategic plan for medical homes with a goal to transform all primary care practices into high-performing and advanced medical homes by 2015 (EOHHS August 200**9).** A subsequent Framework for Design and Implementation addresses practice redesign, consumer engagement, incentive alignment, evaluation, practice engagement, payer participation, role of EOHHS, and timeframe. Participating practices are expected to begin implementation before the end of 2010 (EOHHS, October 2009).

The Medicaid Patient-Centered Medical Home Demonstration. Chapter 305 required Medicaid to design and implement a medical home demonstration. Key requirements for this demonstration include that Medicaid shall 1) restructure its payment system to support primary care practices that use a medical home model, 2) develop a program to support primary care providers in developing an organizational structure necessary to provide a medical home, and 3) work with Medicaid managed care organizations to develop and implement the project. Upon reviewing experiences in other states and the relevant literature, it was determined that MassHealth could best achieve the goals set forth by the Legislature by participating in a multi-payer initiative to reform primary care (see below).

The Massachusetts Patient-Centered Medical Home Initiative is a multi-payer, collaborative approach to implementing a medical home initiative across the Commonwealth. Obligations for payers and providers, including payment methodology, are being developed by the Steering Committee of the Patient-Centered Medical Home Initiative Council (PIC).

The Commonwealth Fund/Qualis Safety Net Medical Home Initiative is a grant program to transform 14 community health center sites into PCMHs. EOHHS is Executive Sponsor and the Massachusetts League of Community Health Centers is providing the Medical Home Facilitator (MHF). Together, the two organizations comprise the Regional Coordinating Center (RCC) as defined under the grant. Funding will primarily support the medical facilitation role, including providing practice coaches. The Qualis project relates to the PCMHI in several ways:

- EOHHS is using the PIC as the “stakeholder advisory group” that we are required to establish for the Qualis grant.
- Practices will be selected to participate in the MA PCMHI through a procurement process.
- Technical assistance (TA) from Bailit Health Purchasing (Bailit) and University of Massachusetts Medical School, Commonwealth Medicine (UMMS) will be provided to all selected practices in the PCMHI, which may include the Qualis CHCs. Since there are expectations for the Qualis CHCs to begin practice transformation activities now, Bailit and UMMS are working with the Massachusetts League of CHCs to provide support to the Qualis CHCs. In addition, there are plans to integrate the CHCs into the PCMHI’s schedule of TA activities, once they begin (planned for September 2010).

Vision for Care Transitions in Massachusetts

Mr. Jiminez’ story continues…

> After 24 hours, he is moved to a medical floor. He sees medical residents, physicians, nurse practitioners, therapists and nurses during the course of each shift. Some speak Spanish, some do not. On Monday, he falls trying to get out of bed by himself, and sustains a left hip fracture. He has an ORIF and is sent to the orthopedic floor for another 5 days. Medications are adjusted, including his warfarin.
>
> He is transferred to a SNF for post-acute care, where he has another clinical care team. They are unable to access his records from the hospital easily, so instead they just repeat his labs. No one asks about the goals of care, or whether Mrs. Jiminez can care for him at home. The patient becomes more depressed…

Our vision is for all Massachusetts citizens to receive safe, effective, timely care during care transitions between and within settings of care delivered by interdisciplinary teams. EOHHS and its partners will be accountable for developing and implementing measurable outcomes for care transitions, based on available national standards, within and among health care systems in every community.

While there may be no “one size fits all” approach to improving care transitions, there is a need to coordinate various models so that within each community a seamless system of care can be developed and sustained. Person-centered medical homes (PCMHs) are one example of an integrated and accountable hub and network, but other models may also co-exist within communities. Goals for measurable outcomes should be set and achieved, and to the extent possible the same measures should be used by all care transition models to minimize reporting burden to health care organizations. State-level measures should be consistent with any published national standards, and efforts such as the HCQCC Performance Measurement Task Force should align with other organizations’ proposed measures to ensure consistency and wide adoption of standardized measures.

We believe this vision will result in a reduction in costly and avoidable hospitalizations and rehospitalizations and other consequences of inappropriate or inadequate care, particularly for the most vulnerable and complex chronically ill patients. Furthermore, we anticipate improved patient and family satisfaction with care transitions and coordination of care for everyone in the Commonwealth.

Realizing the Vision: Principles, Recommendations and Action Steps

> Mr. Jiminez finally goes home…
>
> After 3 more weeks in the SNF, Mr. Jiminez is discharged by the SNF team with a rolling walker and orders for outpatient PT. The nurse calls

> his wife to pick him up. The medication changes are reviewed prior to discharge and a sheet is provided, but Alberto's wife is overwhelmed with her husband's care needs; since teach back is not done, the nurses don't realize that she doesn't understand the different medications and dosages that have been prescribed. No one asks about whether they can pay for the medications or not, or if they have transportation to the CHC for Alberto's follow up appointment.
>
> As it turns out, the soonest appointment they can arrange is in 4 weeks; the unit clerk did not let the care team know that the appointment would not be sooner. Mr. Jiminez is sent home with home health services, and on warfarin with instructions to "follow up with your primary care provider for INR and dosage adjustment."
>
> Five days later, Mr. Jiminez is rushed to the hospital unresponsive, and found to have a lower GI bleed. His INR was 9.6.

Sadly, the experiences of people like Mr. Jiminez are not uncommon. His medical and support service problems were exacerbated by lack of coordination between acute care and long term care services networks. The proper linkages were not made, and the Jiminez family fell into a 'care gap.' We want to avoid the consequences suffered by Mr. Jiminez. In order to realize the vision for improved care transitions, a cogent statewide plan must provide direction for policy makers so that our vision becomes more than just the sum of its parts. Individual care transition models, however successful, must be knit together to create a fabric of improved transitions in every community throughout the state.

The uncharted territory that will exist after the health care reform roadmap is implemented will require flexibility as ACOs and other new organizations evolve. Strong partnerships among providers, healthcare institutions, health plans and government agencies will be needed to create opportunities for frequent and open communication as communities move toward implementation of bundled payments and accountable care.

To achieve individual and community wellness, it will be necessary to align three perspectives: (1) clinical (care of the individual), (2) public health (care of populations), and (3) health policy (payment for and organization of services). Collectively, the principles and recommendations presented here address each of those areas. There are some underlying principles that apply to all areas. For example, ***leadership engagement and flexibility for ongoing learning and innovation at the local level will support accountability for improvement across the state. (Please note: in the principles that follow, the term "community" may mean a geographic community or region, a health care system or other voluntary organization of health care entities).***

For further detail, refer to Appendix B, A Table of Principles and Recommendations.

Principle 1

Timely feedback and feed forward of information through standardized care plans/transition records or other formats are essential to improving care transitions and reducing unnecessary costs.

Goal: Care transitions will include electronic or hard copies of standardized forms for data transfer that facilitate timely feedback and feed forward of information to promote safe and effective care during transitions.

Recommendations:

1. The state already requires that a standard data set be included in all transitions. Based on results from the 22 STAAR hospitals and other related projects, input from frontline providers and cross-continuum team leadership on improvements to sub-regulatory language can be proposed and additional detail included as needed to guide improvement. Individual forms, templates and processes may be customized by local leaders, but some standard information must be included.

   At a minimum, the standard data set for all care transitions will include
   - Principle diagnosis and problem list
   - Reconciled medication list including over the counter/herbals, allergies and drug interactions
   - Clearly identified medical home/transferring coordinating physician/provider/institution and their contact information
   - Patient’s cognitive status
   - Test results/pending results
   - Pertinent discharge instructions
   - Follow up appointments
   - Prognosis and goals of care
   - Advance directives, power of attorney, consent
   - Preferences, priorities, goals and values, including care limiting treatment orders (e.g., DNR) or other end-of-life or palliative care plans

   In addition, the “ideal” transfer record would also include:
   - Emergency plan and contact number and person
   - Treatment and diagnostic plan
   - Planned interventions, durable medical equipment, wound care, etc.
   - Assessment of caregiver status
   - Patients and/or their family/caregivers must receive, understand and be encouraged to participate in the development of their transitions record which should take into consideration the patient’s health literacy, insurance status and be culturally sensitive

   (Recommendations adapted from the TOCCC (Snow et al, 2009) – to be reviewed and refined by a Massachusetts expert panel on care transitions – see “action steps” below for selection process and timeline)
2. Communities should use their cross-continuum teams to review the recommendations of the Care Transitions Expert Panel to implement standardized templates/forms and processes in all health care organizations in that community. Consideration of a follow up telephone call 48 hours after hospital or SNF

discharge by a nurse, pharmacist, care manager or other provider is strongly encouraged. Other program components such as enhanced early post-acute care follow up (being evaluated in the STAAR program) should be considered in each community. This is a dynamic process, and should be coordinated with CMS initiatives such as the CARE tool (see p. 13). As new federal mandates and payment reform evolve, changes in state requirements should be re-evaluated to insure alignment with national initiatives.

3. Surveyors/inspectors will receive education in how to evaluate quality improvement in care transitions, to effectively oversee wider adoption of successful practices in communities and to support the work by hospitals, practices, SNFs and other organizations as well as to enforce existing regulations.

Action Steps

1. An expert panel (sub-group of the care transitions forum) will develop a standard set of information to be communicated during care transitions. The purpose of this document will be to provide a template for local teams who will test the forms and processes in that community, and will evaluate those interventions through ongoing QI processes and process/outcome measures.
2. A plan for roll out of new forms/templates and processes in all Massachusetts communities will be presented to the HCQCC Patient Quality and Safety Committee, with input from the CTF. This will provide local organizations with a timeline for quality improvement and clear guidance on what is expected from local leadership. Alignment of forms and processes to reduce the budget on health care organizations will be considered.
3. The MA Department of Public Health, Division of Health Care Quality will appoint a surveyor or survey manager to lead educational initiatives around care transitions for surveyors and inspectors.

Principle 2

Communication Infrastructure should support efforts to improve care transitions.

Goal: All health care systems will be aware of and adhere to a set of standards for communication around care transitions endorsed by the HCQCC. Communication will honor and value the patient’s wishes.

Recommendations: State standards for communication infrastructure should be based on the principles:

1. Communication is two-way, with opportunities for feedback and clarification. Each sending provider will provide a contact name and number of an individual who can respond to questions or concerns.

2. The content of information transferred includes a core standardized data set (see previous principle)

3. Information is a “living database,” created only once and with each subsequent provider updating, validating or modifying the information and providing updates to patients.

4. Patient information should be available to the provider prior to the patient arrival.

5. Patients should be provided with a medication list that is accessible (paper or electronic), clear, and dated.
6. All communications between patients and providers need to be secure, private, HIPAA compliant and adhere to national data standards.

(Adapted from TOCCC; (Snow et al, 2009))

Action Steps:

1. A sub-group of the CTF including representatives from Me-HI, the MA Health Data Consortium, DPH, EOEA, MRC, providers and insurers should meet at least quarterly to review adoption of and compliance with the above standards.

See also Principle 3, Patient and Family Engagement

Principle 3

Patient and Family Engagement is essential to improving care transitions.

Goal: Patients and families/caregivers will be active participants in developing their own treatment plans. Providers will engage patients/caregivers in order to get an understanding of patient preferences and lifestyle, cultural differences, and ability to manage care. Providers will insure that patients/caregivers have an understanding of the treatment plan and next steps. Patients and families/caregivers will know who their primary care teams are at all points before, during and after care transitions and will be able to access them with questions or concerns. Patients and families/caregivers will have access to their own health information. Communication will honor and value the patient's wishes.

Recommendations:
(See also Principle 2, Communication Infrastructure)

1. Committees addressing health information exchange and communication infrastructure related to transitions (e.g., Care Transitions Forum, HCQCC Quality and Safety Committee) should include at least one, and preferably more than one consumer/patient representative.
2. State-level groups such as Health Care For All, Partnership for Healthcare Excellence, MITSS, Mass Home Care and Independent Living Centers (ILCs) and others should be included in the development of care transitions initiatives at the state, community and organizational level.
3. Patient-centered feedback on "what went wrong" should be included in local QI processes. Feedback on the patient experience with teaching and discharge planning should be encouraged and integrated into local improvement processes.

Action Steps:

1. The Care Transitions Forum will convene a group with representatives from Health Care For All, Partnership for Healthcare Excellence, MITSS, Mass Home Care, ILCs and others to determine how best to insure consumer

representation in all aspects of care transitions development (printed and web-based materials, committees, etc.)

2. Work with patient/family and resident advisory councils at hospitals and nursing homes to insure the consumer voice in care transition improvement programs (MA Coalition for the Prevention of Medical Errors is currently engaged in this work).
3. Insure that underserved racial and ethnic groups are included. Consider neighborhood health centers in communities that will capture these groups (e.g., Lawrence, Fitchburg, Fall River)

Principle 4

Accountability for care during a transition will remain with the sending set of providers until the receiving set of providers has acknowledged responsibility for the care of the patient.

Goal: There will be continuity of care from one set of providers to another across care transitions. Lapses in care during transitions will be eliminated.

Recommendations:

1. The sending provider/institution/team at the clinical organization maintains responsibility for the care of the patient until the receiving clinician/location confirms that the transfer and assumption of responsibility is complete (within a reasonable timeframe for the receiving clinician to receive the information).

2. The sending provider should be available to the patient/caregiver and the receiving provider for clarification with issues of care within a reasonable timeframe after the transfer has been completed and this timeframe should be based on the conditions of the transfer settings.

3. The patient should be able to identify the responsible provider at all points before, during and after transitions.

(Adapted from TOCCC :Snow et al, 2009)

Action Steps:

1. A small group of experts, including providers, insurers, CIOs, DPH, IHI, EOEA and others from the CTF will convene to address issues of communication across settings. Input and experiences from the 22 STAAR hospitals will be included.
2. DPH Division of Health Care Quality will examine sub-regulatory language on discharge from health care facilities to more specifically guide communication standards across settings from a regulatory perspective. Surveyor training on how to identify effective care transitions tools and processes will be developed. Additional recommendations will be brought to the HCQCC through the Patient Quality and Safety Committee.
3. Existing programs and collaboratives such as INTERACT, Partners and others that already address communication across care settings should provide input into ways EOHHS can support and enhance wider adoption of these initiatives.
4. Individual institutions should have the opportunity to present to DPH the methods by which they are approaching and monitoring quality improvements around care

transitions. This information will be reviewed by DPH, and a more rigorous review conducted if required. Periodic reviews by individual institutions (internal QI process) and DPH may include interviewing sending and receiving clinical staff to determine whether accountability for care remains with the sending providers until the receiving providers have accepted the patient. Programs such as STAAR and others have developed tools to enhance the QI assessment of why a patient has returned (rehospitalization), including patient-centered and social reasons for what went wrong; these methods should be disseminated more widely throughout the state.

Principle 5

Provider and Practice Engagement are essential to insuring safe, effective transitions.

Goal: Providers will have a clear understanding of the Joint Principles published as the *Transitions of Care Consensus Policy Statement*, and will assume a shared responsibility along with other entities such as hospitals, nursing homes, home health agencies, hospices and consumers in the community for adopting and advancing any of these principles selected by Massachusetts for implementation.

Recommendations:

1. Each practice or practitioner should have ongoing access to a mentor from EOHHS/DPH and a collaborative of other practices/practitioners as well as hospitals, long term care facilities and home care agencies to assist in development of a workplan, timeline, and required resources for implementation of the selected Joint Principles. These should address practice standards, information systems, decision support, office systems and coaching related to care transitions within communities.

Action Steps:

1. Identify representative practices such as those affiliated with large academic teaching medical centers, small community hospitals, community health centers and independent small practices in rural, suburban and urban areas to serve as the first group of communities for implementation. These representative sites will be supported and mentored by EOHHS (DPH and other departments), EOEA, MRC and by local private partners (as above) to implement selected principles from the Joint Principles by January, 2014. EOHHS partners (IHI, MA Coalition for the Prevention of Medical Errors, DPH, Betsy Lehman Center, BORIM PCA and others) will meet with leadership from each of these practices to identify ways to work collaboratively to achieve the stated goal.

2. Convene a multi-stakeholder coalition from the individual communities (using the 22 STAAR cross-continuum teams, existing medical home or care coordination teams and others where possible) to develop strategies for improving communication and data transfer around transitions to and from provider practices.

  a. Provide links and resources related to the Policy Statement.
  b. Share stories and experiences from practitioner groups that have implemented some or all of the Joint Principles.

c. Identify HIT resources within the practices and requirements needed in order to implement selected principles from the Joint Principles.
d. Summarize lessons related to barriers and facilitators from these practices and practitioners, post on a website, and use to further disseminate the Joint Principles throughout the state.

Principle 6

Improvement in Care Transitions should be assessed using standardized process and outcome measures, based on nationally endorsed measures (e.g., NQF) when available.

Goal: Massachusetts will implement and track outcome measures related to care transitions, and will publish outcome measures on the HCQCC's public website by 2014.

Recommendations:

1. The HCQCC Expert Panel on Performance Measurement and the Quality and Safety Committee should collaborate to review and advise on the selection of process/outcome measurement related to care transitions based on input from local leadership and health care organizations engaged in this work.
2. The group developing and selecting measures should consider process measures, such as length of time from hospital discharge to first practitioner appointment, percent of time that a practitioner to practitioner telephone contact is documented, etc. to measure improved care transitions processes in each community. Additional process measures for consideration by the group could include: reconciled medication list received by discharged patients, SNF/rehab facility or home health agency, transition record with specified elements received by discharged patients, timely transmission of transition record (to facility, home health agency or PCP for follow up care), transition record with specified elements received by discharged patients, emergency department discharges, timeliness of post-discharge care for heart failure patients, time to first home health visit.
3. As an intermediate step to new process indicators, hospitals may consider evaluating improved patient understanding of and adherence to the post-discharge treatment plan through the required CAHPS Hospital Survey (HCAHPS). Hospitals should have flexibility in determining the specific questions, since many organizations already have successful internal systems for QI around these issues. SNFs may consider use of the NH-CAHPS survey.
4. Existing collaboratives and MA projects with sophisticated QI processes and demonstrated results should be leveraged to further disseminate those successful practices. DPH oversight should support and enhance work by hospitals with internal quality systems that successfully measure process improvement (see 2 and 3 above) to align regulatory and quality improvement goals.
5. The Expert Panel on Performance Measurement (in an advisory capacity) and Quality and Safety Committee should consider outcome measures that are implemented and tracked, potentially to include NQF-endorsed measures such as: 3-Item Care Transition Measure (CTM-3), 30-Day All-Cause Risk Standardized Readmission Rate following Heart Failure Hospitalization, 30-Day All-Cause

Risk Standardized Readmission Rate Following AMI Hospitalization, 30-Day all-Cause Risk Standardized Readmission Rate Following Pneumonia Hospitalization, All-Cause Readmission Index (total inpatient readmissions within 30 days from discharge to any hospital), and others.

Action Steps:

1. The first meeting of the Expert Panel on Performance Measurement was on November 17th, 2009. Alice Bonner, Joel Weissman, Craig Schneider and Dwight McNeil met on December 7th for follow up. AB, JW and CS will present the strategic plan and preliminary ideas on measures at the next meeting in February, 2010 to solicit feedback from that group.

Principle 7

Payment should evolve over time towards an approach that aligns the incentives of providers, insurers, and patients to maximize accountability for and minimizes adverse events associated with care transitions. We need a better understanding of barriers to improving care transitions related to the current payment system.

Goal:

Provide input into the discussions on new payment models that will support accountability for safe and effective care transitions within the context of statewide payment reform. Remove barriers to appropriate transitions that may exist related to health plan payment criteria. Remove silos and provide care to populations, within regions or communities.

Recommendations:

1. Consider payment models that could stimulate improvements in care transitions by a) authorizing payment for supplemental services (such as coaching or advanced clinical services); b) bundled payment and episode-based payment as a bridge to global payment; c) penalizing poor performance (lower payment for early readmissions); d) rewarding improved performance (demonstrate improvement in trend over time); e) rewarding improved performance (allow for gain sharing).
2. Analyze and evaluate programs and partnerships in the Commonwealth testing bundled or global payments for effectiveness and the potential for wider dissemination, sharing lessons learned.
3. Remove barriers to appropriate transitions that may exist related to health plan payment criteria (e.g., health plan will not cover transfer to a certain setting).
4. Further explore the potential role for data transparency as one component of new payment models.

Action Steps:

1. The Administration and Legislature should draft and submit legislation to implement recommendations of the Special Commission relative to care

transitions, with input from the HCQCC and should consider appropriations to implement this work and insure sustainability.

2. The HCQCC should obtain input from the Payment Committee of the STAAR project, the DHCFP PPR project and others to be integrated into future statewide initiatives on payment reform.

Conclusions

This Strategic Plan presents a statement of the problem, explains why transitions fail, and illustrates these problems with a case study of a patient facing problematic transitions. The plan describes recognized and evidence-based models of care, paints the policy landscape on both a state and national basis, and addresses the measures for success. The plan concludes with Principles, Recommendations, and Action Steps for realizing our vision for effective care transitions throughout the Commonwealth.

The well-being of everyone in our state and the success of Massachusetts's landmark efforts to reform the health insurance and payment systems are dependent on treating patients across the continuum of care seamlessly and effectively. We hope that this Strategic Plan will be a useful tool in helping the providers and policy makers in the state achieve this vision.

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Appendices

Appendix A. Care Transitions Programs in Massachusetts

INTERACT II (Interventions to Reduce Acute Care Transfers)

Reducing potentially avoidable hospitalizations of nursing home residents can decrease emotional trauma to the resident and family, decrease complications, and reduce healthcare costs. INTERACT I was a CMS special study to develop intervention strategies and tools and then to test them in nursing homes in Georgia. They found that fully two-thirds of hospitalizations were potentially avoidable, and that the toolkit reduced hospitalizations by 50 percent, and 36 percent of those rated potentially avoidable. (Ouslander and Herndon, 2009)

INTERACT II is being conducted in 30 nursing homes, including 10 in Massachusetts. The sites will be collecting data to estimate the costs of implementing the toolkit to inform pay-for-performance initiatives, and will explore incorporating the toolkit into health information technology systems. The researchers will be measuring success by studying hospitalizations per 1000 resident days, the change in the percent of avoidable transfers, the percent of residents with advance directives, a small comparison study of participants vs. non-participants, and retention and dropout rates. (Ouslander and Herndon, 2009)

MOLST (Medical Orders for Life-Sustaining Treatment)

MOLST is a process used by clinicians and critically ill patients to discuss and document end-of-life treatment wishes in the form of a signed medical order, to be honored across settings of care. Chapter 305 of the Acts of 2008 mandated a MOLST demonstration project. The demonstration will be launched in the Worcester area in early 2010, and an evaluation workgroup will be meeting regularly through June 2010 to develop and oversee the evaluation plan. (Adams, 2009)

The MOLST demonstration is being funded by Commonwealth Medicine, and implemented by a large multi-stakeholder coalition. The team is developing training materials and a video. The MOLST form itself has gone through numerous revisions via an extended review process with subject matter experts and stakeholders. (Adams, 2009)

Potentially Preventable Readmissions (PPR)

The Massachusetts Division of Health Care Finance and Policy is conducting a project to validate the accuracy and usefulness of the 3M Potential Preventable Readmissions methodology to identify hospital and benchmark readmission rates for the purposes of potential quality improvement, public reporting, and shared accountability for quality improvement work. Twenty hospitals are participating in the project and received confidential data. On a statewide basis, the baseline (2006) PPR rate was 10.7 percent, resulting in an additional 377,000 hospital days and estimated costs of $577 million. Final results of the study are being processed with the steering committee and are expected by the end of 2009 and/or early 2010 (Kirle, 2009).

STAAR (State Action on Avoidable Rehospitalizations Initiative)

Delivering high-quality health care requires crucial contributions from many parts of the care continuum, and effective coordination between providers and between care settings. Poor coordination of care often results in re-hospitalizations, many of which are avoidable. At the core of this challenge is improving care in the “white spaces” between settings of care, promoting enhanced “system-ness” in a fragmented environment.

Reducing avoidable re-hospitalizations in a state or region requires not only front-line process improvement, but also identification and mitigation of barriers to system-wide improvement, especially policy and payment reforms that will reduce fragmentation and encourage coordination across the continuum of care. Such reforms are necessary to address the shortcomings of the current volume-based incentives, and to place a premium on the quality of the patient’s experience across the continuum of care.

Recently, the Institute for Healthcare Improvement (IHI) launched the STate Action on Avoidable Re-hospitalizations (STAAR) initiative — a multi-state, multi-stakeholder approach to dramatically improve the delivery of effective care at a regional scale. This initiative aims to reduce re-hospitalizations by working across organizational boundaries in three states, Massachusetts, Michigan, and Washington — by engaging payers, state and national stakeholders, patients and families, and caregivers at multiple care sites and clinical interfaces**.** Through supporting the strategy and leadership of state-level Steering Committees in the three states, IHI aims to help states reduce state-wide 30-day rehospitalization rates by 30 percent and to increase patient and family satisfaction with transitions in care and with coordination of care.

STAAR launched technical assistance on its first phase of work, improving the transition out of the hospital, with 21 hospitals and their cross-continuum partners in Massachusetts in September, 2009. IHI recommends testing and adapting to local circumstances practice changes in four areas: enhanced assessment, enhanced patient teaching and learning, timely communication, and timely follow up. The changes aim to improve the transition out of the hospital for all patients. The engagement with cross-continuum partners is integral to the core principle of co-creating the ideal communication processes between “senders” and “receivers” across care settings. The second phase of this work will consist of a collaborative learning network to improve the “reception” into the post-acute setting of care: the medical home and/or the skilled nursing facility.

STAAR is actively engaged in providing expert consultation and innovative work to address structural barriers to successfully spreading better practices to improve transitions and measurably reduce readmissions at a state-wide level. Those barriers include: state-level data/measurement strategies, understanding the financial implications of reducing readmissions on providers, working across the continuum, and alternative payment approaches and other policy levers for change.

LifeBox

Caritas Norwood was awarded a grant from the Kenneth B. Schwartz Center to develop a patient-centered care transitions program. The LifeBox is a vehicle for systematic communication among members of a collaborative of eight healthcare organizations and the patients they serve. The tool is intended to ensure that the patient's character, wishes, values, and goals with respect to healthcare are honored. (Calvert and Gavin, 2009)

The project includes a comprehensive training program for clinical caregivers, patients, and their families to educate and encourage active participation in patient-centered care. The training includes videos that model the conversation between the physician and the patient. The LifeBox itself is information about the patient's life history wishes, and goals, and is a part of the electronic health record and discharge information. The measurements for success will be the effectiveness of the information transfer and patient/family satisfaction with the transfer. (Calvert and Gavin, 2009)

BOOST (Better Outcomes for Older Adults through Safe transitions)

The goal of Project BOOST is to improve the care of patients as they transition from the hospital to the home. The desired outcomes are to reduce 30-day readmission rates, improve patient satisfaction scores, improve H-CAHPS discharge scores, improve information flow between the hospital and outpatient physicians, ensure that high-risk patients are identified and interventions are offered, and to improve patient and family education. The Project's approach is to create a national consensus for best practices, to develop resources to implement these best practices, and to provide technical support. UMass-Marlborough is currently the only Massachusetts hospital participating. (Society of Hospital Medicine, 2009) The tool is known as TARGET: tool for adjusting risk – a geriatric evaluation for transitions (Greenwald, 2009).

RED (Reengineering discharge)

The RED Project intervention is to utilize a Discharge Advocate during admission, to develop an After Hospital Care Plan, to have a scripted follow up call from a pharmacist shortly after discharge, and to provide access to the Discharge Advocate following discharge. The advocate coordinates with the medical team, educates patients about their disease, arranges aftercare, handles medication issues, prepares and reinforces the After Care Plan, and collects data. This program is being implemented at Boston Medical Center. ED visits were 35 percent lower than the control group (25 percent vs. 16 percent), and hospital utilization was more than 25 percent lower. (Greenwald 2009)

Partners HealthCare System Clinical Transitions Project

A study of discharge packets from Massachusetts General Hospital and Brigham and Women's Hospital scored them against the Essential Minimum Data Set. They found that one-third of the packets were missing more than 50 percent of the essential items, one-third were missing more than 33 percent, and the other third were missing more than 10 percent – the defect-free rate was zero percent for the sample. (Bonner and O'Malley 2009)

In response, the team developed a list of 300 essential clinical elements, with 25 core items and datasets for 24 specific conditions and eight medication classes. The goal was for 100 percent of the information to be transmitted 100 percent of the time, and the metric for success is a defect-free rate. The 300-item list was consolidated to seven items: hospital course, allergies, discharge medications, physician contact information, procedures, follow-up plan, and anticoagulation management. These seven items were translated into 12 essential data elements. Performance has improved from zero percent in 2003 to over 90 percent by the end of 2008. The next step will be to expand the number of essential clinical elements, the number and types of transitions, and the process of transferring care. (O'Malley, 2009)

Somerville Hospital Study

A study at Somerville (Massachusetts) Hospital tested a four-step intervention (a Patient Discharge Form, the transfer of an electronic PDF document to the primary care site, phone contact by a primary care nurse to the patient, and a PCP review of the discharge/transfer plan). The researchers found that only 25.5 percent of the intervention group had one or more undesirable outcomes (including: No follow-up within 21 days; Readmission within 31 days; ED visit within 31 days; or, Incomplete outpatient workup), compared with 55 percent of the control group. This discharge-transfer intervention proposes a new paradigm: that the systematic transfer of patient care to the PCP becomes an integral part of the discharge process. The goal is for seamless medical care during transitions and to formalize communication. (Balaban et al, 2008)

Massachusetts Pressure Ulcer Collaborative

The Massachusetts Pressure Ulcer Collaborative is in the formative stage of development, with the plan for implementation in early 2010. Collaborative work began in early 2009 with the formation of a multi-stakeholder steering committee representing members across the continuum of care. The PUC Steering Committee developed a collaborative charter, including the mission, goals, measurement expectations, and a framework for implementing and maintaining the collaborative. A call for applications resulted in approximately 30 organizations (hospitals, long term care, home care) expressing an interest in participating in this collaborative.

Collaborative Mission Statement

Massachusetts Pressure Ulcer Collaborative will support participating health care organizations working together to implement a statewide quality initiative to prevent pressure ulcers across the continuum of care. This will be accomplished through the promotion of best practice, education, and improved communications.

The Greater Boston Aligning Forces for Quality Alliance

The Greater Boston Aligning Forces for Quality (GBAF4Q) Alliance is designed to align stakeholders and resources through a common vision toward improving the health of Greater Boston residents, by improving measurement of care and public reporting, increasing consumer engagement, and enhancing community support for physicians, hospitals, and clinics in their quality improvement efforts. The Massachusetts Health Quality Partners and the Eastern Massachusetts Healthcare Initiative have partnered to spearhead GBAF4Q, which represents a broad-range of stakeholders from the healthcare delivery system, public health, and the community, including state and local public health agencies, consumer advocacy groups, consumers, business coalitions, physician organizations and community health centers, nurse leaders, health plans, hospitals, and academics. The planning group has identified a specific focus on reducing preventable emergency department visits and associated admissions (Lambiaso, 2009).

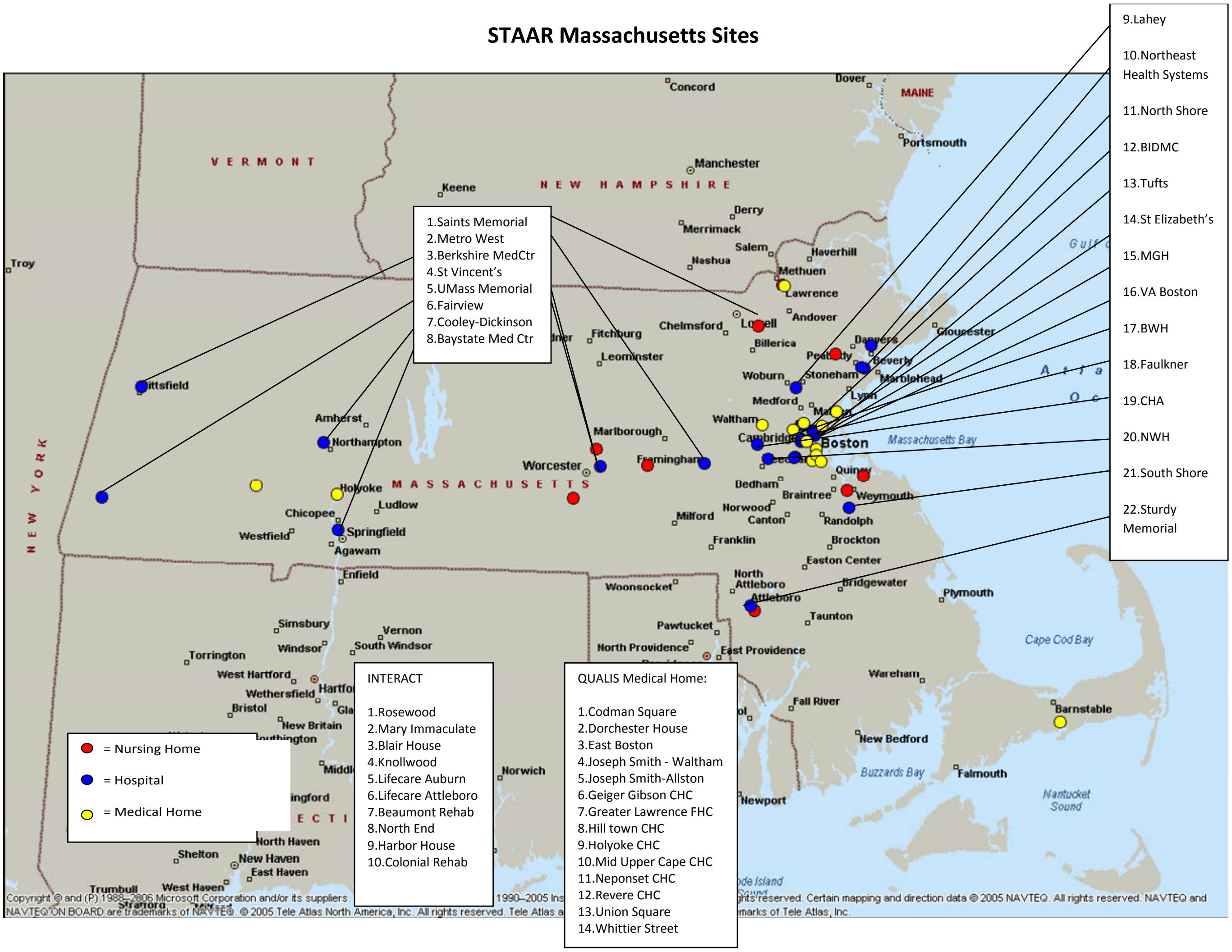
Aging & Disability Resource Center (ADRC) Development and LTC Options

EOEA and the Mass Rehabilitation Commission are using state and federal funding to develop the capacity for ADRCs to function as the single entry point for individuals with disabilities and the elderly seeking long term care support services. Person-centered hospital discharge planning has been identified by CMS as a “key operational component”of the ADRC mission. EOEA is currently working under a federal grant to continue the strategic planning/capacity-building needs of the ADRCs. In addition, state funds are being used to operate 3 LTC Options projects in the state, with the goal of providing counseling for consumers of all income who are imminently considering nursing home admission. The goal of this program is to prevent inappropriate placement in institutions, and to provide consumers with the ‘least restrictive care” in accordance with MassHealth statute.

Senior Care Options (SCO) Plan

This managed care program for the dually eligible, created by Massachusetts statute, currently serves more than 13,000 consumers, providing them with coordinated health and long term care services---much in the way that the Medical Homes initiatives seeks to create a seamless system of care across settings. In the SCO model, the Senior Care Options entities use care management staff from the Aging Services Access Points (ASAPs) to ensure care coordination between acute care and long term care needs. As noted above, the ASAPs are key entities in the ADRC model as well. Community care coordination for complex care clients are handled by Geriatric Support Services Coordinators (GSSC), who work for the ASAPs. The ASAPs also coordinate care for roughly 50,000 individuals per year, about one-third of whom are on MassHealth.

STAAR Massachusetts Sites



1.Saints Memorial
2.Metro West
3.Berkshire MedCtr
4.St Vincent's
5.UMass Memorial
6.Fairview
7.Cooley-Dickinson
8.Baystate Med Ctr

9.Lahey
10.Northeast Health Systems
11.North Shore
12.BIDMC
13.Tufts
14.St Elizabeth's
15.MGH
16.VA Boston
17.BWH
18.Faulkner
19.CHA
20.NWH
21.South Shore
22.Sturdy Memorial

INTERACT

1.Rosewood
2.Mary Immaculate
3.Blair House
4.Knollwood
5.Lifecare Auburn
6.Lifecare Attleboro
7.Beaumont Rehab
8.North End
9.Harbor House
10.Colonial Rehab

QUALIS Medical Home:

1.Codman Square
2.Dorchester House
3.East Boston
4.Joseph Smith - Waltham
5.Joseph Smith-Allston
6.Geiger Gibson CHC
7.Greater Lawrence FHC
8.Hill town CHC
9.Holyoke CHC
10.Mid Upper Cape CHC
11.Neponset CHC
12.Revere CHC
13.Union Square
14.Whittier Street

🟥 = Nursing Home
🟦 = Hospital
🟨 = Medical Home

Appendix B. Summary Table: Principles, Goals, Recommendations, Action Steps

(Please refer to main body of Plan for details on recommendations and action steps)

Principle 1. Timely feedback and feed forward of information through standardized care plans/transition records or other formats are essential to improving care transitions and reducing unnecessary costs.

Goal: Care transitions will include electronic or hard copies of standardized forms for data transfer that facilitate timely feedback and feed forward of information to promote safe and effective care during transitions.

Recommendations	Action Steps	Measures	Who Is Responsible	Reported To
1. Minimum dataset: At a minimum, the standard data set for all care transitions will include: ▪ Principle diagnosis and problem list ▪ Reconciled medication list s ▪ Clearly identified medical home/transferring coordinating physician/institution and their contact information ▪ Patient's cognitive status ▪ Test results/pending results ▪ Pertinent discharge instructions ▪ Follow up appointments ▪ Prognosis and goals of care ▪ Advanced directives, power of attorney, consent ▪ Preferences, priorities, goals and values, including care limiting	**1.** An expert panel will recommend a final standard information set. Local teams will test use of forms and processes in that community and monitor implementation of the standard data set through QI systems by January, 2011.	To be developed by the HCQCC Expert Panel on Performance Measurement and QSC. For example: percentage of time that the receiving provider has 100% of the information required.	DPH	HCQCC

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
treatment orders (e.g., DNR) or other end-of-life or palliative care plans **1a**. The **“ideal” transfer** record also would include: ▪ Emergency plan, contact person and number ▪ Treatment and diagnostic plan ▪ Planned interventions, durable medical equipment, etc. ▪ Assessment of caregiver status ▪ Patients and/or family/caregivers must receive, understand and be encouraged to participate in the development of their transitions record which should take into consideration the patient’s health literacy, insurance status and be culturally sensitive. (Recommendations adapted from the TOCCC: Snow et al, 2009)				
2. Program components: 2a. Communities use **cross-continuum teams** to implement templates/forms and processes. 2b. **Follow up telephone call** 48 hours after hospital or SNF discharge by a	**2.** A plan for roll out of new forms/templates and processes in all Massachusetts communities will be developed by the Patient Quality and Safety			

Recommendations	Action Steps	Measures	Who Is Responsible	Reported To
clinician, nurse, pharmacist, care manager or other provider is strongly encouraged. **2c**. **<u>Enhanced early post-acute care follow up</u>**.	Committee of the HCQCC, with input from the CTF. This will provide local organizations with a timeline for quality improvement and clear guidance on what is expected from local leadership. Alignment of forms and processes to reduce burden on health care organizations will be considered.			
3. **<u>Surveyors/inspectors</u>** should be trained to evaluate quality improvement in care transitions and to enforce existing regulations.	**3.** The MA Department of Public Health, Division of Health Care Quality will appoint a surveyor or survey manager to lead educational initiatives around care transitions for surveyors and inspectors.			

Principle 2. Communication Infrastructure should support efforts to improve care transitions.

Goal**:** All health care systems will be aware of and adhere to a set of standards for communication around care transitions adopted by the HCQCC. Communication will honor and value the patient's wishes.

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
1. Contact information: Each sending provider will provide a contact name and number of an individual who can respond to questions or concerns.	**1.** A sub-group of the CTF including representatives from Me-HI, the MA Health Data Consortium, DPH, providers and insurers should meet at least quarterly to review adoption of and compliance with the recommended standards. (Adapted from TOCCC: Snow et al, 2009)	TBD	DPH	HCQCC
2. Information Content: The content of information transferred includes a core standardized data set (see previous principle)	**2.** The development of these components will be linked to the MA HIT Expert Panel chaired by Secretary Bigby, and federal HIT standards under development for meaningful use.			
3. "Living database": Information is created only once and then updated, validated or modified by each subsequent provider.				
4. Patient information should be available to the provider prior to the patient arrival.				

Recommendations	Action Steps	Measures	Who Is Responsible	Reported To
5. Medication tracking: Patients should be provided with a medication list that is accessible (paper or electronic), clear, and dated.	**5**. Consider legislation to allow home health aides to do medication monitoring			
6. HIPAA compliance: All communications between patients and providers need to be secure, private, HIPAA compliant and adhere to national data standards.	**6.** See also Principle 3 Patient and Family Engagement			

Principle 3. Patient and Family Engagement is essential to improving care transitions.

Goal: Patients and families/caregivers will be active participants in developing their own treatment plans. Providers will engage patients/caregivers in order to get an understanding of patient preferences and lifestyle, cultural differences, and ability to manage care. Providers will insure that patients/caregivers have an understanding of the treatment plan and next steps. Patients and families/caregivers will know who their primary care teams are at all points before, during and after care transitions and will be able to access them with questions or concerns. Patients and families/caregivers will have access to their own health information. Communication will honor and value the patient's wishes.

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
1. **Patient representation:** Relevant policy-making committees should include a consumer/patient representative.	**1.** Convene a group with representatives from Health Care for All, Partnership for Healthcare Excellence, MITSS and others to determine how to best insure consumer representation in all aspects of care transitions development (printed and web-based materials, committees, etc.)	TBD		
2. **Patient advocate representation:** State-level groups such as Health Care For All, Partnership for Healthcare Excellence, MITSS and others should be included in the development of care transitions initiatives at the state, community and organizational level.	**2.** Work with patient/family and resident advisory councils at hospitals and nursing homes to insure the consumer voice in care transition improvement programs (MA Coalition for the Prevention of Medical Errors is currently engaged in this work).			
3. Patient-centered feedback on the patient experience with teaching and discharge planning should be encouraged and integrated into local improvement processes. This should include a focus on health literacy.	**3**. Insure that underserved racial and ethnic groups are included. Consider neighborhood health centers in communities that will capture these groups (e.g., Lawrence, Fitchburg, Fall River)			

Principle 4: Accountability for care during a transition will remain with the sending set of providers until the receiving set of providers has acknowledged responsibility for the care of the patient.

Goal: There will be continuity of care from one set of providers to another across care transitions. Lapses in care during transitions will be eliminated.

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
1. Longitudinal Accountability: The sending provider maintains responsibility until the receiving location confirms assumption of responsibility	**1.** A small group of experts, including providers, insurers, CIOs, DPH, IHI and others from the CTF will convene to address issues of communication across settings. Input and experiences from the 22 STAAR hospitals will be included.			
2. Handoff responsibility: The sending provider should be available for clarification with issues of care within a reasonable timeframe after the transfer has been completed; this timeframe should be based on the conditions of the transfer settings.	**2.** DPH Division of Health Care Quality will examine sub-regulatory language on discharge from health care facilities to more specifically guide communication standards across settings from a regulatory perspective. Additional recommendations will be brought to the HCQCC through the Patient Quality and Safety Committee.			

Recommendations	Action Steps	Measures	Who Is Responsible	Reported To
3. <u>Identifiable provider</u>: The patient should be able to identify the responsible provider. (Adapted from TOCCC: Snow et al, 2009)	**3.** Existing programs and collaboratives such as INTERACT, Partners and others that already address communication across care settings should provide input into ways EOHHS can support and enhance wider adoption of these initiatives. Individual institutions should have the opportunity to present to DPH the methods by which they are approaching and monitoring quality improvement around care transitions. This information will be reviewed by DPH, and a more rigorous review conducted if required.			

Principle 5: Provider and Practice Engagement are essential to insuring safe, effective transitions.

Goal: Providers will have a clear understanding of the Joint Principles published as the *Transitions of Care Consensus Policy Statement*, and will assume a shared responsibility along with other entities such as hospitals, nursing homes, home health agencies, hospices and consumers in the community for adopting and advancing any of these principles selected by Massachusetts for implementation.

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
1. Education and Best Practices: Outreach to provider practices to share information and provide education and Best Practices around care transitions should be an early action step in the process.	**1.** Identify best practice sites to implement the Joint Principles by January, 2014. EOHHS partners (IHI, MA Coalition for the Prevention of Medical Errors, DPH, Betsy Lehman Center, BORIM PCA and others) will meet with leadership from each of these practice sites to identify ways to work collaboratively.			
2. Mentors: Practitioners should have access to mentors to address practice standards, information systems, decision support, office systems and coaching related to care transitions.	**2.** Convene multi-stakeholder coalitions from individual communities to develop strategies for communication and data transfer.			

Principle 6: Improvement in Care Transitions should be assessed using standardized process and outcome measures, based on nationally endorsed measures (e.g., NQF) when available.

Goal: Massachusetts will implement and track outcome measures related to care transitions, and will publish outcome measures on the HCQCC's public website by 2014.

Recommendations	Action Steps	Measures	Who Is Responsible	Reported to
1. **The Expert Panel on Performance Measurement** (hereafter, Expert Panel) of the HCQCC and the HCQCC Quality and Safety Committee should collaborate to develop and select process/outcome measurement related to care transitions based on input from local leadership and health care organizations engaged in this work.	**1.** The Expert Panel should dedicate an entire meeting to this work, or form a task force to complete the work within 2-4 months.	TBD	DHCFP, DPH	
2. **Measure characteristics**: Process measures should consider characteristics relevant to transitions.	**2**. The Expert Panel should consider the following measures: time from hospital discharge to first practitioner appointment; frequency of practitioner to practitioner telephone contact; reconciled medication list received by discharged patients; transition record with specified elements received by discharged patients; timely transmission of transition record; timeliness of post-discharge care for heart failure patients.	Many of these metrics are only feasible once organizations have EMR in place (not through paper-based chart review). Therefore these process measures would be targeted for implementation in 2014 or after hospitals have EMR in place.		

Recommendations	Action Steps	Measures	Who Is Responsible	Reported To
3. <u>Intermediate Process Measures</u>: Hospitals and SNFs may consider evaluating improved patient understanding of and adherence to the post-discharge treatment plan 2a. Hospitals and SNFs should have flexibility in determining the specific questions				
4. <u>Dissemination</u>: Existing collaboratives and successful QI projects should disseminate results.	**4.** DPH oversight could support and enhance work by hospitals and SNFs with internal quality systems that successfully measure process improvement (see 2 and 3 above) to align regulatory and quality improvement goals.			
5. <u>Proxy outcomes</u>: The Expert Panel (in an advisory capacity) and Quality and Safety Committee should consider tracking outcome measures	**5.** Consider NQF-endorsed measures such as: 3-Item Care Transition Measure (CTM-3), 30-Day All-Cause Risk Standardized Readmission Rate following Heart Failure Hospitalization, 30-Day All-Cause Risk Standardized Readmission Rate Following AMI Hospitalization, 30-Day all-Cause Risk Standardized Readmission Rate Following Pneumonia Hospitalization, All-Cause Readmission Index (total inpatient readmissions within 30 days from discharge to any hospital).			

Principle 7. Payment should evolve over time towards an approach that aligns the incentives of providers, insurers, and patients to maximize accountability for and minimizes adverse events associated with care transitions. We need a better understanding of barriers to improving care transitions related to the current payment system.

Goal: Provide input into the discussions on new payment models that will support accountability for safe and effective care transitions within the context of statewide payment reform. Remove silos and provide care to populations, within regions or communities.

Recommendations	**Action Steps**	**Measures**	**Who Is Responsible**	**Reported To**
1. Incentive alignment: Payment models should stimulate improvements in care transitions by a) authorizing payment for supplemental services such as coaching or advanced clinical services; b) penalizing poor performance; c) rewarding improved performance; d) rewarding improved performance over time. 1a. **Shared savings**: Payment systems should allow for gain sharing)	**1.** The HCQCC Quality and Safety Committee should obtain input from the Payment Committee of the STAAR project, the DHCFP PPR project and others to be integrated into future statewide initiatives on payment reform.			
2. Existing programs and partnerships in the Commonwealth looking at **bundled and global payments should be analyzed and evaluated** for effectiveness and the potential for wider dissemination, sharing lessons learned.	**2.** The Administration and Legislature should consider drafting legislation to implement recommendations relative to care transitions of the Special Commission, with input from the HCQCC			
3. **Data Transparency:** The potential role for data transparency as one component of new payment models should be explored further.				

Glossary

Accountable care organizations – A model proposed by The Dartmouth Institute in which integrated delivery systems would receive global payments for the care of patients.

ADRC – Aging & Disability Resource Centers

American Board of Internal Medicine - ABIM is the national association of internal medicine specialists and 19 related subspecialties.

ASAP – Aging Service Access Point

Avoidable rehospitalizations – Rehospitalizations that occur as a result of one of 15 ambulatory care sensitive conditions, such as diabetes, asthma, chronic obstructive pulmonary disease, congestive heart failure, and hypertension. Hospitalizations occurring as a result of these conditions may have been prevented by either timely access to quality outpatient care or adoption of healthy behaviors.

BOOST – Better Outcomes for Older Adults Through Safe Transitions is a project to improve patient care as they transition from the hospital to their homes. UMass-Marlborough Hospital is participating.

Care transitions – The transfer of a patient from one setting of care or one set of providers to another during the course of an episode of care.

Care Transitions Forum – A coalition of over 100 organizations in Massachusetts that seek to improve the effectiveness of care transitions. The Forum was established by the Massachusetts Senior Care Foundation and the Massachusetts Health Data Consortium, and reports to the Health Care Quality and Cost Council.

Care Transitions Intervention - The CTI is the methodology for a CMS contract with the Colorado Foundation for Medical Care to conduct a special study to develop a framework for improved transitional care processes in order to reduce readmissions. CTI is an evidence-based interdisciplinary team approach to transitional care that was developed by Eric Coleman.

Care Transitions Measure – A 3 or 15-item instrument used to assess the quality of a transition from the patient's perspective. Developed by Eric Coleman and the University of Colorado.

The Care Transitions Model – An interdisciplinary team approach based on four pillars: medication self-management, the use of a patient-centered record, timely primary care and specialist follow-up, and knowledge of red flags. The pillars are operationalized by a personal health records and a transition coach. Also known as the Coleman Model.

Care Transitions Performance Management Set – Indicators of success in improving patient outcomes for those undergoing transitions, developed by the American Board of Internal Medicine Foundation, American College of Physicians, Society of Hospital Medicine, and Physician Consortium for Performance Improvement.

Centers for Medicare & Medicaid Services – CMS is the federal agency that administers the Medicare and Medicaid programs.

Comparative effectiveness research – CER is the study of the relative benefits and value of alternative therapies. The federal healthcare reform bills include CER, and the HCQCC recommends implementation of evidence-based health insurance coverage informed by CER.

Continuity Assessment Record and Evaluation (CARE) Tool – Developed as part of the CMS Post-Acute Care Payment Reform Demonstration, CARE is a standardized patient assessment tool for use at acute hospital discharge and at post-acute care admission and discharge. It is intended to eventually replace OASIS, MDS, and IRFPAI.

Continuity of Care Record – The CCR was developed by ASTM International, the Massachusetts Medical Society, HIMSS, and the American Academy of Family Physicians to be a minimum dataset that communicates the most relevant information about a patient for the purposes of exchanging clinical information among providers and a summary of care delivered for the patient.

Continuum of care – Healthcare settings that include hospitals, sub-acute and post-acute nursing facilities, the patient's home, primary and specialty care offices, community health centers, rehab facilities, home health agencies, hospice, long-term care facilities, and other institutional, ambulatory, and ancillary care providers.

Division of Health Care Finance and Policy – DHCFP is the Massachusetts state agency that collects, analyzes, and disseminates information; analyzes cost trends and cost containment options; develops, calculates, and reports on performance measures; manages the health safety net; and establishes and manages the all-payer claims database.

EOEA – Executive Office of Elder Affairs

Greater Boston Aligning Forces for Quality Alliance – GBAF4Q is developing a common vision for improving the health of Greater Boston residents by improving measurement, public reporting, consumer engagement, and community support.

Health Care Quality and Cost Council - The HCQCC is mandated under Massachusetts General Law chapter 6A to establish statewide goals for improving health care quality, containing health care costs, and reducing racial and ethnic disparities in health care. The Council is comprised of individuals representing multiple stakeholders, and has several committees, including the Quality and Patient Safety Committee.

HIT/HIE – Health information technology is the use of a variety of electronic methods for managing information about the health and medical care of individuals and groups of patients. Health information exchange is electronic movement of health-related information among organizations according to nationally recognized standards.

HCAHPS - The CAHPS Hospital Survey, also known as Hospital CAHPS, is a standardized survey instrument and data collection methodology used by CMS for measuring patients' perspectives of hospital care.

ILC – Independent Living Center

Institute for Healthcare Improvement – IHI is an independent not-for-profit organization helping to lead the improvement of health care throughout the world that works to accelerate improvement by building the will for change, cultivating promising concepts for improving patient care, and helping health care systems put those ideas into action. IHI is the lead organization for the STAAR project in Massachusetts.

INTERACT II – Interventions to Reduce Acute Care Transfers is a project being conducted in 30 nursing homes, including 10 in Massachusetts, to reduce potentially avoidable hospitalizations.

IRFPAI – The Inpatient Rehabilitation Facility Patient Assessment Instrument required by CMS for facilities to classify patients into distinct groups based on clinical characteristics and expected resource needs for prospective payment system reimbursement purposes.

JCAHO – The Joint Commission for the Assessment of Healthcare Organizations, now known as the Joint Commission, was founded in 1951, and evaluates and accredits more than 17,000 healthcare organizations and programs. The Joint Commission is the nation's oldest and largest standards-setting and accrediting body in health care.

LifeBox – A project by Caritas Norwood funded by the Kenneth B. Schwartz Center to develop a tool that ensures the patient's character, wishes, values, and goals are honored.

MedPAC – The Medicare Payment Advisory Commission, was established by the Balanced Budget Act of 1997 to make recommendations to Congress regarding Medicare payment policy.

MDS – The Minimum Data Set that CMS requires nursing homes to collect for quality improvement purposes.

MITSS – Medically Induced Trauma Support Services is a non-profit organization founded in 2002 whose mission is to support healing and restore hope to patients, families, and clinicians who have been affected by an adverse medical event.

MOLST – Medical Orders for Life-Sustaining Treatment is a demonstration project in the Worcester, Massachusetts area being led by Commonwealth Medicine to use medical orders to communicate patients' end-of-life treatment wishes.

MRC – Massachusetts Rehabilitation Commission

National Transitions of Care Coalition – The NTOCC was formed in 2006 by 30 associations and organizations to improve the quality of care coordination and communication when patients are transferred from one level of care to another.

OASIS – The Outcome and Assessment Information Set of data that CMS requires home health agencies to collect for quality improvement purposes.

Patient-Centered Medical Home – An attempt to apply theories of primary care to actual practice in order to improve quality, reduce costs, and reduce disparities, by having each patient receive individualized care from a team of primary care providers.

Physician Consortium for Performance Improvement – The PCPI was convened by the American Medical Association to enhance quality of care and patient safety by taking the lead in the development, testing, and maintenance of evidence-based clinical performance measures and measurement resources for physicians. PCPI is comprised of over 100 national medical specialty and state medical societies, experts in methodology and data collection, the Agency for Healthcare Research and Quality, and CMS.

PPR – Potential Preventable Readmissions is a project being conducted by DHCFP to validate the accuracy and usefulness of a 3M methodology to identify hospital readmission rates.

RED – Reengineering Discharge is a project that uses a discharge advocate to develop an After Hospital Care Plan as well as a follow-up call from a pharmacist. The program is being implemented at Boston Medical Center.

SCO – Senior Care Options

STAAR – State Action on Avoidable Rehospitalizations is being conducted in three states, including Massachusetts, where 22 hospitals have agreed to participate in an effort to work across the continuum of care to reduce rehospitalizations.

State Quality Improvement Initiative – A project funded by The Commonwealth Fund and AcademyHealth, the Massachusetts SQII team identified reducing readmissions and improving care transitions in its State Action Plan, and authorized the creation of this Strategic Plan.

The Transitional Care Model – The components of this approach are screening, engaging the patient and/or caregiver, managing symptoms, educating and promoting self-management, collaborating, assuring continuity, coordinating care, and maintaining relationships. Also known as the Naylor Model.

Transitions of Care Consensus Conference – The TOCCC establishes standards to address quality gaps in transitions, developed jointly by the American College of Physicians, Society of Hospital Medicine, American Geriatric Society, American College of Emergency Physicians, and Society for Academic Emergency Medicine.