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# An Early Look At A Four-State Initiative To Reduce Avoidable Hospital Readmissions

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**ABSTRACT** Launched in 2009, the State Action on Avoidable Rehospitalizations initiative, known as STAAR, aims to reduce rates of avoidable rehospitalization in Massachusetts, Michigan, Ohio, and Washington by mobilizing state-level leadership to improve care transitions. With the program two years into its four-year cycle, 148 hospitals are working in partnership with more than 500 cross-continuum team partners. Although there are no publicly available data on whether the project is achieving its primary goal of reducing avoidable rehospitalizations, the effort has so far been successful in aligning numerous complementary initiatives within a state, developing statewide rehospitalization data reports, and mobilizing a sizable number of hospitals to work on reducing rehospitalizations. More than 90 percent of participating hospitals have formed teams to routinely review rehospitalizations with their community-based colleagues.

In recent years, policy makers have highlighted rehospitalizations as an opportunity to improve the quality of health care and reduce costs. The 2007 and 2008 Medicare Payment Advisory Commission reports to Congress pointed to rehospitalizations as a marker of poor quality and high cost. The reports recommended measuring and reporting disease-specific, risk-adjusted thirty-day rehospitalization rates, first privately and then publicly beginning in 2009.<sup>1,2</sup>

The recommendations also included a payment policy outline that eventually became part of Section 3025 of the Affordable Care Act: to assess a payment penalty on hospitals with higher-than-expected rates of rehospitalization. The penalty is to be applied initially to hospitals' performance on three conditions (heart failure, heart attack, and pneumonia) and will eventually include additional medical and surgical conditions.

These policies signal a recognition that poor coordination of care between settings is in part a function of a payment environment that rewards

volume of services rather than the quality of care over time.<sup>3</sup> In the current economic climate especially, there is a high-priority need to deliver effective care that optimizes quality, health, and affordability.<sup>4</sup>

Fortunately, experience and published evidence suggest that avoidable rehospitalizations can be reduced,<sup>5</sup> but the gap between evidence and practice is wide.<sup>6</sup> Although there are numerous reports of small-scale successes,<sup>7</sup> evidence of sustainable change for organizations or populations is elusive.

To date, the majority of successful and durable approaches to reducing rehospitalizations occurred under conditions in which hospitals had financial incentives to take the necessary steps. These included cases in which investigators received direct grant funding, such as that from the Agency for Healthcare Research and Quality and the National Institutes of Health;<sup>8</sup> financial gain-sharing arrangements, in which hospitals, payers, and others who benefited from reduced readmissions split the savings;<sup>9</sup> payer-initiated programs, such as an Aetna pilot;<sup>10</sup> and

a Centers for Medicare and Medicaid Services subnational demonstration in care transitions;<sup>11</sup> or explicit organizational investment in a new service model, such as hiring new staff to provide additional education, coordination, and outreach.<sup>12</sup>

Unlike many quality improvement objectives, improving transitions in care and reducing avoidable rehospitalizations require engaging providers across organizational and service-line boundaries. In other words, clinicians in different organizations need to collaborate to improve care. Most quality improvement efforts to date have been inwardly focused on improving care within the four walls of an organization. Improving the transition of patient care responsibilities from one organization and set of providers to another and thus requires coordination among providers and organizations that often lack financial and information-sharing relationships.

Many of these relationships may be facilitated by the creation of accountable care organizations and financial incentives that reward coordination. However, in many instances the payment models of tomorrow are not yet a reality.

A novel step toward creating an improved environment for community-level collaboration is found in the recently announced Partnership for Patients,<sup>13</sup> and specifically the Community-Based Care Transitions Program.<sup>14</sup> The latter creates a payment mechanism to encourage hospitals and community-based providers to form relationships, understand their shared patient population, explore the breakdowns in care in their community, and implement complementary improvements in each setting of care. This new program offers not only a new payment mechanism, but also a specific platform to encourage new partnerships to reduce rehospitalizations at the community level.

The model described here was implemented two years ago in three states; a fourth state, Ohio, joined the initiative one year ago. The goal of the state-action component of the initiative was to form community and regional relationships among providers so that they could more effectively share the care of patients over time and across settings.

### The STAAR Initiative

The State Action on Avoidable Rehospitalizations (STAAR) initiative is a project of the Institute for Healthcare Improvement, supported by a grant from the Commonwealth Fund. The resources from the grant support the institute's activities in three states—Massachusetts, Michigan, and Washington; Ohio joined the initiative in 2010 as a self-funded participant.

The explicit aim of the initiative is to reduce rehospitalizations by stimulating action state-wide. The state, rather than an individual setting of care, is the entity of interest. To achieve this aim, the initiative focuses on two primary units of intervention: hospital-based “cross-continuum teams” (hospitals partnering with home health agencies, nursing facilities, office practices, community-based support services, and patients); and multistakeholder state-level steering committees comprising hospital associations, government payers, private payers, state governments, provider organizations, employers, business groups, and nonprofits (Exhibit 1). These committees coordinate and align complementary programs across the state, identify and mitigate systemic barriers, and promote a common framing of the issues through provider and stakeholder networks.<sup>15</sup>

The initiative is two years into its four-year cycle. This report is an interim description of four states' experience.

### STAAR ‘Cross-Continuum Teams’

In the first two years of the program, the primary focus of quality improvement technical assistance was on hospitals. Hospitals participating in the initiative are expected to form a cross-continuum team. This team consists of a hospital and those providers and community agencies with which the hospital frequently shares patients. Each hospital is asked to partner the “senders” (usually hospital providers), the “receivers” (usually nursing facilities or community-based care providers), and patient and family representatives to collaborate in improving communication and coordination at points of transition from the hospital to the next setting of care.

In addition, hospitals and cross-continuum teams are asked to perform the following prerequisite analyses as the basis for commencing their quality improvement efforts. First, they must collect data for all-cause thirty-day readmission rates. Second, they must perform chart reviews and interviews of five recently readmitted patients to identify—from the perspectives of patients, families, and other care providers—opportunities to improve transitions.<sup>16</sup>

The STAAR methodology recommends that hospitals and cross-continuum teams collaborate to implement the following recommendations to improve the transition between care settings: perform a comprehensive assessment of patients; improve patient education and provide clear and updated communication to patients and their caregivers; communicate essential information to the receiving provider at the time of

**EXHIBIT 1**

**STAAR Initiative Steering Committee Composition**

Type of participant	State
Hospital association	MA, MI, WA, OH
Skilled nursing facility/nursing home/long-term care associations	MA, MI, WA, OH
Large group practices/integrated system	MA, MI, WA, OH
Department of Public Health, Health and Human Services, or governor's office	MA, MI, WA, OH
Academic medical center	MA, MI, WA, OH
Elder services, Administration on Aging	MA, MI, WA
Association of health plans/commercial payers	MA, MI, WA
Medical or osteopathic association	MA, MI, WA
Nonprofit quality, data, policy, or business coalitions on health	MA, WA, OH
Quality improvement organization	MI, WA
Visiting nurse/home health association	MA, MI
Medicaid	MI, WA
Health Care Quality and Cost Council	MA, OH
Consumer advocacy organization	MA
State auditor's office	MA
Hospice and palliative care association	MI
Department of Insurance	OH
Industry or pharmaceutical company	OH

**SOURCE** Authors' analysis. **NOTES** States involved are Massachusetts (MA), Michigan (MI), Washington (WA), and Ohio (OH). STAAR is State Action on Avoidable Rehospitalizations.

discharge; and ensure timely follow-up.<sup>17</sup>

There is alignment among these four recommendations and other key research and improvement initiatives that aim to improve the discharge process in hospitals.<sup>8,18,19</sup> Of note, the intent of the quality improvement technical assistance provided by the initiative is to support local adaptation of these broad recommendations to achieve improvements in a wide range of settings.

Results of the quality improvement program will be reported at the conclusion of the initiative in 2013. During the first two years of the initiative, 148 hospitals and more than 500 cross-continuum team partners in four states were participating in the quality improvement program.

**STAAR State-Level Steering Committees**

The second component of the initiative is to provide targeted technical assistance to state steering committees in Massachusetts, Michigan, Washington, and Ohio. A small number of organizations assume voluntary leadership responsibility for the initiative in each state.

Common characteristics of the state leaders are that they recognize the need for change; are willing to devote time to leading the effort in their state; are able to identify and convene state-level steering committees to support the work of the initiative; and are able to help recruit

and support hospitals and other providers. In all cases, a state's hospital association is a state leader. Exhibit 1 describes the composition of steering committees in each state.

In the first year of the initiative, the primary objectives of the steering committees were to develop a shared understanding of the issues around rehospitalizations, inventory local projects involved in improving care transitions, and develop a strategic plan for the initiative in each state. As with many coalition-based efforts, leaders learned that care was required to establish a shared understanding of the issues, understand partners' motivations for participation, identify resources offered by each partner, establish trust and clear communication, and expand partnerships when needed to take advantage of each region's unique resources.

As the initiative evolved in the second year, the state leaders expended additional effort to ensure the success of the quality improvement project, capture and analyze the insights from those teams, and sustain or expand participation in the project.

**Unique Features In Each State**

**MASSACHUSETTS** Massachusetts has an active grassroots, voluntary coalition of providers, payers, associations, consumer advocates, and others interested in improving transitions in care across the state. The Massachusetts Care Transitions Forum was established in 2008 and

meets quarterly. The forum's steering committee is also the steering committee for the STAAR initiative in Massachusetts, and the leadership of the Care Transitions Forum reports on care transitions programs in Massachusetts to the Patient Safety Subcommittee of the Massachusetts Healthcare Quality and Cost Council.

State leaders of the initiative are volunteers from the Massachusetts Coalition for the Prevention of Medical Errors, the Massachusetts Department of Public Health Bureau of Health Care Safety and Quality, the Massachusetts Medical Society, and the Massachusetts Hospital Association. In addition, the senior health policy adviser to the secretary of health served as an ad hoc member of the leadership team.

A unique achievement of the initiative in Massachusetts is the close alignment of all major care transitions projects in the state. These include the multipayer medical home demonstration for office practices, the Interventions to Reduce Acute Care Transfers (INTERACT) quality improvement program for nursing facilities,<sup>20</sup> the Medical Orders for Life-Sustaining Treatment (MOLST) pilot project,<sup>21</sup> and care transitions coaching services and linkage to community services provided by the state network of aging service organizations.<sup>22</sup>

More than 300 organizations were engaged in complementary programs in Massachusetts as of January 2011 (Exhibit 2). A map of the providers involved in these efforts across Massachusetts

has been a valuable communications and strategic tool.<sup>23</sup> For example, Massachusetts was recently awarded a grant from the Office of the National Coordinator for State Health Policy to develop an electronic universal transfer form, which is currently in a pilot-testing phase. The national grant was awarded in part because of the large numbers of providers in all settings who are actively engaged in and working collaboratively on improving care transitions in the state, as represented on this map.<sup>23,24</sup>

**MICHIGAN** The Michigan initiative, called MI STA\*AR, is led by a partnership between the Michigan Health and Hospital Association's Keystone Center for Patient Safety and Quality and the Michigan Peer Review Organization, Michigan's quality improvement organization. Each of these organizations has experience running large-scale quality improvement programs and extensive relationships with hospitals and community-based providers. The MI STA\*AR steering committee consists of executive leaders of all major payers, including Medicaid, state provider associations, area agencies on aging, employers, health systems, and others, and it meets at least semiannually.

STAAR efforts in Michigan have been particularly notable for launching a series of innovative efforts to mobilize providers and community members to reduce barriers, improve care, and improve communication in multiple care settings. For example, cross-continuum teams in

**EXHIBIT 2**

**Portfolio Of Efforts To Improve Care Transitions In Massachusetts**

Participant	Participation in care transitions	Number
Cross-continuum partners	Each hospital in STAAR partners with a self-determined number of community-based providers	> 200
INTERACT	Skilled nursing facility- and nursing home-focused quality improvement project	> 100
MOLST	Office practices, hospitals, emergency medical services agencies pilot to clarify end-of-life care preferences	7
Community Care Linkages	Program to better link community-based services and supports with health care providers	27
Administration on Aging	Community-based care transition coaches trained through grants from the Administration on Aging	113
Multipayer medical home	Multipayer-supported medical home transformation sites	46
Care Transitions Forum	Coalition of providers; payers; purchasers; academics; and information technology, professional, and public-sector leaders	> 125
Care Transitions Forum Steering Committee	Coordinating body of public- and private-sector leaders across the state	35
<b>Total number of organizations engaged</b>		<b>&gt;300</b>

**SOURCE** Authors' analysis. **NOTES** Numbers in far right column do not add to total given overlap between categories; total count is a manual count of organizations, without duplication. STAAR is State Action on Avoidable Rehospitalizations. INTERACT is Interventions to Reduce Acute Care Transfers. MOLST is Medical Orders for Life-Sustaining Treatment.

Michigan determined that they needed to develop a standardized information transition form that would be useful for improving care transitions between settings, and thus launched the Ticket to Ride project to develop and test such a form.

In addition, MI STA\*AR leaders created the Detroit Community Action to Reduce Rehospitalizations. Participants are a broad cross-section of local and state leaders—including those from hospitals, postacute care facilities, emergency medical services, the City of Detroit, the Greater Detroit Health Council, the Area Agency on Aging, homeless shelters, faith-based organizations, and large employers—all of whom seek to identify and mitigate the clinical, social, and economic barriers to breaking the cycle of repeated hospitalizations in a community with high rates of poverty, homelessness, and unemployment.

**WASHINGTON** The Washington State Hospital Association's Reducing Readmissions steering committee comprises representatives from the state hospital association, each of the major payers, hospitals, skilled nursing facilities, ambulatory care settings, the quality improvement organization, the Puget Sound Health Alliance, the pharmacy association, the medical association, and various other stakeholders.

The Washington steering committee has implemented a standardized discharge communication tool in cooperation with the quality improvement organization, hospitals, and community health care providers. Washington also credits its participation in the STAAR initiative with greatly expanding the use of the Physician Orders for Life Sustaining Treatment (POLST) form, a standard form used to ensure that a person's wishes regarding life-sustaining treatments are known, communicated, and honored across care settings. The form was developed jointly by the Washington State Medical Association and the Washington State Hospital Association.<sup>25</sup>

During the first two years of the initiative in Washington, public-sector leadership launched a multipayer medical home demonstration project. STAAR worked to align and integrate with the complementary priorities and goals of that project by contributing to the care transition-related provisions in the project and by presenting the initiative's recommendations for improving care transitions to all medical home project participants.

**OHIO** In July 2010 Ohio joined the STAAR initiative with funds that were allocated through a public-private partnership among the Quality Institute of Ohio, the Ohio Health Care Coverage and Quality Council, and the Ohio Hospital As-

sociation. In November 2010 the public-sector leadership partners changed following the election of a new governor. Although funding for the initiative was preserved, the state leadership team has been in transition. For this reason, Ohio STAAR has focused primarily on optimizing participation in the quality improvement work at the hospital and community levels.

Unlike hospitals in the other states where the initiative is under way, participating Ohio hospitals contribute to the state funding model but are offered an opportunity to have a portion of their contribution refunded contingent upon adhering to the initiative's core methodology. This funding model has proved successful in encouraging the participation of hospitals; notably, we have observed a 50 percent higher on-time reporting rate than in hospitals from the grant-funded states. This arrangement may serve as a useful template for leaders considering similar efforts.

### Common Issues Across All States

**ADDRESS SYSTEMIC BARRIERS** In addition to identifying and coordinating complementary efforts in a geographic area, the STAAR initiative provided a resource base for mobilizing technical assistance to address common issues across all states. In the first two years we focused on the following needs:<sup>15</sup> obtaining the best available statewide data on rehospitalizations; understanding the financial impact of reducing rehospitalizations; and aligning incentives to improve care transitions.

**OBTAIN THE BEST AVAILABLE DATA** In Massachusetts, STAAR leaders participated in a steering committee of the Division of Health Care Finance and Policy charged with assessing the usefulness of a specific rehospitalization measure for the purpose of publicly reporting rehospitalization rates. In the course of participating on the committee, the STAAR initiative mobilized additional technical assistance to perform a comparative analysis of three major rehospitalization measurement systems, including their implications for clinical practice and policy makers.

Following eighteen months of deliberation, the committee determined that the limitations of each measurement system were too great to proceed with public reporting of rehospitalization rates until the measures were improved. The Division of Health Care Finance and Policy has moved forward with providing state- and hospital-specific rehospitalization reports to hospitals on a confidential basis.

In Michigan, a voluntary partnership among all governmental and several local payers to

produce “best available” statewide rehospitalization data represents a unique example of how state-level leaders can create novel solutions without mandates. The partnership, spearheaded by the Michigan Peer Review Organization, has established common measurement specifications and has produced an aggregated, statewide report that represents more than 90 percent of the covered lives in Michigan.

The reports were pilot-tested with a sample of MI STA\*AR hospitals before being distributed widely. The unique benefit of these data is that they include patients who were discharged from one hospital and readmitted to a different hospital. This is a major asset of payer-based, as opposed to hospital, data sets.

As a result of STAAR technical assistance, the Washington State Hospital Association, in collaboration with the Washington State Department of Health, has developed and now regularly provides hospitals with statewide all-cause, all-payer rehospitalization reports. The department collects the deidentified data, and the hospital association creates the reports. The reports are available every six months and report data that are approximately ten months old. The all-payer rehospitalization performance data have stimulated considerable engagement in the issue among hospitals.

One important achievement of the effort to obtain best-available statewide rehospitalization data has been the adoption of a standard definition for *rehospitalization* in these states. The population-based rehospitalization reports in the three states enable hospitals and community care settings to analyze utilization in a community, in addition to that of an individual hospital.

These state reports thus provide important information germane to improving the care of patients across settings. Research shows that 25 percent of Medicare rehospitalizations are to another hospital,<sup>26</sup> and section 3025 of the Affordable Care Act holds hospitals accountable for all rehospitalizations within thirty days of discharge, whether or not the rehospitalization occurred at another hospital.

**UNDERSTAND THE FINANCIAL IMPACT ON HOSPITALS** Shortly after the initial enrollment of hospitals in the quality improvement collaborative, leaders of the STAAR initiative inquired of a number of hospital finance officers what the anticipated financial impact of success in the initiative—a 30 percent reduction in rehospitalizations—would be for their institutions. It was quickly determined that the financial impact of reducing rehospitalizations in the current payment environment remained largely unexamined, even for hospitals committed to and actively working on reducing rehospitalizations.

A number of peer-reviewed publications report cost savings for interventions to improve care transitions and reduce rehospitalizations. However, savings are calculated from a societal or payer perspective, not a hospital perspective. Although numerous initiatives across the United States have been locally successful in reducing avoidable rehospitalizations, most have yet to be sustained or spread. Many successful pilot or grant-funded projects infuse resources into improved service delivery to demonstrate efficacy while reducing inpatient volume. Understanding the investments required for hospitals to routinely deliver improved care is essential to achieve durable change.

STAAR partnered with sixteen financial officers to further explore the costs and revenues associated with rehospitalizations in their institutions. From these case examples, STAAR developed an instrument to facilitate and encourage hospital finance officers to analyze this information. Although more than 1,100 people attended a STAAR webinar reporting the results of this exercise,<sup>27</sup> many hospitals in STAAR have not routinely performed this financial analysis. In a rapidly changing payment environment, understanding the current financial profile of rehospitalizations and evaluating the financial impact of reducing rehospitalizations is essential to the sustainability of rehospitalization reduction initiatives.

**ALIGN INCENTIVES TO IMPROVE TRANSITIONS** Following the first year of the STAAR initiative, hospitals and cross-continuum teams were surveyed regarding their perceptions of payment policy or other financial barriers to improving care transitions and reducing rehospitalizations. Providers reported the following as barriers to their efforts to reduce rehospitalizations: the cost of copayments for medications and follow-up visits; lack of coverage for home health services if patients did not meet Medicare’s “home-bound” requirements; lack of reimbursement for transitional care services, such as post-discharge phone calls, coaches, and dedicated clinicians; lack of standardization and coordination among payer-based care management services; and lack of data collected over time, to document use across settings. These insights were presented to groups of payers in each state to explore whether small pilot tests or policy changes might be warranted.

In Massachusetts, Blue Cross and Blue Shield of Massachusetts created a voluntary pay-for-participation quality program based on the recommendations in the STAAR model, to review readmission data and form a cross-continuum team to work on improving care transitions. In addition, Health New England agreed to tempo-

rarely waive copayments for follow-up office visits to test whether this positively influenced follow-up rates and averted hospitalizations for people with financial needs.<sup>28</sup> Baystate Medical Center, in Springfield, Massachusetts, funded a small pilot to provide a postdischarge home health visit for its self-insured population at high risk of readmission, even if patients did not meet the Medicare criteria for such a home health visit.<sup>29</sup>

In Washington State, recent legislation required the development of a Medicaid quality incentive program. As a result of Washington's participation in the STAAR initiative and the advocacy of the STAAR state leadership there, two of the four proposed quality targets relate to improving care transitions and reducing avoidable rehospitalizations: improving discharge information and implementing "teach back," a clinician communication protocol that affirms that the patient is able to articulate vital condition-specific information;<sup>30</sup> and establishing a plan to reduce avoidable emergency department visits. Washington is the first state to have a Medicaid quality incentive program for performance relating to transitions in care and avoidable hospitalizations.

## Discussion

The STAAR initiative aims to reduce rehospitalization rates in states by mobilizing state-level leadership to improve transitions in care. This effort has resulted in 148 hospitals working in partnership with more than 500 community-based organizations across four states.

Technical assistance provided by STAAR has facilitated insights and solutions to common challenges, including obtaining statewide rehospitalization data reports, understanding the financial impact of rehospitalizations on hospitals, and aligning incentives for change.

The STAAR initiative has specifically fostered collaboration with related care transition programs within states. Exhibit 3 highlights specific accomplishments of the steering committees' efforts in each state to date.

**UNEXPECTED RESULTS** An unexpected positive result of the initiative is the universal adoption of the recommendation to establish a cross-continuum team. Prior to enrolling in STAAR, none of the hospitals had established a mechanism for routinely reviewing rehospitalization events with their community-based colleagues. Now, more than 90 percent of hospitals participating in STAAR have formed cross-continuum teams.

Some of these teams are composed of just four organizations, although one team has more than

eighty participants and holds its meetings at a community meeting hall, as opposed to the hospital. This level of adherence to a single recommendation in a voluntary program is suggestive of a strategy that is valuable and relevant across many communities.

An additional unanticipated result of the STAAR initiative has been the ability to closely partner the project with other complementary care transition efforts in a state and thereby create greater visibility and greater momentum for expanding not only STAAR, but the other projects as well. The interest in and expansion of STAAR and INTERACT, the nursing home quality improvement effort in Massachusetts, is one such example.

Nursing homes and skilled nursing facilities on cross-continuum teams recognized that the INTERACT protocol could be implemented in their settings to contribute to the jointly shared aim of reducing avoidable rehospitalizations. One benefit of the emergence and adoption of complementary quality improvement methods such as STAAR and INTERACT is that different settings of care have specific tools to apply to improve processes within their own settings, even as they work to improve communication between settings. Leaders of statewide improvement programs may increasingly need to consider how to balance the benefits of strict adherence to an attributable methodology with the potential benefits of exercising agility in adapting to and participating in complementary, ad hoc partnerships.

Finally, the results of the first two years of state action in STAAR suggest that technical assistance resources can be a great asset to states' efforts to improve the health care delivery system. Although specific solutions may differ by state, common challenges exist, so technical assistance can be a shared resource across states.

**LIMITATIONS** There are several limitations of the approach in STAAR and our results to date. First, in providing coordinated technical assistance to a large number of provider and community organizations across a state, there are necessarily fewer resources available to support activity in any individual care setting. This is in contrast to other national models to reduce rehospitalizations, which provide direct mentorship at the level of the individual institution.<sup>18</sup>

Second, although a great deal of attention was devoted to developing statewide rehospitalization data, the data are just now available and not yet actively used to guide strategy or implementation in local communities. This has not prevented teams from working across settings; they have simply done so in the absence of population-based data.

## Accomplishments Supported By STAAR Steering Committees

Accomplishment	State
Align payer-led incentives	MA, MI, WA
Develop, test, pilot a universal transfer form	MA, MI, WA
Provide population-based rehospitalization data reports to hospitals	MA, MI, WA
Develop strategic plan on care transitions	MA, MI
Partner with grantees of Administration on Aging	MA, MI
Obtain public-sector sponsorship of STAAR	OH
Engage in regional cross-sector mobilization (Detroit Community Action to Reduce Rehospitalizations)	MI
Secure grant award in part due to statewide care transitions infrastructure	MA
Train Department of Public Health nursing home surveyors in elements of safe care transitions	MA

**SOURCE** Authors' analysis. **NOTES** States involved are Massachusetts (MA), Michigan (MI), Washington (WA), and Ohio (OH). STAAR is State Action on Avoidable Rehospitalizations.

Third, STAAR was designed to work with and maximize the influences of policy signals and concurrent complementary projects. It was not designed to be evaluated in isolation from these confounding factors.

**RECOMMENDATIONS** Based on our experience of conducting this work in four states, we offer the following recommendations for policy makers, providers, and leaders or funders of similar efforts. First, efforts to reduce rehospitalizations must go beyond the walls of the hospital. Although hospitals will be solely accountable for payment penalties for thirty-day rehospitalization rates under the Affordable Care Act, they will not be able to reduce these rates sustainably without the explicit partnership of community-based providers. Many payment and policy signals reinforce this concept.<sup>13,31–33</sup>

Second, state leaders who are setting health care quality and cost improvement aims that span multiple settings of care—such as reducing rehospitalizations, reducing avoidable emer-

gency department visits, or improving medication reconciliation—should consider forming a state-level, multistakeholder entity that can ignite action, generate momentum, and leverage networks to increase interest in and visibility of a common aim. The state as a unit of action is increasingly a relevant focus, especially as Medicaid agencies, state health exchanges, and state governments seek to innovate in the face of rising health care spending and shrinking state budgets.

Finally, incentives and updated payment policies are needed to support the investment required to deliver coordinated care across settings. The Community-Based Care Transitions Program<sup>13</sup> will be a very important payment mechanism for facilitating these activities for fee-for-service Medicare patients. Other payers should consider developing similar programs to support these improvements as the new standard of care. ■

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## NOTES

- 1 Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC): MedPAC; 2007.
- 2 Medicare Payment Advisory Commission. Report to the Congress: reforming the delivery system. Washington (DC): MedPAC; 2008.
- 3 Schoen C, Guterman S, Shih A, Lau J, Kasimow S, Gauthier A, et al. Bending the curve: options for achieving savings and improving value in US health spending. New York (NY): Commonwealth

- 4 Berwick DA, Nolan T, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759–69.
- 5 Boutwell AE, Hwu S. Effective interventions to reduce rehospitalizations: a survey of published evidence. Cambridge (MA): Institute for Healthcare Improvement; 2009.
- 6 McCarthy D, How SKH, Schoen C, Cantor JC, Belloff D. Aiming higher: results from a state scorecard on health system performance. New

York (NY): Commonwealth Fund; 2009.

- 7 Boutwell AE, Griffin F, Hwu S, Shannon G. Reducing avoidable rehospitalizations: a compendium of 15 promising interventions. Cambridge (MA): Institute for Healthcare Improvement; 2009.
- 8 Jack BW, Chetty VK, Anthony D, Greenwald JL, Sanchez GM, Johnson AE, et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Ann Intern Med*.

- 2009;150:178–87.
- 9 McCall N, Cromwell J, Urato C. Evaluation of Medicare Care Management for High Cost Beneficiaries Demonstration: Massachusetts General Hospital and Massachusetts General Hospital Physician Organization final report. Research Triangle Park (NC): RTI International; 2010.
  - 10 Naylor M, Sochalski J. Scaling up: bringing the transitional care model into the mainstream. New York (NY): Commonwealth Fund; 2010.
  - 11 Colorado Foundation for Medical Care. Care Transitions QIOSC: about the theme [Internet]. Denver (CO): CFMC; c2010 [cited 2011 Jun 9]. Available from: <http://www.cfmc.org/caretransitions/about.htm>
  - 12 Hostetter M. Case study: reducing hospital readmissions among heart failure patients at Catholic Healthcare Partners. New York (NY): Commonwealth Fund; 2008.
  - 13 HealthCare.gov. Partnership for Patients: better care, lower costs [Internet]. Washington (DC): HealthCare.gov; 2011 Apr 12 [cited 2011 Jun 9]. Available from: <http://www.healthcare.gov/center/programs/partnership>
  - 14 Centers for Medicare and Medicaid Services. Details for Community-Based Care Transitions Program [Internet]. Baltimore (MD): CMS; 2011 May 12 [cited 2011 Jun 9]. Available from: <http://www.cms.gov/demoprojectsevalrpts/md/itemdetail.asp?itemid=cms1239313>
  - 15 Boutwell AE, Jencks SJ, Nielsen G, Rutherford P. Reducing avoidable rehospitalizations: applying early evidence and experience in front-line improvements to develop a state-based strategy. Cambridge (MA): Institute for Healthcare Improvement; 2009.
  - 16 Nielsen GA, Rutherford P, Taylor J. Getting started kit. Cambridge (MA): Institute for Healthcare Improvement; 2010.
  - 17 Nielsen GA, Rutherford P, Taylor J. How-to guide: creating an ideal transition home. Cambridge (MA): Institute for Healthcare Improvement; 2009.
  - 18 Society of Hospital Medicine. Project BOOST [home page on the Internet]. Philadelphia (PA): SHM; [cited 2011 Jun 9]. Available from: [http://www.hospitalmedicine.org/ResourceRoomRedesign/RR\\_CareTransitions/CT\\_Home.cfm](http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/CT_Home.cfm)
  - 19 American College of Cardiology, Institute for Healthcare Improvement. Hospital to Home Initiative [home page on the Internet]. Washington (DC): ACC; c2011 [cited 2011 Jun 9]. Available from: <http://www.h2hquality.org>
  - 20 Ouslander JG, Lamb G, Tappen R, Herndon L, Diaz S, Roos BA, et al. Interventions to reduce hospitalizations from nursing homes: evaluation of the INTERACT II Collaborative Quality Improvement Project. *J Am Geriatr Soc.* 2011;59(4):745–53.
  - 21 Massachusetts Medical Orders for Life-Sustaining Treatment [home page on the Internet]. Worcester (MA): MOLST; [cited 2011 Jun 9]. Available from: <http://www.molst-ma.org>
  - 22 Community Care Linkages of Massachusetts [home page on the Internet]. Burlington (MA): Community Care Linkages of Massachusetts; [cited 2011 Jun 9]. Available from: <http://www.communitycarelinkages.com/>
  - 23 Boutwell AE, Johnson MB, Wetherhold J. Geo-map of Massachusetts' care transitions initiatives [Internet]. Cambridge (MA): Institute for Healthcare Improvement; [cited 2011 Jun 9]. Available from: <http://www.batchgeo.com/map/mastaarteamsmap>
  - 24 Department of Health and Human Services, Office of the National Coordinator for Health Information Technology. Health Information Exchange (HIE) Challenge Grant [Internet]. Washington (DC): ONC; 2011 Feb 23 [cited 2011 Jun 10]. Available from: <http://healthit.hhs.gov/portal/server.pt?open=512&mode=2&objID=3378>
  - 25 Washington State Medical Association. POLST [home page on the Internet]. Olympia (WA): WSMA; c1996–2011 [cited 2011 Jun 16]. Available from: [http://www.wsma.org/patient\\_resources/polst](http://www.wsma.org/patient_resources/polst)
  - 26 Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med.* 2009;360(14):1418–28.
  - 27 Boutwell AE, Johnson MB, Balik B. STAAR webinar: the financial implications of reducing rehospitalizations [Internet]. Cambridge (MA): Institute for Healthcare Improvement; 2010 [cited 2011 Jun 10]. Available for download from: <http://www.ihl.org/IHI/Programs/StrategicInitiatives/STateActiononAvoidableRehospitalizationsSTAAR.htm?TabId=4>
  - 28 Blue Cross Blue Shield of Massachusetts. The Hospital Performance Incentive Program [Internet]. Boston (MA): BCBSM; 2010 May [cited 2011 Jun 10]. Available from: [http://www.blueadvocacy.org/plans/program/hospital\\_performance\\_incentive\\_program](http://www.blueadvocacy.org/plans/program/hospital_performance_incentive_program)
  - 29 Boutwell AE, Johnson MB. Reducing barriers to care across the continuum: engaging payers. Cambridge (MA): Institute for Healthcare Improvement; 2010. (STAAR Issue Brief).
  - 30 Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. *Arch Intern Med.* 2003;163(1):83–90.
  - 31 HealthCare.gov. Accountable care organizations: improving care coordination for people with Medicare [Internet]. Washington (DC): HealthCare.gov; 2011 Mar [cited 2011 Jun 10]. Available from: <http://www.healthcare.gov/news/factsheets/accountablecare03312011a.html>
  - 32 HR 3590: The Patient Protection and Affordable Care Act (Pub. L. No. 111-148), Sections 2402, 2704, 3024, 3025, 3026, and 3502.
  - 33 Centers for Medicare and Medicaid Services. QIO 10th statement of work [Internet]. Baltimore (MD): CMS; 2011 Mar 11 [cited 2011 Jun 10]. Available from: [https://www.fbo.gov/?s=opportunity&mode=form&id=c9758e6861085718832064025f15d75f&tab=core&\\_cview=1](https://www.fbo.gov/?s=opportunity&mode=form&id=c9758e6861085718832064025f15d75f&tab=core&_cview=1)