**INTRODUCTION**

Although many Rhode Island physicians communicate effectively with one another when performing patient hand-offs, there is a great deal of variability in how well care transitions are performed. When inpatient-outpatient care transitions are well executed, communication includes timely and accurate clinical information that enables downstream physicians to immediately assume responsibility for patient care and activates patients and their caregivers to better self-manage. These processes can improve health outcomes and patient satisfaction, decrease healthcare costs, and ensure that patients understand how, when and where to seek help. This is true both for patients transitioning from the community to the hospital and for those transitioning from the hospital back to the community.

In reality, however, care transitions require complex time-sensitive communication and the wide variation in how well this is accomplished indicates ample room for improvement. In our increasingly fragmented healthcare system, in which hospitalists often manage inpatient care and length of stay is decreasing, inpatient and outpatient physicians often do not have the information they need to ensure seamless care delivery within or between settings or to ensure high-quality outcomes. For patients discharged from the hospital, for example, this can result in medication errors, incomplete transfer of discharge information to downstream clinicians (including community physician offices) and increased healthcare utilization, all of which reduces the likelihood of optimal patient outcomes.

Rhode Island is a recognized leader in care transitions, with more than 25 years of experience implementing standardized communication using the Department of Health's Continuity of Care Form, completion of which is required for facility-to-facility transfer. However, available data underscore what physicians say: that there are opportunities to further improve our local leadership in care transitions processes. In 2009, the Commonwealth Fund's State Scorecard on Health System Performance ranked the state 49th out of 51 for ambulatory care-sensitive hospital admission among Medicare beneficiaries and Rhode Island Department of Health data demonstrate that 22% of hospitalized adults were readmitted to the same hospital within 30 days of discharge. Both ambulatory care-sensitive admissions and hospital readmission are considered somewhat preventable with high-quality outpatient care and hospital discharge, respectively, and are often used as proxy measures for care transition outcomes.

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**Quality Partners of Rhode Island, the Medicare Quality Improvement Organization, was awarded a Medicare contract to implement a three-year care transitions program. The Safe Transitions Project aimed to improve the safety of patient care transitions by translating effective patient and provider interventions into sustainable systems change. After testing evidence-based interventions locally and systematically gathering input on physicians' preferences and needs, Quality Partners collaborated with physicians, health plans and community leaders to develop a series of best practices intended to elevate the quality of communication between hospitals and community physician offices. Best practices are evidence-based care processes proven to improve care transitions outcomes.**

**OBJECTIVE**

To develop hospital and community physician office care transitions best practices that reflect the evidence base and are incorporated into health plan contracting, where possible.

**METHODS**

The Safe Transitions Project's community advisory board includes wide stakeholder representation, including inpatient and outpatient physicians, commercial health plans, Medicaid, and representatives from home health, hospice, hospital, skilled nursing, and physician office settings. In 2010, Quality Partners collaborated with the advisory board to undertake a three-phased approach to best practice development.

**Evidence base review**

We reviewed the medical literature and national campaigns to identify evidence-based processes that (alone or grouped together) improved care transition outcomes. This included a literature review of current best practices and a comprehensive analysis of existing evidence.
search and review of the following: Better Outcomes for Older adults through Safer Transitions (BOOST);14 the Care Transitions Intervention (CTI);15 the Joint Commission’s National Patient Safety Goal on Reconciling Medication Information;15 Project Re-Engineered Discharge (RED);16 and the National Quality Forum’s (NQF) Safe Practices.16 We placed the evidence base in the context of local data and preference, such as results and knowledge from the Safe Transitions Project’s interventions, a hospital community of practice, and a community physician survey about communication needs and preferences.

Vetting process
After drafting best practice concepts, definitions and metrics, we met with hospital and physician office stakeholder groups to refine the best practices and ensure feasibility within each setting’s existing workflow. This step included discussions with hospital quality directors and the Rhode Island Department of Health’s Primary Care Physician Advisory Council (PCPAC), among others. Health plan auditors also reviewed the hospital best practice metrics.

Endorsement and adoption process
After finalizing the best practices, we sought buy-in from key stakeholders, including hospital and physician office clinicians, commercial health plans, Medicaid, and the Rhode Island Office of the Health Insurance Commissioner (OHIC).

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**Table 1: Hospital and Community Physician Office Best Practices and Select Evidence Base**

<table>
<thead>
<tr>
<th>Best Practice*</th>
<th>Hospitals</th>
<th>Community Physician Offices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Notify community physician office about ED visits and hospital admission.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Provide receiving clinicians with hospital clinician’s contact information upon discharge.</td>
<td>X X X</td>
<td>X X X</td>
</tr>
<tr>
<td>3. Provide patient with effective education prior to discharge.</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>4. Provide patient with written discharge instructions prior to discharge.</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>5. Provide patient with follow-up phone number prior to discharge.</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>6. Perform medication reconciliation prior to discharge.</td>
<td>X</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>7. Schedule patient outpatient follow-up appointment prior to discharge.</td>
<td>X</td>
<td>X X X X</td>
</tr>
<tr>
<td>8. Provide community physician office with summary clinical information at discharge.</td>
<td>X X X</td>
<td>X X X</td>
</tr>
<tr>
<td>9. Invite primary care physician to participate in end-of-life discussions during hospital visit.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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**RESULTS**

The best practices focus on bi-directional communication between hospitals and community physician offices. (See Table 1) Each set is limited to actions within the control of physicians or other clinicians in that setting and targets: (1) clinician-to-clinician communication and (2) patient activation and support. (See Figure 1) They also reflect the fact that physicians express a willingness to change their communication practices, if assured they will receive the information they want, when they need it. The related definitions and metrics [available upon request] ensure consistent implementation and measurement across settings and payors. We did not set or recommend benchmarks for these metrics, recognizing that baseline rates remain unknown and achievable adherence within real-world constraints will not reach 100% for each best practice.

Hospital quality directors from the state’s 11 acute-care hospitals endorsed the hospital best practices. Additional hospital best practice outreach included discussions with hospital executive leadership, at each facility’s discretion. Two primary care physician (PCP) groups endorsed the community physician office best practices: PCPAC and the Rhode Island Health Center Association’s Clinical Leadership Committee. Blue Cross & Blue Shield of Rhode Island and Leading Age Rhode Island, a nursing home trade association, also endorsed the community physician best practices.
The commercial health plans and Rhode Island Chronic Care Sustainability Initiative (CSI-RI), the state’s all-payer patient-centered medical home program, are incorporating the best practices into hospital and physician contracting, respectively, with contract initiation and renewal.

Discussion

Locally and nationally, poor care transitions usually result from three root causes: missing, wrong, or delayed information; delayed or unscheduled follow-up testing and appointments; and poor adherence to recommended and needed medication therapy. The hospital and community physician office best practices aim to elevate local care transitions by addressing these root causes and aligning the resultant systems change with measurement (accountability) and payment (incentives). This approach is intended to ensure community consensus and target known misalignments, such as the fact that reduced hospital readmission decreases hospital census and revenue, impeding hospital executives’ ability to prioritize and make the financial business case for improving care transitions.

The best practices incorporate the evidence base, including Quality Partners’ work to implement two randomized, controlled trial (RCT) patient interventions proven to reduce hospital readmission by approximately 30% in RCTs. Project RED includes a National Quality Forum-endorsed discharge checklist and is provided during inpatient discharge education. The Care Transitions Intervention (CTI) is a 30-day health coaching intervention that begins in-hospital and continues in the community, focusing on patient activation. Both models were developed by physician researchers (Drs. Brian Jack and Eric Coleman, respectively) and include best practice concepts such as medication reconciliation, outpatient follow-up, and the ability for patients to outreach to their physician’s office before worsening symptoms become emergent. The use of local experience and data helped generate stakeholder buy-in during the vetting process.

While the best practices reflect community consensus and standardized definitions and measurement, they afford physicians broad license to determine which processes to implement and how. In other words, the best practices focus on defining what high-quality care transitions entail, not how these actions are accomplished—recognizing that some physicians have already accomplished these processes and also that successful implementation strategies will depend on unique circumstances, such as existing workflow, staffing, electronic medical record adoption, and even physical location. Additionally, over time, some of these concepts may be automated through health information technology; for example, as the Rhode Island Quality Institute incorporates PCP notification of ED visits and hospital stays into the state’s health information exchange.

Several additional aspects of the best practices and their development are significant. First, they require reciprocal actions from hospitals and community physician offices. Physicians in both settings express frustration if they fail to receive the clinical information they need to assume responsibility for patient care: improving half of the equation would not solve the problem in its entirety. Second, we used stakeholder consensus to draft and vet the best practices. Partnering with the Safe Transitions Project’s advisory board, which includes diverse clinician and payor representation, ensured buy-in for aligning implementation with payment. Finally, vetting the draft best practices with hospitals and PCP groups, among others, helped to further refine the concepts, ensure face validity and feasibility, and spread awareness and support.

Although a primary goal was to align implementation with payment, having clinicians and payors participate in development required us to preempt any issues regarding health plan collusion. We segregated discussions about clinical processes from discussions about payment models, and hospital-payor payment models and contracting negotiations remained confidential. OHIC also helped preempt problems with collusion by directing the commercial health plans to contract with hospitals to implement.

Imagine that you are a hospitalized patient in the process of being discharged. The moment you are wheeled outside the hospital to your waiting ride, who is responsible for your care? What is your own accountability? If you have a question, should you call the hospitalist who oversaw your inpatient care or the outpatient physician you have seen for years? Does physician accountability depend on what discharge information is sent from one setting to another and when, or is it independent of information flow? The question of physician accountability at the point of transfer from one setting to another, such as inpatient to outpatient, is a cornerstone of the debate on care transitions.

As a patient, you may assume that your physicians are in regular communication—that your outpatient physician, whether it is your PCP or a specialist, knows about your hospital stay and is poised to oversee your follow-up care. When you arrive at your physician’s office for a post-hospital follow-up appointment, would you be surprised to learn that your physician didn’t know hospital stay until after your discharge? Or still doesn’t know? Maybe the hospital faxed information that has been filed by office staff or maybe that information has not yet been sent. While most patients would be surprised by this scenario, many physicians are not. There are times when we are in regular communication with one another about patient care. But we routinely deal with scenarios like this one, where we are expected to assume responsibility for patient care—but may not have all the pertinent clinical information.

Quality Partners’ work to develop best practices that optimize inpatient-outpatient physician communication and activate patients addresses this information imbalance.
ment the hospital best practices and included the community physician best practices in CSI-RI’s physician contracts.

We note several limitations, most significantly that relatively few interventions in the care transitions medical literature focus on community physician office (vs. hospital) care processes. Much of our community physician office evidence base is drawn from national campaigns, local preference, and expert consensus, including a checklist for post-hospital follow-up.17 Additionally, as with most quality improvement projects, many widely-acclaimed interventions include multiple processes proven to work when implemented simultaneously, but have not been tested individually. For example, CTI includes four concepts, including medication reconciliation and outpatient follow-up. As mentioned above, the RCT reduced hospital readmission by 30%;15 locally, Quality Partners demonstrated similar effectiveness in Rhode Island.18 While the efficacy of individual elements of the CTI mode is unknown, we included medication reconciliation and outpatient follow-up in both sets of best practices, because these concepts are reinforced elsewhere in the evidence base and supported by local physicians. The same is true of other best practice concepts that have not been tested in isolation.

As national dialogue about healthcare reform shifts to accountable care models, opinion leaders increasingly emphasize the importance of establishing community goals and aligning payment with these goals. These best practices help to articulate Rhode Island’s expectations for care transitions, addressing questions about accountability and information flow while correcting known misalignments within the system. They codify local consensus around care transitions, creating metrics and definitions that elevate proven interventions to sustainable systems change and define our community’s vision—and they are also “aspirational,” setting a high bar for care transitions excellence. Future research will address the need to establish baseline rates for these metrics, determine the efficacy of individual best practices, and establish cross-setting partnerships to test both sets of best practices simultaneously.

**Next Steps**

Rhode Island physicians have demonstrated their commitment to quality through initiatives related to health information technology, patient safety, and patient-centered medical homes. To further elevate patient care and address known physician frustrations, physicians should review the best practices and identify those that they can incorporate into their clinical practice. Suggested first steps include mapping current cross-setting communication with community partners; prioritizing implementation by establishing baseline rates for the best practice metrics; and reviewing the evidence base cited in Table 1 to identify improvement strategies. Community physicians may also want to incorporate advance care planning discussions into routine patient visits and educate their staff about the importance of early office visits or phone follow-up for patients with recent hospitalizations. This may include having front office staff ask patients if they were recently hospitalized and triage these calls appropriately; advise staff to ask patients about recent hospitalizations and ensure these patients receive timely appointment or phone follow-up.

Physicians interested in informing the development of home health and skilled nursing facility best practices should contact the corresponding author.

**Disclaimer**

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**Acknowledgements**

Through community collaboration, the Safe Transitions Project aims to transform the Rhode Island healthcare system into one in which discharged patients understand their conditions and medications, know who to contact with questions, and are supported by healthcare professionals who have access to the right information, at the right time. This is our vision statement.

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**References**


13. Analyses from the Rhode Island Department of Health’s Hospital Discharge Data Set.


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**Disclosure of Financial Interests**

The authors and/or their spouses/significant others have no financial interests to disclose.

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