COMMUNITY CARE TRANSITIONS TOOLKIT
Acknowledgements

This toolkit was developed by the Colorado Foundation for Medical Care (CFMC), the Integrating Care for Populations and Communities Aim National Coordinating Center (ICPCA NCC) for the 9th SOW Care Transitions theme. The toolkit was funded by the Centers for Medicare & Medicaid Services (CMS) under contract number HHSM-500-2008-CO9THC. Sincere thanks go to CMS Government Task Leaders, Doug Brown and Traci Archibald, who led the Care Transitions Theme with flexibility, insight, and innovation. The NCC also acknowledges the tireless effort of the QIO personnel from AL, CO, FL, GA, IN, LA, MI, NE, NJ, NY, PA, RI, TX and WA who are the true innovators in the work described here and have contributed greatly to the findings. Additionally, CFMC would like to recognize the expertise provided by our numerous supporters, including Dr. Joanne Lynn, Dr. Eric Coleman, and Dr. Steve Jencks.

Disclaimer

This material was prepared by CFMC, the Medicare Quality Improvement Organization for Colorado, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. PM-4010-006 CO 2011

This toolkit was developed as a guide for beginning a care transitions project in an effort to reduce hospital readmissions. The contents presented have been identified as useful practices and processes by the National Coordinating Center (NCC) or the 14 QIOs participating in the Care Transitions theme in the 9th Statement of Work (SOW), and may be altered to best fit your individual community. Any links or sites included within the toolkit are not under the control of CFMC. CFMC is not responsible for the contents, changes, or updates of any linked site. CFMC provides these links and resources as a convenience, and the inclusion of any link does not imply endorsement by CFMC or CMS of the site or any association with its operators.

Toolkit Overview

This toolkit will provide you with the information, resources, and tools you need to start your own care transitions initiative. Remember to think globally and act locally. You are encouraged to adjust resources as needed for your specific community.
The process by which patients move from hospitals to other care settings is increasingly problematic, as hospitals shorten lengths of stay and as care becomes more fragmented. Medicare patients report greater dissatisfaction with discharge-related care than with any other aspect of care that the Centers for Medicare & Medicaid Services (CMS) measures\(^1\). Within 30 days of discharge, 19.6% of Medicare beneficiaries are rehospitalized\(^2\), and the Medicare Payment Advisory Commission (MedPAC) estimates that up to 76% of these readmissions may be preventable\(^3\). Rates of re-hospitalization, and health care utilization in general, vary substantially among individual hospitals and among geographic locations\(^4,5\). Therefore opportunities for improvement exist at both the individual provider level and in community-based strategies aimed at multiple providers and local/regional support infrastructure\(^6,7\).

Information contained within this toolkit is presented as a result of the 9th Statement of Work (SOW) Care Transitions Theme, where the goal was to improve transitional care for a population of fee-for-service Medicare beneficiaries living within a selected community. Success was measured by reductions in hospital readmission rates for the targeted population. Fourteen QIOs were contracted in the 9th SOW to reduce 30-day hospital readmission rates, improve rates of physician follow-up appointments within 30 days of discharge, improve HCAHPS scores for targeted hospitals, and to reduce the risk-standardized 30-day readmission rates for acute myocardial infarction, heart failure and pneumonia.

---

1 Care Quality Information from the Consumer Perspective Hospital Survey (HCAHPS) Pilot
2 Jencks SF, Williams MV, Coleman EA: Rehospitalizations among patients in the Medicare Fee-for-service Program. NEJM 2009 Apr 2; 360(14):1418-28.
QIOs accomplished this work by engaging multiple providers (including hospitals, home health agencies, dialysis facilities, nursing homes, and physician offices), as well as patients, families, and community health care stakeholders in cooperative and synergistic quality improvement efforts. Each community implemented multiple interventions, with the QIO serving to assist in coordinating efforts, recruiting key participants into the work as needed, evaluating progress, synthesizing best practices, and creating a sustainable infrastructure so that the progress can continue after project completion.

The Theme was set up to allow QIOs maximum flexibility to develop and adapt local projects based on community strengths and local best practices, and to tailor solutions based on community priorities.

**CARE TRANSITIONS LITERATURE**

CFMC has created a Literature Reference Repository, listing publications and articles relevant to improving care transitions and reducing readmissions. This document will be updated periodically.

- Care Transitions Literature Reference Repository (link to Literature Review file)
  This document contains a list of relevant publications and articles for care transitions work.

Visit the National Transitions of Care Coalition (NTOCC) website for more information on literature around Care Transitions through their ‘Transitions of Care Compendium’ (TOC Compendium). The TOC Compendium is a collection of resources such as white papers, journal articles, and websites that a “Transitions of Care” professional or interested consumer might find useful in their practice or medical situation. Explore the TOC Compendium at: www.NTOCC.org/Compendium.

You can also use the Care Transitions Search Engine on the Integrating Care for Populations and Communities Aim National Coordinating Center (ICPCA NCC) website (http://www.cfmc.org/caretransitions/ct_search.htm) that is customized to look for high-quality content on improving care transitions and patient safety.

**STEPS TO GETTING STARTED**

Getting started on your efforts in care transitions may follow a series of steps, including identifying your overarching goals, recruiting and convening your partners, leadership, and community, conducting a root cause analysis within your community, implementing interventions, measuring results, and creating a sustainable approach to maintain gains.

As an organizer in this effort, you might start the planning process by asking yourself a few questions:

> “The secret of getting ahead is getting started. The secret of getting started is breaking your complex, overwhelming tasks into small manageable tasks, and then starting on the first one.”

- Mark Twain
• Who are your people (who lives here, who works here, to whom is this important)?

• Who holds power in your community (hospitals, physician practice group, payers, other)?

“Who are your people (who lives here, who works here, to whom is this important)?
Who holds power in your community (hospitals, physician practice group, payers, other)?”

- Derek Sivers

• How far are you in your efforts to improve transitions of care?

• Do you have a motivating issue?

• Do you have pre-defined goals or results you aim to achieve?

• Do you have a mandate or a group to create a working, action-oriented team?

Some participants found that the most difficult thing to do is forge the will to make changes happen. Moving people to actually do something differently today, rather than following the familiar and dysfunctional patterns that have come to be accepted, can be challenging. You may have to consistently address the ongoing issue of generating and sustaining the will to drive improvement.

We can learn from TED’s stance on developing leadership by watching the video, Derek Sivers: How to Start a Movement (http://www.ted.com/talks/derek_sivers_how_to_start_a_movement.html). It takes more than one person to create change, or in this case, a movement.

Consider addressing the following information to get started:

• Investigate data and the facts:

• The experiences and issues people are facing in your community’s systems is critical information.

  • Consider looking into the costs and effectiveness of your community compared with other areas.

• Find a leader – effective leadership is essential:

  • Someone (usually a group) should embody the vision, take risks, forge coalitions, exercise political pressure, and otherwise anchor the work.

• Build on local issues:

  • Something is probably already brewing – build on it! If many Medicare beneficiaries are bouncing back into hospitals after discharge, then consider: Can you generate interest that might move action over the issue?

• Think ahead:

  • Always consider your timeframes and end goals, and keep the ideal structure of your community coalition in mind as you advance in your planning.

“Now is no time to think of what you do not have. Think of what you can do with what there is.”

- Ernest Hemingway
• Think globally and act locally:
  o Adjust your structure, interventions, and measurements according to your community’s needs.
  o Testing your ideas in small ways may help to get things started (once good ideas are proven to work, your commitment to implementation and expansion may be easier).

• Capture quality stories:
  o Much about health and health care is a bit obscure to most people until it personally touches them, and stories are how people learn at both the cognitive and emotional levels.

If you are not a QIO, find out who your QIO is and reach out to them to begin discussing partnering opportunities (link to http://www.ahqa.org/pub/connections/162_694_2450.cfm).

The most important aspect may just be getting started. Bring people into the endeavor and build enthusiasm. Find a concept that you can easily implement and test it out in the most auspicious setting. Learn from the test and build your effort as time moves forward.
Despite the challenges associated with building, governing, and sustaining a locally based coalition, remember that this structure offers the best opportunities for sustained improvement for your community.

The Centers for Disease Control (CDC) has substantial resources on building and sustaining community coalitions, since they have been essential to public health initiatives such as tobacco control, stroke prevention, and domestic abuse. You will find many resources at www.cdc.gov and perhaps it is useful to start with the tobacco control program’s handbook Coalitions: State and Community Guide at www.cdc.gov/tobacco/stateandcommunity/bp_user_guide/pdfs/user_guide.pdf.

The Institute for Healthcare Improvement (IHI) also has useful resources related to coalition building for collaboration. Start by reading their white paper on ‘Planning for Scale: A Guide for Designing Large-Scale Improvement Initiatives’ (Log-in required for access, free registration: http://www.ihi.org/IHI/Results/WhitePapers/whitepapersindex.htm).

A few guiding points from community-based health care improvement coalitions in the field:

- Keep the door open – laggards may be eager to join later.
- Allow no vetoes – parties that want to try something out are free to do so.
- If there is one party with an overwhelming degree of influence, the meetings might go better with an outside facilitator who can keep things more equal.
- Nursing homes and mental health providers have been “beaten up” so much that their staff are often “beaten down” and resentful of being given second-rate status. Meeting in their setting or talking about what they did for shared patients can help establish respectful relationships.
• Process mapping is a tool that often serves to share a work process efficiently and thereby often illuminates inefficiencies and opportunities, especially regarding transfers where the multiple providers do not know one another’s processes.

• Trading visits or exchange site visits can help all parties to understand one another’s settings to better understand and identify challenges and opportunities.

• An intervention that does not work as initially planned is not a failure, but an opportunity to learn something previously unknown about your system, community, or population.

• It takes time to build trust between providers and partners – allow the relationships to grow slowly, but encourage these entities to start talking and sharing.

---

**Setting**

In the 9th SOW Care Transitions theme, each QIO applied for funding by identifying a population of Fee-for-Service (FFS) Medicare beneficiaries for which it proposed to reduce hospital readmission rates, and a group of health care providers involved in delivering care to that population. Each target population was defined by zip code of residence, resulting in a group of beneficiaries living within a contiguous set of zip codes. The targeted beneficiary population consists of all FFS Medicare beneficiaries living in the selected zip codes.

QIO staff identified providers to target for recruitment by assessing the target population’s claims data for key hospitals involved in delivering care to the population, and through local knowledge of relevant community services and leaders. Each Care Transitions community is therefore defined as a set of contiguous zip codes, and a set of targeted medical services providers.

QIOs were encouraged to select communities of beneficiaries whose hospital care could be largely localized to a finite set of hospitals to ensure creation of manageable intervention communities. Each QIO constructed a final proposed community by optimizing the overlap between beneficiaries living in the selected community, and a group of target hospitals. Project
leaders at the Centers for Medicare & Medicaid Services (CMS) selected 14 sites in which to fund the project, including Alabama, Colorado, Florida, Georgia, Indiana, Louisiana, Michigan, Nebraska, New Jersey, New York, Pennsylvania, Rhode Island, Texas, and Washington.

QIO ROLE

In the 9th Statement of Work, the QIOs undertook various roles, with the most common and prominent being facilitation of interdependent improvement efforts. The QIOs worked to help build trust and reliable interfaces among project participants, including providers across various settings. Additionally, the QIOs were able to share data in aggregate with their providers to help them further understand readmission rates and patterns and opportunities for improvement. Many QIOs developed their own reports for distribution to providers, please see the ‘Tools’ section for examples.

The QIOs also served as a resource for technical assistance and evidence-based information. The QIOs facilitated training and implementation of various interventions utilized by individual providers and the community all throughout the project.

ROLE OF THE PATIENT

It is important to remember to act for the individual and learn for the population. By engaging consumers in our efforts, including patients and their families, we are much more likely to be successful. Remember to consider the patient’s experience as they transition from provider to provider, setting to setting, their voices are quite valuable.

The Obama Administration has launched the Partnership for Patients: Better Care, Lower Costs, a new public-private partnership that will help improve the quality, safety, and affordability of health care for all Americans. The Partnership for Patients brings together leaders of major hospitals, employers, physicians, nurses, and patient advocates along with state and federal governments in a shared effort. The Partnership focuses in on the patient, to ensure hospital care becomes safer, more reliable, and less costly.

Join the Partnership for Patients today and learn more information at www.healthcare.gov. (direct link is http://www.healthcare.gov/center/programs/partnership/index.html)

“Patients can be part of the solution to reducing avoidable readmissions.”
- Laurie Robinson, Quality Improvement Director, eQHealth Solutions

“What others can learn from our experience is that the consumer is always the constant. The more we can engage the consumer, the more likely we are to succeed.”
- Chris Freire, Care Management, Glens Falls Hospital and Hudson Headwaters Group, NY
TYPES OF PARTICIPANTS (PROVIDERS & PARTNERS)

While all care transitions initiatives are different, the types of participants involved are often common across communities. Traditional partners include the providers based within your community, such as:

- Hospitals
- Skilled Nursing Facilities
- Home Health Agencies
- Hospice organizations
- Palliative care organizations
- Dialysis facilities

It may be helpful to engage other partners in your work to increase spread and sustainability. Examples of these supportive partners may include:

- Adult Day Centers
- Aging and Disability Resource Centers (ADRCs) - [http://www.aoa.gov/AoAroot/AoA_Programs/HCLTC/ADRC/index.aspx](http://www.aoa.gov/AoAroot/AoA_Programs/HCLTC/ADRC/index.aspx)
- Area Agencies on Aging (AAAs) - [http://www.n4a.org/](http://www.n4a.org/)
- Employers in the community
- Information Technology companies or vendors
- Pharmacies
- Quality Improvement Organization (QIO)
- Senior Centers
- Trade associations
Community Recruitment/Engagement

The United States does not have a commonplace method by which localities can set priorities and implement improvements. Other countries authorize the County Council, Primary Care Trust, or public health offices to assess the community situation, set priorities, engage in debates among advocates, defend the interests of the vulnerable, and act responsibly in the public interest. In the US, local governments have very limited authority to control payments, services, or patterns of care. Individual state governments have some of these authorities, but they are generally too large to engineer local reform. No other authority usually exists.

Therefore, most localities in the US will need to develop voluntary coalitions to guide change in their own sites. Some can build on organizations or coalitions already in place; others will build from the beginning. Convening competing voluntary organizations is a fragile model on which to build governance.

Building a coalition requires a graceful mix of accommodating powerful entities and maintaining a welcoming attitude for smaller players and laggards. It helps for advocates to know their community very well and what

“Individuals and organizations working on this initiative are pioneers shaping the future of healthcare improvement.”
- Audrey Paulman, MD, MMM, Principal Clinical Coordinator

IN THIS SECTION:
- Community Building Strategies
- Community Meetings
- Coalition Charters & Memoranda of Agreement or Understanding (MOA or MOU)
- Publicity/Proclamations
- Data/Analytic Tools
- Common Data Sources
- Sample Analytic Reports and Templates
- Social Network Analysis/Maps/Overlap
- Interactive Maps

Page 11
issues, goals, and objectives will likely drive various entities to join. Often reputation, opportunity for growth, and personal commitments are driving forces, rather than monetary income. The leading organization needs to know the players well, offer reasons to share in the coalition, negotiate deals, and deliver. This work should be anchored in the values of the community and be respectful of external structures such as payment and law.

The CDC has developed a number of resources on coalition building and governance (link to http://www.cdc.gov/tobacco/stateandcommunity/bp_user_guide/pdfs/user_guide.pdf). These resources are primarily aimed at tobacco control, but can be easily targeted toward building communities for a common goal.

The Institute for Healthcare Improvement (IHI) has generated a list of considerations that argue for a major part of health care reform to be anchored in local action (link to http://www.ihi.org/IHI/Topics/LeadingSystemImprovement/Leadership/Literature/USHealthCareReformbyRegion.htm). Their reflections are listed below:

- All the components needed to construct a health system are within a region
- Common values are more likely to emerge
- Solutions to problems depend upon context, and context is known most accurately locally
- Platforms for dialogue exist or can be created
- Other health determinants are attributes of a region

HealthcareCommunities.org (HC) is a web-based knowledge management system that provides multiple means for the health care quality improvement community to share knowledge and contribute to each others’ QI work. The HC has private areas for organized quality improvement communities that are based around different clinical and operational interests. Community members use password-protected access to community-specific files, forums, calendars, listserves, and other tools and features.


The foundation of successful organizing is leadership development. This includes your own core leadership, your providers, and everyone who

“"It’s up to all of us in this community to design the system we want for our family, friends, and ourselves.””
- Hospital Chief Medical Officer, Colorado

“A small hinge swings the door a wide distance.”
- Pat Richetto, Quality Resource Specialist, AQAF
takes part in a care transitions initiative. For more information on organizing tactics, please visit the New Organizing Institute (http://neworganizing.com).

COMMUNITY BUILDING STRATEGIES

Community-building strategies typically include convening workgroups, providing data and assisting in intervention measurement. Most initiatives hold large community-wide meetings within the first nine months of the project to drive awareness of the effort, share community-level readmission data, bring experts and intervention designers to speak with participants, provide networking opportunities, and issue a call to action.

A key role of the leader in every community is to facilitate interdependent improvement efforts and build reliable interfaces among project participants. Every participant counts. Community-building activities have generally incorporated one or more of 4 basic techniques, including provider pairs, setting-specific groups, vertical clusters, or steering committees.

Provider pairs

In some communities, it may be best to partner providers based on direct referral patterns. Assisting provider pairs as a series of separate projects and facilitating sharing of best practices to spread successful innovations can be effective. Rather than convening a large group of providers together, this approach is more focused and directed to the relationship between a sender and receiver, most often a hospital and a nursing home, although this pairing could include a variety of care settings. This pairing often functions with informal leadership or a consensus-based structure.
**Setting-Specific Groups**

In other communities, the providers may be more effectively grouped by setting type. This entails convening like providers and then working toward vertical integration of efforts. This approach allows for more focused implementation of interventions that are specific to a certain setting. For example, the INTERACT intervention (see interventions for more information) is targeted specifically to implementation within a nursing home or skilled nursing facility setting. The QIO or largest provider will often serve as a facilitator in this model.
**Vertical Clusters**

Convening vertical clusters of highly interdependent providers first (hospital—skilled facility—home health groups), then working towards merging clusters into a greater community can be effective. This approach allows for multiple projects to occur simultaneously within one community. The vertical clusters are largely based on referral patterns and include providers from various settings (e.g. hospital, three nursing homes, two home health agencies, one hospice facility, etc.). The QIO or hospital will often serve as a facilitator in this model.

- Link to Cross Setting Flyer: GA
  This one-page document outlines information for providers about cross-setting groups, including ‘what’, ‘who’, ‘why’, and ‘how’ to get involved in care transitions efforts in the community.
**Steering Committee**

Many successful projects are driven by a high-level community-directed steering committee that facilitates deployment of community-targeted priorities and makes final decisions regarding activities and priorities. The QIO and hospital(s) deliberately take the role of participants rather than a controlling element. The Steering Committee structure should be determined by its members, which should be inclusive of all provider setting types and stakeholder or partner groups. The committee should be representative of various staff levels, including leadership and direct care workers. Additionally, it may be helpful to engage partner organizations, physicians, staff, and consumers as part of your Steering Committee structure. From there, your Steering Committee may choose to designate specific action-oriented workgroups to further the effort. These workgroups might focus on areas such as patient activation, communication, measurement, etc.
COMMUNITY MEETINGS

To be effective, a community needs to be well organized, represented, and have open channels for communication. Additionally, it is helpful to have a formalized structure as noted in the Strategies section. The coalition or community should have diverse membership with clearly delineated roles and responsibilities. The community should also keep sustainability in mind when developing plans and implementing interventions for improvement.

The National Transitions of Care Coalition (NTOCC) has identified communication as the main driver for improving transitions of care. NTOCC identifies six key elements to an effective transition of care.

• Sender: The health care professional who is accountable for the sending of key information necessary to ensure continuity of care.

• Receiver: The health care professional who is accountable for receiving the key information (usually at the next care setting) shared by the sender about the patient undergoing transition.

• Key Information: Critical information (such as most up to date medical history, medical diagnosis, medication list, time of most recent pain medication or antibiotic, discharge instructions, results from tests/procedures) available in a clear, complete, and timely manner.

• Action: Obligations and tasks the Receiver of the key information must execute in a timely manner to maintain continuity of care and services for the patient.

• Verification: A necessary action by the Sender to ensure the key information sent has been appropriately received and acknowledged by the intended health care professional.

• Clarification: A necessary action by the Receiver to ensure the transition information is clear and if concerns are present enables the Receiver to pose questions to the Sender, in order to proceed with appropriate patient-centered care (Tahan, 2009).

To help address intended results and measures of success, consider using the Before and After Action Review concepts. The Before and After Action Review was originally adapted from the work of the US ARMY and modified by Society for Organizational Learning.

The Before Action Review addresses the following questions:

• What is our intended result?

• What are our success measures?

• What challenges will we face? (Predictions)
• What did we learn from last time (if applicable)?
• What do we think will make us successful this time? (Hypotheses and Experiments)

The After Action Review addresses the following questions:

• What was our intended result?
• What were our actual results?
• What caused our results?
• What is our next opportunity?
• What should we take forward next time? (Sustains/Improves/Insights/Experiments)

There are multiple ways to communicate with your community. Initially, it may be helpful to organize a community-wide event to broadly promote your upcoming project or work in transitions of care. This will serve as a forum for gaining attention, support, engagement, and commitment to action. Attendees may be meeting one another for the first time – so consider adding enough time for networking to begin building those community-based partnerships.

“In preparation for the community Kick-Off meeting and the activities to follow, we invited several influential leaders among the provider network to participate in a one-time meeting of a Mastermind Group.”

- Risa Hayes, Project Manager, CFMC

• Link to Community Meeting template: GA
  This one-page community meeting template includes topics relevant to facilitate a cross-setting meeting.

• Link to Cross-Setting Meeting Assessment: GA
  This one-page assessment collects feedback to improve cross setting meetings.

• Link to Cross-Setting Meeting Minutes: GA
  This one page document provides a template for recording meeting minutes and action items.

• Link to Next Steps across Settings – Talking Points for Networking
  This one page document lists seven talking points to encourage networking among providers across settings.

If a community-wide meeting is not possible, consider hosting a webinar or teleconference in order to bring potential partners together to get consistent information out into the community. This may be helpful as a follow-up to the community meeting for participants who were unable to attend.
Additionally, letters of invitation for participation have been helpful, especially for provider and stakeholder leadership (e.g., CEOs, COOs, etc.). This letter may invite various providers to attend, and also serves as an information base for executive buy-in.

- Link to Letter of Invitation (Physicians): NY
  This one-page physician invitation gives pertinent details concerning the physician role in the care transitions project.

- Link to Physician Outreach Letter: RI
  Here is another one-page example of a physician invitation letter.

Once you have convened your community, it is important to identify a structure that will aid in moving your work forward. Your coalition should identify distinct and specific goals for your work. Consider developing a vision or mission statement, objectives, core values, policy and procedure manuals, or by-laws. All members of your community should be involved in this process. Ongoing meetings and phone calls may be necessary for continued engagement.

- Link to Action Team agenda: CO
  This structured meeting template includes topics such as participants, purpose, agenda and action items.

### COALITION CHARTERS & MEMORANDA OF AGREEMENT & UNDERSTANDING (MOA or MOU)

Coalitions charters, letters of intent, participation, or memoranda of agreement (MOA) have also proven to be helpful when engaging specific health care providers. Coalition charters can be developed by the community members and signed to indicate participation and commitment.

Coalition Charter Template (please adjust based on your community’s needs) ([http://www.cfmc.org/caretransitions/files/toolkit/community%20engagement/Coalition_Charter.doc](http://www.cfmc.org/caretransitions/files/toolkit/community%20engagement/Coalition_Charter.doc)) The MOA should highlight specific requirements and items of understanding for involvement in the project. An MOA will provide clear and precise understanding of responsibilities and commitments for all parties engaged in the initiative.

- Link to Sample Memorandum of Understanding: LA
  This is a three-page memorandum of understanding that includes clearly delineated roles and responsibilities of the participant hospital and QIO. It also includes a team development list.

- Link to setting-specific participation agreement (Generic – 4 files: hospital, HH, SNF, PO)

  This two-page participation agreement is home health specific and delineates the roles and responsibilities of the home health agency and QIO.

  This two-page participation agreement is hospital specific and delineates the roles and responsibilities of the hospital and QIO.
This two-page participation agreement is nursing home specific and delineates the roles and responsibilities of the nursing home and QIO.

This two-page participation agreement is physician office specific and delineates the roles and responsibilities of the physician office and QIO.

- Link to example of participation agreement (Generic)
  This is a brief one-page participation agreement.

- Link to example of provider disclosure form (Generic)
  This is a one-page provider disclosure agreement is for disclosure purposes so that participant information can be shared.

**PUBLICITY/PROCLAMATIONS**

Local media coverage can prove valuable for communicating the progress and successes of your local efforts related to care transitions. Press releases, quotes, stories, interviews, videos, and recordings may be helpful when approaching common media outlets such as television, newspaper, and radio. Visit the Integrating Care for Populations and Communities Aim NCC homepage to view media outreach related to the 9th SOW Care Transitions efforts - [http://www.cfmc.org/caretransitions/](http://www.cfmc.org/caretransitions/).

When convening your community in a broad setting or annual statewide meeting, consider involving your state Governor. By submitting a request well ahead of time, some states are able to have a day or week identified through a Governor-issued proclamation related to your project. Some states may also issue letters from the Governor in support of your efforts. Check your state government’s website for more information and specific requirements.

- Link to Nebraska Safe Transitions Day Proclamation - January 2009
  This is the proclamation from the Governor of Nebraska proclaiming Safe Transitions Day. Your QIO/organization may choose this type of high-profile media to highlight your project.

- Press Release for CTI participating providers: NE
  Here is an example of a brief CTI press release template.

Some communities find it helpful to award certificates of participation for all participating community members, organizations, and providers to highlight their commitment and participation in the work. This can come in the form of a framed certificate, poster, or banner.

- Link to New Jersey Certificate of Participation poster
  Here is a one-page document that was used to recognize participating organizations for their efforts in the care transitions project.
It may also be beneficial to establish key messages, goals, and objectives so that all publicity or media have consistent content. Developing talking points or a standardized slide deck can also help when community members are presenting on the status or progress of the project in a public setting.

Widespread dissemination of information on your effort will help to drive progress, support, and interest in the work being completed. Community or statewide newsletters can be targeted to a specific audience, such as health care providers or beneficiaries. List serves can be created for participating community members to discuss challenges and opportunities arising from the work.

Establishing a community brand or identity can also help to unify the effort and bring providers and partners together. A recognizable logo, website, tagline, and mission statement will help to coalesce your efforts.

- Nebraska – CareTrek (http://www.cimronebraska.org/caretrek.aspx)
- Northwest Denver, CO – Connected for Health (http://www.cfmc.org/providers/providers_pcc.htm)
- Whatcom County, WA – Stepping Stones (http://www.steppingstoneswhatcom.org/)

To further understand challenges and opportunities between provider settings, it can be helpful to set up site exchange visits across settings or even within specific provider types. Walking a mile in another’s shoes is a valuable exercise to understand processes within a current system’s structure and daily routines.

- Link to Site Visit Facilitation Guide (generic)
  This two-page site visit guide defines the purpose, overview and objectives for a cross-site visit.
- Link to Site Visit Exchange Evaluation (generic)
  This one-page site visit evaluation is brief and concise.

DATA/ANALYTIC TOOLS

Data has proven to be an engaging, motivating and necessary element of any successful intervention. Data has been used in the following ways in many initiatives to improve health care:

- To open doors - to get providers and funders interested
- To stimulate a movement - an easy-to-remember fact serves to sum up the need for change
- To block trials of some changes because they did not work

“In God we trust. All others must use data.”
- Statician’s Credo
in another setting

• To monitor change and set goals

In the 9th SOW, some QIOs implemented Data Use Agreements to allow data sharing between the QIO and specific health care provider. A Data Use Agreement (DUA) is a legally binding agreement between entities (e.g., QIO, contractor, private industry, academic institution, other Federal government agency, or state agency). Please visit the CMS website for more information on data sharing (http://www.cms.gov/PrivProtectedData/).

• Link to Data Sharing Agreement speaking notes (generic)
  This two-page speaking notes document is detailed and clearly defines all aspects of explaining the nuances of data sharing.

• Link to Data sharing Agreement Template (generic)
  This three-page document is a data sharing agreement template.

• Link to Data Use Agreement template: CO
  This six-page data sharing agreement example is very detailed and explicit.

It is important to keep stakeholders informed about the culture and state of health care in the community. Data can serve to report problem areas as well as communicate success. While there are many common data sources available to community leaders, the messaging of the data is also essential. This section describes some common often publicly-available data sources and displays examples and templates from others that have embarked on this work.

COMMON DATA SOURCES

This list gives some data sources concerning health and health care that are commonly available to communities in the US:

**Vital records** – Available in every jurisdiction – usually familiar to the Department of Health epidemiologists – can be mined for combinations of age, race, diagnoses, being in hospital/ER/nursing home at the time of death (often requires cross-matching addresses for nursing homes). Vital records are collected in nearly the same way over long periods of time and have few restrictions on use (because the person is no longer living and has no privacy rights per se).

**BRFSS** – Behavioral Risk Factor Surveillance Survey – available in every jurisdiction – core set of questions is asked throughout the nation – local questions can be added relatively inexpensively – local public health epidemiologists are familiar with it – sampling biases are adjusted by CDC formulae so that annual reports reflect the population (raw data are much harder to work with – many biases). Asked in Spanish and English – and on cell phones – but does not capture people who are institutionalized, people who only speak other languages, people without phones, people who won’t talk on the phone, and others. Furthermore, the cell phone responders can only answer the core questions. The target of the survey is mostly risky behaviors and conditions appropriate for preventive health interventions (smoking, etc) but localities
can add others around any topic of concern. The BRFSS includes a question on self-reported health – but only for the respondent. The BRFSS provides estimates for every county and state of the rate at which people rate their health as excellent, good, fair, or poor. Having fair or poor health correlates with being sick, dying sooner, being less productive, and other adverse effects. Using vital records and BRFSS self-rated health status, one can generate a measure that combines the two ideas into a useful indicator of overall health: either life expectancy in good/excellent health or years of life before age 75 in good/excellent health. One tool used for this purpose is the County Health Rankings web site (www.countyhealthrankings.org).

**MDS and OASIS** – Every person who is a resident in a nursing home has a “minimum data set” (MDS) reported to their state and then to CMS at admission, discharge, every 90 days, and with major changes in health status. Every person whose home care is paid by Medicare and most of Medicaid has a similar data set (OASIS) collected and sent to the state and to CMS. (And many home health agencies just collect it on everyone, but analyze the data that includes other payers only internally.) Depending upon the rate of use of nursing homes and home care as after-hospital care settings, your area may have most of the people who are very sick going through nursing homes and/or home care. Since the data is collected on everyone in a standard way, one could generate a number of insights as to the experience of people who are living with major illnesses and disabilities. For example, one could estimate the rate of serious pressure ulcers, the use of restraints, the prevalence of advance care plans, and the status of family caregivers. These databases have been used mostly for regulatory and financial purposes, and not for monitoring quality, so analytic approaches would need to be developed.

**Medicare Claims** – Medicare fee-for-service claims are a rich and well-used source of data. Getting the data requires privacy protections, a good deal of skill in working with the data, and often a substantial delay. One potential source of access to Medicare claims might be through the QIO that serves your area. At present, the QIO would face substantial delays in getting CMS permission to help you with the data, but that may change with the new emphasis on accelerating innovation. Some QIOs have substantial expertise in analyzing Medicare claims, and may have access to programs developed by others. Information on the following items can be learned through Medicare claims: Hospice program use, location at the time of death, utilization of health care over a time period, utilization of ventilators/feeding tubes/high cost treatments/multiple providers, rate of pressure ulcers, rate of CPR efforts (and outcomes), survival after specific interventions, and more. Medicare claims have mostly missed managed care and hospice (other than the fact of enrollment for a period of time), but new requirements are filling in some of the data in those settings.

**Medicaid claims** – Theoretically, one can do most of what can be done with Medicare with the Medicaid data, but some states may not have the data in an easily accessible and usable format and may not have analysts skilled at looking at Medicaid data. Also, many states have most of their beneficiaries in managed care and get very little data on these patients. Furthermore, eligibility for Medicaid often is intermittent. Nevertheless, dual eligible (Medicare and Medicaid) patients often have substantial Medicaid records, and many states have learned a great deal from examining outlier payments or high-cost codes. Merging Medicare and Medicaid databases might yield a powerful database for local reform.
**Chronic Condition Data Warehouse** - CMS compiles claims, MDS, OASIS, and a few other databases into a consolidated record for research. Local researchers under contract to a community coalition could generate proposals and get permission to use the CCW data ([http://ccwdata.org/](http://ccwdata.org/)). This requires that the researcher submit a data request through the Research Data Assistance Center (ResDAC), which can be costly ([http://www.resdac.org/](http://www.resdac.org/)).

**RHIOs (Regional Health Information Organizations)** - Some areas have cooperative health information interchanges to support better clinical care and surveillance for bioterrorism or epidemics. That activity generates a useful database that some are learning to mine for measures of quality and population health, though this sometimes requires appropriate usage agreements. If the RHIO has most people and services in the community, analyses can illuminate what is happening at a clinical level in that population. This can include all ages and conditions (except for military, veterans, incarcerated persons, and Native Americans who use separate government health care that usually does not participate in the RHIO) In areas without a functioning RHIO, one might still find that some critical elements of the care system are concentrated in one or two providers and that tapping into their data may show important indicators. For example, outpatient laboratory data may be housed by one or two companies, or virtually all patients with a particular illness or disability may use one provider.

**Local utilization reporting** - Many jurisdictions monitor at least ER and hospital use and sometimes certain laboratory tests in order to detect public health threats. These databases might be mined for additional useful information.

**HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) and other CAHPS mandated by CMS** - These are surveys of patients, sometimes of all adults as in the Hospital CAHPS and sometimes only of Medicare patients who use particular service types. These data are used in the on-line reports of hospital quality (Hospital Compare at [http://www.hospitalcompare.hhs.gov/hospital-search.aspx](http://www.hospitalcompare.hhs.gov/hospital-search.aspx)), for example, and thus are available for most hospitals. Similar data are available for nursing homes available at [www.medicare.gov/NHCCompare](http://www.medicare.gov/NHCCompare) and for home health agencies at [www.medicare.gov/HHCompare](http://www.medicare.gov/HHCompare).

**Tumor Registries** - Every cancer and brain tumor diagnosed in the country is recorded in the local, state, and national tumor registries, along with demographic information, precise diagnostic information, and initial treatment. Prevention and screening services are not included, only diagnosed cancers and brain tumors. States organize their local registries in different ways, sometimes having only hospital-based and state registries and other times having county or region-based databases as well. You can start with your hospital's registrar who will know how the system works in your locale. Working with these data usually require either persuading the government epidemiologists to do analyses for you or working with someone who can handle privacy issues (such as an academic researcher), since these data are identifiable and affect living persons.

**Census** - The United States Census Bureau collects population and housing data every ten years using ZIP Code Tabulated Areas (ZCTAs). These typically correspond to ZIP Codes and can provide a wealth of demographic information at the local level, such as accessibility of transportation.
StateHealthFacts.org – Statehealthfacts.org is a project of the Henry J. Kaiser Family Foundation and is designed to provide free, up-to-date, and easy-to-use health data for all 50 states. Statehealthfacts.org provides data on more than 700 health topics and is linked to both the Kaiser Family Foundation website (www.kff.org) and Kaiser Health News (http://www.kaiserhealthnews.org/)

SAMPLE ANALYTIC REPORTS AND TEMPLATES

The following analytic reports and templates were developed by QIOs participating in the Care Transitions theme in the 9th SOW. All reports were developed for QIOs using Medicare fee-for-service data. These reference materials may be of assistance when developing your community strategy and resources. For additional information, please contact the Integrating Care for Populations and Communities Aim NCC (CO-ICPCTechnical@coqio.sdps.org) or the individual QIO as the developer of the resource. Data displayed in the following reports is “dummy” data and does not reflect actual information or trends for any of the communities in the 9th SOW Care Transitions Theme.

Community Reports

- Trend graphs for Admissions/Readmission/ED Visits/Observation Stays: CO CO_1_Event Trending.xlsx
  This is an example of a care transitions quarterly trend graph using care transitions event measures per 1000 eligible beneficiaries.

- Readmissions per 1000 beneficiaries (Current and Goal): CO CO_2_Readm Trend Goal.xlsx
  This trend graph data example shows 30-day hospital readmissions quarterly over time.

- Quarterly Performance Report: WA WA_1_Quarterly Performance Report.docx
  This seven-page care transitions measures document is an example displaying multiple data graphs. It is very detailed and includes definitions of the different data displayed.

- ED Visits and Observation Stays Tables: TX TX_1_ER Obs.rtf
  These care transitions measures data are shown using data tables.

- DRGs Related to Readmissions and Discharge Disposition: TX TX_5_DRG.xls
  These care transitions data are DRG related and show percentages from multiple provider settings.

Hospital Specific

- Summary Report: AL AL_1_Hospital Summary.xls
  This care transitions data table compares one hospital to a specific group of other

“Data is a lot like garbage. You have to know what you are going to do with the stuff before you start collecting it.”
- Mark Twain
hospitals. It also shows some physician comparison data.

• **Readmission Trends (All Cause, AMI, HF, PNE):** AL AL_2_Hospital Trend Graph.doc
  These care transitions data are displayed using a data table and a trend graph showing one specific hospital’s readmission rates.

• **Hospital Discharge Profile:** AL AL_3_Hospital Discharge Profile.doc
  This care transitions data table displays a specific hospital’s discharges by DRG.

• **Readmission Control Chart:** CO CO_3_Hospital Readmission Control Chart.xlsx
  This care transitions trend graph displays the monthly readmission rates for one hospital in the target community.

• **Length of Stay Trends (All Cause, AMI, HF, PNE):** NJ NJ_1_LOS Trends.xls
  This data table depicts length of stay for one hospital over time and includes a trend graph comparing the hospital to the other hospitals in the target community.

• **Readmission Trends (rolling timeframe - also available monthly):** NJ NJ_2_Rolling Readmission Trends.xls
  These care transitions data show multiple data tables and trend graphs displaying a specific hospital’s rates and provides comparison data between the hospital and the target community’s rates.

• **Hospitalist Readmission Rates:** NJ NJ_3_Hospitalists Readmission Rates and LOS.xls
  These data tables are very detailed and specific to hospitalists’ readmission rates and length of stay.

• **HCAHPS Template:** NY NY_1_HCAHPS Template.doc
  This HCAHPS data table template defines the HCAHPS questions that are currently measured and provides hospital specific data as well as a comparison to the state and national averages.

• **Heart Failure Discharge Disposition:** NY NY_2_Discharge Disposition_HF specific.xls
  This data table and trend graph depicts discharge disposition for heart failure from one specific hospital and readmission rates by provider type.

• **Heart Failure Discharges and Readmissions by Disease:** NY NY_3_Heart Failure Discharge Disease.xls
  This data table depicts heart failure discharges from one specific hospital and readmissions by disease and provider type.

**Setting Specific**

• **Nursing Home Discharge Status:** FL FL_1_Nursing Home Report.xls
  These data tables depict discharge status from nursing home to other provider settings. Also includes data on <30 day stays.

• **Nursing Home Monitoring Report:** GA GA_1_Nursing Home Monitoring.docx
  This simple data monitoring template is designed for the nursing home to collect specific hospital readmission rates.
• Skilled Nursing Facility Readmission Summary: TX  TX_2_SNF Summary.xls
The skilled nursing facility readmission summary includes data tables and a run chart that compares a specific skilled nursing facility to the other skilled nursing facilities in the care transitions target community.

• Home Health Readmission Summary: TX  TX_3_HHA Summary.xls
This home health agency readmission summary includes data tables and run charts that compares a specific HHA to the other HHAs in the target community. This summary also includes a bar chart with all target community agencies (de-identified) readmission rates.

• Inpatient Rehabilitation Facility Readmission Summary: TX  TX_4_IRF Summary.xls
This inpatient rehabilitation facility readmission summary includes data tables and run charts than compares a specific rehab facility to other facilities in the target community. This template also breaks down 30-readmission rates in detail.

• SNF/Home Health Readmission Profile NY_4_SNF HHA Readmission Profile.xls
This skilled nursing facility/home health readmission profile is detailed and includes LOS, number of days between discharge and readmission, reason for readmission and other information helpful to care transition providers.

SOCIAL NETWORK ANALYSIS/ MAPS/ OVERLAP

Social network analysis (SNA) is an evidence-based method for mapping connections, and the quality of those connections, between key participants in a complex interdependent system. It can be used to detect missing but important links that could be intentionally established, and to highlight adverse professional relationships that could be remediated to improve the care delivered to a shared population.

It is often used to assess a network of entities, be they individuals or organizations. SNA allows us to examine specific relationships as well as characteristics of the network as a whole. The basic elements of a network consist of nodes and the connections between them, also known as ties. Ties can be unidirectional or bidirectional depending on the relationship between the two nodes. Ties are represented by arrows with the arrow heads indicating directionality.

The typical social network analysis uses data about trust and interchange among people. It is also possible to use the transfer of patients between providers as the indicator of the relationship. The following diagram depicts a social network analysis using Medicare claims data. It portrays the interdependent relationships involved in hospital readmissions within a single community of health care providers. In this diagram, the red lines represent the bidirectional relationships, whereas the blue lines represent unidirectional relationships. This diagram can be used to target relationships that would most benefit from an intervention.
Maps, metrics and improvement tools designed to primarily serve the needs of local area stakeholder champions are important in community improvement initiatives. Communities attempting to develop rational improvement plans would benefit more from being able to see the extent and location of actual problem occurrence in the population served without reference to any one accountable provider. Such a strategy would eliminate the need to disprove the adequacy of adjustment methods, allow flexibility in assessing local strengths and weaknesses, encourage cooperation among community members who could frame their own communities, issues and initiatives, create simpler methods of tracking improvement, and allow variation to be a source of learning instead of evaluation.

An example of such a map is displayed below. It combines unadjusted Medicare utilization and demographic data by ZIP code. From the data displayed in this map, local users could test hunches and select activities to serve micro-populations with the greatest evidence of need for informing and tracking improvement activities directed at a location-defined population.

The ideal map would be interactive with online access and user capability to manipulate layers of data according to specific interests. A good example of such a map was developed by Netflix to show user movie preferences in metropolitan areas (http://www.nytimes.com/interactive/2010/01/10/nyregion/20100110-netflix-map.html). While the Netflix map is not health care related, it represents an example of how visual data can excite and engage users to explore data at the ZIP code level. This map inevitably provides entertainment for users as
hypotheses are generated for why a certain movie is popular in one ZIP Code as compared to
a neighboring ZIP Code. Imagine the dialogue if health care data were portrayed in this way?

**OVERLAP**

There are various ways to segment regions when developing the boundaries of a community. For example, geopolitical boundaries are widely used (e.g., the United States Postal Service uses ZIP code defined areas). The Dartmouth Atlas of Health Care (http://www.dartmouthatlas.org/) uses localization to segment hospital regions. Localization is a patient origin measure that assigns regions to providers using simple patient plurality (majority). Patient origin approaches take into consideration both the residence of the patient and information regarding the provider of interest when constructing impact regions. To create hospital service areas using localization, one can count the number of patients within each ZIP Code that are assigned to each hospital, and the hospital with the greatest number of patients assigned ‘wins’ the ZIP Code. The list of ZIP Codes winning the hospital becomes the hospital’s service area.

Analysts at the Colorado Foundation for Medical Care developed a third approach called overlap. Overlap is essentially localization with a twist—after calculating service areas based on subregional plurality, by which a hospital “wins” the subregion by superlative representation, an extra step is taken to determine if the degree of “winning” is enough to warrant its inclusion into an area where the hospital could be described as influential. This is important for initiatives designed to improve the health or utilization profile of a geographically described population. For example, a hospital may wish to know where its population of greatest impact is located, and not a description of the total area where it has any degree of influence. It is the difference between the area where it has some influence compared to the area where it could
be reasonably accountable for population measures. Calculating the overlap of a community may be important because groups working in highly overlapped communities are able to target more interventions to beneficiaries who reside in the community; therefore, population-based (community) rates are more likely to improve.

The following Venn diagram describes the different patient sets. Overlap is the proportion of beneficiaries who live in a place and also seek their medical care at the hospitals located in that place, depicted by the middle darker blue portion of the Venn diagram.

**People, Place, Provider: Solving the Puzzle**

This power point presentation clearly defines how care transitions communities are formed based on zip codes and the relevance of “overlap”.
A Root Cause Analysis (RCA) is a process for identifying the basic or causal factors that underlie variations in outcomes. An RCA typically allows you to identify the “root” of the problem in a process, including how, where, and why a problem, adverse event, or trend exists. This analysis should focus on a process that has potential for redesign to reduce risk. The RCA is also a way of looking at unexpected events and outcomes to determine all of the underlying causes of the event and identify recommended changes that are likely to improve them. Through an RCA, you can make decisions and look for sustainable solutions based on data and facts. Remember that active failures are rarely root causes; rather, latent conditions over which we have control are often the root cause of a problem. An RCA focuses primarily on systems and processes, not individual performance.

To begin, identify the underlying functions leading to poor outcomes. Then, determine the primary cause(s) and contributing factors. An RCA is generally broken down into the following steps:

- Collect data
- Analyze data
- Develop and evaluate corrective actions, using PDSA cycle
- Implement successful corrective actions

**PLAN-DO-STUDY-ACT CYCLE**

William Edwards Deming was born on October 14, 1900. He is most famous for Deming PDAC Cycle, otherwise known as the Shewhart cycle, or the Deming Wheel's “Plan-Do-Check-Act”
Deming is widely credited with improving work processes and methods for improvement. He is most famous for the Deming PDCA Cycle, otherwise known as the Shewhart cycle, or the Deming Wheel’s “Plan-Do-Check-Act” (modified to “Plan-Do-Study-Act”). The PDSA cycle is a basic and scientific method for improvement.

Once a team has mapped a process, set a goal, developed measures and a data collection plan and selected changes, the next step is to test those small changes using the PDSA cycle. It’s a quick way to improve work processes that allows teams to rapidly test a change on a small scale. Risk taking is encouraged and failures are OK because the team learns from them.

The PDSA cycle brings data, learning, and action together into one process. It should be noted that improvement often requires multiple PDSA cycles.

In addition to the PDSA cycle, some communities may focus on rapid cycle improvement. Rapid cycle is the use of standard quality tools with skilled facilitators to achieve breakthrough improvements in performance within a rapid time frame. Rapid cycle uses the same basic principles as the PDSA cycle, but the work is accelerated through a series of cycles to make a change.
ACTION/IMPLEMENTATION PLAN

After you have determined the root cause(s), then it is time to develop an Action or Implementation Plan. Plans are necessary to pilot the improvement experiment and determine future adjustments for improvement. When designing the Action or Implementation Plan, be very specific about the changes being made. Clearly answer each of the following components in a brief outline to help create a plan that is easy to follow and ensures accountability for achieving specific tasks by target deadlines.

• Identify strategies to reduce risks of similar events occurring in the future
• Address responsibility for implementation, oversight
• Address ongoing measurement to determine effectiveness of the actions
• Create a timeline for multiple actions
• Set reasonable/attainable goals
• Link goals to measurement
• Select changes that have the highest potential impact community-wide, but test one change in one area first

“When it is obvious that the goals cannot be reached, don’t adjust the goals, adjust the action steps.”
- Confucius
COMMUNITY ASSESSMENT

QIOs performed comprehensive community assessments within the first month of the project to direct and refine intervention strategies. Assessment items included:

- Willingness of community to come together for the initiative
- Population demographics
- Claims data analysis of care patterns associated with readmissions
- Local perceptions of drivers of readmissions
- Tabulation of existing quality improvement activities
- Priorities of committed participants
- The presence of other relevant community infrastructure, such as Health Information Exchanges, Aging Network services and Certified Value Exchanges

Teams can perform root cause analyses using traditional quality improvement methods within their communities to determine the main drivers of readmissions. In the 9th SOW, QIOs used a variety of techniques for the root cause analyses, including:

1. Medical Record Reviews: these included reviews of randomly sampled hospital discharges, reviews of 30-day readmissions, as well as reviews of other services provided such as skilled nursing, home health or physician follow-up services.

2. Process Assessment: this included direct observation of processes such as discharge and admission, interviews with process owners, and mapping of processes.

3. Group Discussion & Individual Interviews: QIOs gained tremendous insight from both cross-setting group discussions as well as individual interviews with both providers and patients.

TOOLS

There are a variety of methods and tools available to help conduct a Root Cause Analysis when initiating a care transitions effort within your community. Some of the more common techniques include medical record reviews, process mapping, cause and effect diagrams, fault tree analyses, LEAN value stream mapping, 5-Whys, group or individual interviews, and focus groups, etc.

Medical Record Reviews

Medical record reviews can help to identify trends and patterns within specific provider settings. These reviews might include randomly

“We can’t solve problems by using the same kind of thinking we used when we created them.”
- Albert Einstein
sampled hospital discharges, reviews of 30-day readmissions, as well as reviews of other services provided such as skilled nursing, home health or physician follow-up services.

Process mapping is a technique used for visual representation of work processes in a form of a map. The process map is a basic tool for process improvement and identifies a variety of activities, including input and output, approvals, exceptions, and hand-offs. The goal of the map is to provide a clear vision of a process, so that participating organizations and individuals gain an understanding of their specific role in the overall system or community. The process map should identify bottlenecks and delays, rework, and unnecessary steps within the process. The map should represent the process flow from the beneficiary’s point of view, showing whether each step of the process helps create a clear value for the individual or patient.

- Link to Utilization Reduction Data Tracking Template: IN
  This brief one-page utilization data tracking template includes information necessary to track utilization including LOS, number of hospitalizations, average cost/DRG and number of patient days.

- Readmission Chart Review tool: NJ
  This two-page readmission chart review tool is detailed and includes all topics related to readmission and care transitions.

- Hospital Readmission Review Tool: PA
  This readmission review tool is a checklist of detailed topics related to readmission and care transitions.

- Chart Review Audit Tool (Home Health, Hospital): PA  2 separate files
  Home Health:
  This chart review audit tool is specific to home health hospital readmissions.
  Hospital:
  This is a brief one-page hospital readmission review tool including topics related to care transitions.

- Abstraction Template (General, Skilled Nursing Facilities, Home Health Agencies): WA 3 separate files
  General:
  This is a four-page very detailed care transitions abstraction template tool.
  Skilled Nursing Facilities:
  This is a simple but detailed four-page care transitions abstraction template tool for SNF. The majority of the topics are in a yes/no format.
  Home Health Agency:
  This is a four-page very detailed care transitions abstraction template tool formatted for the home health setting.

- Readmission worksheet: GA (new document to link)
  This 3-page readmission worksheet may be used to assist in identifying gaps in care and aid in care transition quality improvement directives.
Process Assessment

Assessing a process in its current state can be helpful to develop benchmarks and determine where improvement can occur. Assessments might include direct observation of processes such as discharge and admission, interviews with process owners, and mapping of processes. A variety of methods are outlined below.

Process Mapping

Process mapping helps to clarify specific roles and contributions of the process participants and identify opportunities for improvement. A clear view of the entire system provides a framework for multiple improvement approaches and allows process reengineering on defined, community or beneficiary-oriented basis.

Cause-and-Effect Diagram

A Cause-and-Effect Diagram is a tool that can help to identify, sort, and display potential causes of a specific problem or quality characteristic. It visually illustrates the relationship between a given outcome and all the factors that may influence that outcome. This type of diagram is sometimes called an “Ishikawa diagram” or a “fishbone diagram”. This tool is useful for identifying and organizing the known or possible causes of quality, or the lack thereof. The structure provided by the diagram helps team members to think and brainstorm in a very systematic way. Some of the benefits of constructing a Cause-and-Effect Diagram are that it encourages group participation, utilizes group knowledge of the process, uses an orderly format to diagram cause-and-effect relationships, indicates possible causes of variation in a process, increases knowledge of the process, and identifies areas where data or more information should be collected for further review.
Fault Tree Analysis

A Fault Tree Analysis graphically represents the interaction of failures and other events within a system or process. Basic events at the bottom of the fault tree are linked to one or more TOP events. These TOP events represent identified hazards or system failure modes for which predicted reliability or availability data are required. Fault trees are often used when the effect of a failure is known to find out how this might be caused by a combination of other failures within a large or complex system. When a solution has been previously identified, this analysis can be helpful to understand potential failures and determine more sustainable and effective solutions. It also helps to identify risks in a system and proactively develop risk reduction strategies and measures.
Value Stream Mapping

Value stream mapping is a lean manufacturing technique used to analyze the flow of materials and information currently required to bring a product or service to a consumer. Lean principles are built on a five-step thought process for guiding the implementation of effective techniques.

1. Specify value from the standpoint of the end customer by product family.
2. Identify all the steps in the value stream for each product family, eliminating whenever possible those steps that do not create value.
3. Make the value-creating steps occur in tight sequence so the product will flow smoothly toward the customer.
4. As flow is introduced, let customers pull value from the next upstream activity.
5. As value is specified, value streams are identified, wasted steps are removed, and flow and pull are introduced, begin the process again and continue it until a state of perfection is reached in which perfect value is created with no waste.

For the care transitions effort, Lean efforts and value stream mapping can be used to understand more about the process by which a patient is discharged from the hospital to another care setting and then re-admitted. The goal is to depict flow of information throughout all value-adding processes required to provide a service to the individual. Value stream maps document each step of the process to understand both value-adding and non-value-adding (waste) processes and steps. A current state map is initially produced, which becomes the baseline for improvement. Then, a future state map is produced, documenting a more stream-

---

8 Lean Enterprise Institute. Principles of Lean. [http://www.lean.org/WhatsLean/Principles.cfm](http://www.lean.org/WhatsLean/Principles.cfm)
lined and valuable approach to the process with a focus on eliminating waste and increasing efficiencies.

5-Whys

The ‘5 Whys’ is a technique used in the Analyze phase of the Six Sigma methodology. This Six Sigma method does not involve a statistical hypothesis and in many cases can be completed without a data collection plan. This technique can help to identify the root cause of a problem, determine the relationship between different root causes of a problem, and is simple and easy to complete without statistical analysis.

To complete the ‘5 Whys’, start with writing down the specific problem. Then, ask why the problem happens and record the answer. If the answer provided does not directly identify the root cause of your initial problem, ask ‘Why’ again, and record the answer. Continue this process until the team agrees the problem’s root cause has been identified. This process is often complete within five cycles, but can take more or less, depending on the problem.

Example:

Q: Why are so many Medicare beneficiaries with heart failure being readmitted to the hospital?
A: Because they do not understand or remember the red flags related to their condition after discharge.
Q: Why do they not understand the red flags?
A: They do not have the correct documentation or reminder systems in place.

Q: Why do they not have the proper documentation or reminders?
A: Because they did not receive a Personal Health Record or Red Flag magnet with documentation of these red flags upon discharge.

Q. Why did they not receive the PHR or magnet?
A. Distribution of these materials is not part of the current discharge process.

By asking a sequence of ‘Whys’, one can deduce the root cause of a heart failure patient being readmitted to not having a process in place at discharge to educate them on red flags for their specific condition.

**Individual and Group Interviews**

Individual interviews can help to identify patterns, trends, and opportunities for improvement from the staff member and beneficiary perspectives. Group discussion and interviews often allow for reflection and brainstorming of challenges and opportunities. This open-ended format can produce data and insights that may be less accessible without interaction found in a group setting—listening to others’ verbalized experiences can stimulate memories, ideas, and experiences in participants. These groups can be formulated across settings, or within provider teams, organizations, or specialties. Tremendous insight can be gained from these interviews to identify drivers of rehospitalizations in your own community.

- Link to Discharge Follow-Up tracking tool (Excel): RI
  This safe transitions hospital discharge tracking tool includes follow-up phone call questions which generates summary data.

- Link to Follow-Up Phone call tracking tool (Excel): MI
  This follow-up phone call tracking tool includes follow-up phone call questions and summary data that generates bar graphs to display monthly trends.

- Link to Follow-Up Phone Call Data Collection Tool (Excel): GA
  This follow-up phone call tracking tool allows data collection regarding red flags, understanding of medications, follow-up appointments, etc. and generates monthly trend graphs.

**Focus Groups**

Focus groups can be another qualitative research method for gaining insight related to reducing readmissions within the community. This structured format allows for individuals to discuss their perceptions, opinions, beliefs and attitudes. Prior to convening a focus group, consider your goals and objectives. Develop a list of questions to help drive the session and be sure to have a skilled facilitator to moderate the discussion and topic areas to be addressed. Focus groups typically run 1 – 2 hours with 6 – 10 participants. Be sure that all members

“They most effective way to manage change successfully is to create it.”

- Peter F. Drucker

Page 40
are comfortable speaking freely within the group; often this can be achieved by convening like participants. To gain a higher level view, consider convening multiple focus groups of varying individuals (i.e., physicians across settings, home health nurses in the community, readmitted beneficiaries, etc.).

- Office Manager Focus Group Summary: NJ
  This is an example of a brief one-page office manager focus group summary.

- Office Manager Focus Group Report: NJ
  This is an example of a 30-page very detailed office manager focus group report that was moderated by an outside source and professionally documented.

**RCA Results from 9th SOW Communities**

Review of medical records and root causes analyses revealed remarkably consistent results. In general, patients experienced readmissions because of unmanaged worsening of their conditions, the use of suboptimal medication regimens, and returning to emergency departments instead of accessing a different type of medical service. The root causes of these problems could be attributed to 3 basic system gaps or drivers of readmission:

1. Lack of engagement or activation of patients and families into effective post-acute self management,
2. Lack of standard and known processes among providers for transferring patients and medical responsibility, and
3. Ineffective or unreliable sharing of relevant clinical information.

Many of the evidence-based interventions to improve transitional care are directed at one or more of these gaps, but require cooperative activity by more than one provider. All projects have therefore needed to incorporate efforts directed at building cross-setting or multi-provider relationships to deploy, measure, and revise implementation strategies. Most sites have extended from relationship building into general community-building as necessary groundwork to enable improvement.
The 9th SOW contract required that projects use evidence-based intervention models. The Integrating Care for Populations and Communities Aim NCC produced a summary of these models and the level of evidence for each\(^9\). The Care Transitions Intervention (CTI\(^{SM}\)) is a coaching intervention triggered by hospitalization that reduces hospital readmissions through developing patient and family self-management capability. All participating QIOs were offered CTI training for staff and for appropriate providers in their communities through the theme support contract. QIOs were expected to measure intervention results continuously and to adapt or abandon interventions that did not produce promising results.

In the 9th SOW, each QIO community implemented interventions to address all three drivers of readmissions as well as formal programs and homegrown (locally developed) programs which address multiple drivers. Table 1 below shows the implemented interventions by community. This list includes all interventions that were implemented at any time throughout the duration of this project. Not all interventions are currently underway.

There are a number of well described and evidence-based interventions that can reduce unwanted readmissions\(^{10}\). Recent studies by Coleman\(^{11}\) and Naylor\(^{12}\) suggest that interventions


\(^{10}\) Improving care transitions and reducing hospital readmissions: Establishing the evidence for community-based implementation strategies through the care transitions theme, http://www.cfmc.org/caretransitions/files/Care_Transition_Article_Remington_Report_Jan_2010.pdf

\(^{11}\) Coleman E, Parry C, Chambers S, Min S: The Care Transitions Intervention Arch Intern Med. 2006; 1822-1828

targeting comprehensive transitional care from the hospital to the community can reduce readmission rates by approximately one third. Quality improvement work with selected home health agencies has reduced re-hospitalizations. The Veterans Health Administration has reduced re-hospitalization significantly through use of a care coordination program utilizing the conceptual framework of programming and feedback\textsuperscript{13}. Improved health care processes at and after discharge correlate with reductions in early re-hospitalization\textsuperscript{14} (add refs for BOOST and RED). Many of these interventions are best deployed through protocols that depend on the coordinated actions of more than one provider, and on effective incorporation of patients, families and community health support agencies.

The following table (Table 1) summarizes implemented interventions by driver of rehospitalizations. These were the widely used interventions and the readmission drivers they are intended to remediate for the 9\textsuperscript{th} SOW communities.

---


Table 1. 9th SOW Care Transitions Theme Implemented Interventions by Driver of Rehospitalization

<table>
<thead>
<tr>
<th>9th SOW CARE TRANSITIONS THEME IMPLEMENTED INTERVENTIONS BY DRIVER OF REHOSPITALIZATION</th>
<th>DRIVERS TARGETED</th>
<th># QIOs IMPLEMENTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color key: PRIMARY DRIVER TARGETED</td>
<td>Patient activation</td>
<td>Standard, known process</td>
</tr>
<tr>
<td>BLUE: Patient activation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GREEN: Standard, known process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAY: Transfer of information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BROWN: Multiple drivers (formal program)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAN: Multiple drivers (standalone/homegrown)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MULTIPLE DRIVERS (FORMAL PROGRAMS)**

| BOOST ("Better Outcomes for Older adults through Safe Transitions") toolkit | ✔ | ✔ | ✔ | 1 |
| BPIP (Best Practices Intervention Package - Transitional Care Coordination) toolkit | ✔ | ✔ | ✔ | 11 |
| CTI (Care Transitions Intervention) | ✔ | | | 13 |
| INTERACT ("Interventions to Reduce Acute Care Transfers" of nursing home residents) | ✔ | ✔ | ✔ | 11 |
| POLST ("Physician Orders for Life-sustaining Treatment") or analogue (MOLST, POST, MOST) | | | ✔ | 3 |
| RED ("Re-engineered Discharge") | | | ✔ | 5 |
| TCAB ("Transforming Care at the Bedside") and "Creating an Ideal Transition Home" | ✔ | ✔ | ✔ | 8 |
| TCM ("Transitional Care Model") | | | ✔ | 2 |

**MULTIPLE DRIVERS (STANDALONE/HOMEGROWN)**

| Advance care planning | ✔ | ✔ | ✔ | 3 |
| Bilingual, multi-lingual materials | ✔ | ✔ | ✔ | 7 |
| Case management (Care Transitions-specific) | | | ✔ | 7 |
| CHF intervention bundle | ✔ | ✔ | | 1 |
| Disease-specific interventions | ✔ | ✔ | | 13 |
| Medication reconciliation | ✔ | | ✔ | 11 |
| Plan of care, collaboration with patient/family | ✔ | | ✔ | 4 |
| Setting-specific interventions | ✔ | | ✔ | 9 |

**DRIVER: LOW PATIENT ACTIVATION**

| "Ask Me 3" tool | | | | 7 |
| Coaching (non-CTI) | | | | 8 |
| Community Living Program | | | | 2 |
| Discharge planning checklist (CMS "Planning Your Discharge" or other) | | | | 13 |
| Education, patient/family | | | | 10 |
| "Keeping Patients at Home" | | | | 2 |
| PAM ("Patient Activation Measure") tool | | | | 4 |
| Patient Emergency Care Plan (not BPIP-specific) | | | | 4 |
| Personal health record (not CTI-specific) | | | | 8 |
| Pill box, medication manager (e.g., "7-day MediPlanner") | | | | 3 |
To guide intervention planning, CMS and the Care Transitions Theme Support Center developed a Proportion of Transitions Table (PTT) to supply each QIO with the expected contribution of each provider to total transition activity occurring within the targeted population. The PTT resulted from analysis of all FFS Medicare claims for residents residing in the zip-code identified community for the calendar year 2007, to attribute transitions occurring to specific providers.

### The Proportion of Transitions Table

<table>
<thead>
<tr>
<th>Red flags</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Speak-up” (JCAHO)</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>4</td>
</tr>
<tr>
<td>Teach-back</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>9</td>
</tr>
</tbody>
</table>

#### DRIVER: LACK OF STANDARD, KNOWN PROCESS

| Alert system | ✓ | ✓ | ✗ | 3 |
| Assessment tools | ✓ | ✓ | ✗ | 9 |
| ACMs (Appropriate Care Measures) | ✓ | ✓ | ✗ | 3 |
| Audit, review or tracking | ✓ | ✓ | ✓ | 10 |
| Communication re-design (internal) | ✓ | ✓ | ✓ | 9 |
| Cross-setting standardization | ✓ | ✓ | ✓ | 7 |
| Document standardization | ✓ | ✓ | ✓ | 8 |
| Education, provider | ✓ | ✓ | ✓ | 8 |
| Equipment and technology | ✓ | ✓ | ✓ | 4 |
| Follow-up appointment (primary care) made at discharge | ✓ | ✓ | ✓ | 9 |
| Patient mapping | ✓ | ✓ | ✓ | 4 |
| Pharmacy, inpatient (medications filled @ discharge) | ✓ | ✓ | ✓ | 3 |
| Pressure ulcer intervention program | ✓ | ✓ | ✓ | 3 |
| Protocols and Pathways | ✓ | ✓ | ✓ | 7 |
| Referrals, enhanced | ✓ | ✓ | ✓ | 6 |
| Reports to providers (data, feedback) | ✓ | ✓ | ✓ | 6 |
| Risk assessment, readmission | ✓ | ✓ | ✓ | 8 |
| Staffing re-design | ✓ | ✓ | ✓ | 4 |
| Telehealth, telemedicine | ✓ | ✓ | ✓ | 7 |
| Telephone follow-up | ✓ | ✓ | ✓ | 9 |
| Zone tools | ✓ | ✓ | ✓ | 5 |

#### DRIVER: INADEQUATE TRANSFER OF INFORMATION

| Care coordination (general, non-specific) | ✓ | ✓ | ✓ | 4 |
| Communication re-design (external; cross-setting) | ✓ | ✓ | ✓ | 8 |
| Discharge process, notification | ✓ | ✓ | ✓ | 8 |
| HIT (health information technology), data sharing and transfer | ✓ | ✓ | ✓ | 4 |
| Provider support (cross-setting) | ✓ | ✓ | ✓ | 5 |
| Beneficiary and community outreach | ✓ | ✓ | ✓ | 4 |
| SBAR (“Situation-Background-Assessment-Recommendation”) | ✓ | ✓ | ✓ | 8 |
ring within 30 days of hospital discharge to individually identified providers. The PTT will be updated annually throughout this project when the 2008 and 2009 data are available.

Only those transitions beginning with a hospital discharge are included in the PTT. Each transition is assumed to have 2 participants, a sending provider and a receiving provider. Every hospital discharge is attributed to that hospital as a sender, and each hospital readmission is attributed to that hospital as the receiver. Providers are designated as ‘targeted’ if they were identified by the QIO as a target of recruitment for the project. Any provider not designated as ‘targeted’ is included in the PTT as ‘non-targeted.’ Additionally, providers are categorized as being “In-Area” or “Out-of-Area”. In-area providers are either targeted by the QIO and/or are providers who are physically located within the community zip codes. Out-of-Area providers are not targeted by the QIO and they are located outside of the community zip codes.

Providers are further categorized as ‘inpatient’ or ‘outpatient.’ Numbers of transitions, either as a sender or receiver, are tallied per targeted institution or are attributed to that institution as a simple proportion of all transitions counted for the targeted population. Each transfer of a patient to home is counted in its’ own category labeled “home” and every readmission of a patient from home is attributed to “home” as the sender. The resulting table therefore has a cell for each targeted inpatient and outpatient providers, for home, and then the remaining providers are grouped into the following categories: Inpatient Out-of-Area (or non-targeted inpatient providers); Outpatient In-Area (for those non-targeted outpatient providers); Outpatient Out-of-Area (for those non-targeted outpatient providers not within the community zip codes); HHA/Hospice Not in Community (HHA and Hospice are reported separately from other settings). Each of these providers and categories are listed along the row as senders, and the same along the column as receivers. Numbers in each cell in the body of the table indicates how often each pairing occurs during a year of transitions for the population (see Sample PTT/Transitions Grid).

- Link to Transitions_Q3_example (on hold)

The benefit of identifying a population that can be largely mapped to a finite set of providers is most evident from the PTT. If there are a large number of providers involved in delivering medical services to the population, QIOs either must rely on a few targeted providers to make large enough reductions in readmissions to affect the population readmission rate, or have adequate staff devoted to the project to reasonably affect processes and practices at a large number of institutional and non-institutional settings, including home health agencies and physician offices. Communities in which the medical service patterns extend well beyond the group of providers targeted by the project will have larger proportions of transitions attributed to ‘non-targeted’ providers.

---

15 ‘Inpatient’ Provider examples: Short-term (General and Specialty) Hospitals, Federally Qualified Health Centers, Alcohol/Drug Hospitals, Medical Assistance Facilities, Critical Access Hospitals, Long-Term Hospitals, Hospital Based Renal Dialysis Facilities, Rehabilitation Hospitals, Children’s Hospitals, Psychiatric Hospitals, Skilled Nursing Facilities

‘Outpatient’ Provider examples include: Hospices, Independent Renal Dialysis Facilities, Home Health Agencies, Comprehensive Outpatient Rehabilitation Facilities, Rural Health Clinics, Community Mental Health Centers, Outpatient Physical Therapy Services
QIO-DEVELOPED TOOLS

The following tools and resources were developed by QIOs participating in the Care Transitions theme in the 9th SOW. These reference materials may be of assistance when developing your community strategy and resources. For additional information, please contact the Integrating Care for Populations and Communities Aim NCC or the individual QIO as the developer of the resource (link to the Contact Us page).

Interventions & Resources

Coaching:

- Professional Links
  - Care Transitions Intervention (http://www.caretransitions.org/)
  - Transitional Care Model (http://www.transitionalcare.info/index.html)

- Overviews
  - Coaching overview for general audience: NE
    This is a one-page example of a brief overview of the Care Transitions Intervention for general audiences.
  - Coaching overview for beneficiaries: PA
    This is a one-page example of a brief overview of the Care Transitions Coach Program for beneficiaries.
  - Coach Referral Card: WA
    This is an example of a coach referral card for beneficiaries.
  - Poster, 10 Facts about Coaching for Physicians: PA
    This is an example of a poster with a brief overview of the CTI Coach Program focused toward physician education.

- Tracking Forms/Tools
  - Coaching tracking database (Access file): RI
    This is an example of an Access database to track coach interventions and provide summary data.
  - CTI coach tracking form: RI
    This three-page document is a very detailed CTI coach tracking and documentation form that tracks the patient from the hospital visit to the home visit and includes all 3 follow-up calls.
  - CTI coaching encounter form: CO
    This is a brief one-page example of a CTI coach encounter form that may be used for each visit and phone call.

- Participation agreements
  - CTI QIO & Organization Participation Agreement: Coleman
This is a three-page CTI QIO/organization agreement developed by Dr. Eric Coleman for the CTI Intervention.

- Consent form for participation: GA
  This is a brief one-page example of a patient consent form for the CTI Coach Program.

- Miscellaneous
  - Coaching talking points: PA
    This two-page coach talking points document was designed to assist the transition coach in framing questions and queuing reminders on CTI coaching techniques.
  - Coaching script: PA
    This coaching script was designed to assist the CTI coach on the hospital visit or in the event the patient initially refused the coach intervention.
  - Business Case for Coaching (PPT): RI
    Here is a short PPT that clearly demonstrates the value of the business case for hospitals to participate in improving care transitions through the CTI coach model.
  - Transitions coach workflow: CO
    This is a one-page workflow document that demonstrates the transition coach process.
  - Readiness Assessment Tool: TX
    This is a brief one-page description of the CTI Readiness Assessment Tool designed to assist teams better understand what is involved in implementing the model and to help the QIO assist in improving system organizational efforts.

Personal Health Records:

- Care Transitions Intervention℠ PHR (link to www.caretransitions.org/documents/phr.pdf)
  This is the original personal health record designed by Dr. Eric Coleman that provides the framework for the 4 pillars of the CTI Intervention.

- Top 10 reasons to complete a PHR: PA
  This is a one-page document to illustrate the reasons for completing a PHR.

- PHR (English & Spanish versions): NY (2 separate files)
  English: This is an example of a custom designed PHR that includes the entire framework of the CTI Intervention.
  Spanish: This is the same custom designed PHR in Spanish.

- PHR (English & Spanish): TX (1 file)
  Here is another customized version of the PHR in English and Spanish. The medication record insert can be found in the next section.
Patient Activation/ Self Management:

• Professional Tools:
  o My Medication List - NTOCC (link to http://www.ntocc.org/Portals/0/My_Medicine_List.pdf)
    This is a medication list developed by NTOCC and also available in Spanish and French.
    • Also available in Spanish (http://www.ntocc.org/Portals/0/My_Medicine_List_Spanish.pdf)
    • Also available in French (http://www.ntocc.org/Portals/0/My_Medicine_List_French.pdf)
  o Taking Care of MY Health Care guide (link to http://www.ntocc.org/Portals/0/Taking_Care_Of_My_Health_Care.pdf)
    This is a two-page health care guide developed by NTOCC and also available in Spanish and French.
    • Also available in Spanish (http://www.ntocc.org/Portals/0/Taking_Care_Of_My_Health_Care_Spanish.pdf) and French (http://www.ntocc.org/Portals/0/Taking_Care_Of_My_Health_Care_French.pdf)

• Care Transitions InterventionSM Patient Activation Assessment (link to www.caretransitions.org/documents/Activation_Assessment.pdf)
  This is the CTI Patient Activation Assessment developed by Dr. Eric Coleman.

• 7 Steps to Managing Your Health Resource Guide: NJ
  This resource guide contains 7 elements to manage your health including steps to prepare for physician visits, medication management, red flags, food pyramid and guide, exercise, PHR and fall prevention tips.

• Medication record & insert (English/Spanish): TX (2 separate files)
  Medication record: This two-page medication record is completed in English /Spanish.
  Insert: This one-page medication insert record was designed so that patients can add to their medication record as needed. This insert is also completed in English/Spanish.

• Teach-Back laminated cards: TX
  This resource includes teach-back information providing quick reference guides on multiple drugs, disease processes and national quality indicators.

• SNF Discharge poster: TX
  This SNF discharge poster was designed as a reminder for staff to review necessary elements of a safe transition to home prior to discharge.

• 10 Reasons to schedule a follow-up visit with physicians: PA
  This one-page educational tool was designed to provide the patient with the top “10” reasons for physician follow-up post hospitalization.

• Quick Tips When Talking with your Doctor: FL
This two-page (one page in English—one page in Spanish) educational tool was designed to assist the patient to take a more active and engaged role when interacting with their physician.

**Discharge/Transfer:**

- **Professional Links:**
    This is a six-page discharge planning checklist with instructions developed by CMS.
    This three-page universal transfer form was developed by the American Medical Directors Association to facilitate the transfer of necessary patient information from one care setting to another.

- **QIO-developed tools**
  - Continuum of Care Transfer Form: GA
    This one-page transfer form was designed to provide pertinent patient information for discharge from the nursing home to another care setting across the continuum.
  - Discharge Risk Assessment Tool: LA
    This one-page discharge risk assessment tool was designed to assist discharge planners in determining the next level of care option for the patient upon discharge from the hospital.
  - Discharge Follow-up Monthly Tracking (Excel file): RI
    This safe transitions hospital discharge tracking tool includes follow-up phone calls that are entered into the tool resulting in summary data.
  - Options for Next Level of Care: WA
    This next level of care tool was designed to assist with determining options for the next level of care that is patient appropriate.
  - Post Acute Care Tool: CO
    This post acute care tool was designed by the NW Denver care transitions community to provide education to the patient and family on PAC settings and resources that are available in the community.
  - Hospital Discharge Planning Golden Rules for beneficiary: NY
    This one-page educational tool was designed for the patient and family to ask pertinent questions while hospitalized and during the discharge planning process.
  - Unplanned Transfer Data Collection Tool (Excel file): RI
This transfer data collection tool was designed to assist nursing homes in preparing a root cause analysis of unplanned transfers by collecting and documenting detailed information regarding the patient’s condition prior to transfer.

- **Discharge Preparation checklist (English/Spanish): FL**
  This discharge preparation checklist was developed by Dr. Eric Coleman for the CTI Intervention. This one-page document is also available in Spanish.

- **Readmissions and Transfer Tracking Tool for SNFs (Excel file): NE**
  This readmission and transfer tracking tool is a monthly compilation of details regarding patient information pertaining to transfer and readmissions.

- **MATCH Medication Discrepancy comparison tool (Excel): NE**
  This MATCH medication discrepancy comparison tool compares the patient’s medication list from home, to the discharging facility and to the admitting facility for reconciliation purposes.

- **RX Alert Poster: Aid for Pain Free Management: GA**
  This poster notifies physicians of the DEA mandate about prescriptions of schedule II-V controlled substance medications at discharge.

- **Nurse-to-Nurse communication across from NH to Hospital: GA**
  This one-page form assists with nurse-to-nurse communication via phone when a patient transfers from a nursing home to a hospital.

**Disease-specific tools:**

- **Heart Failure passport resources: MI** ([Link to MI site - http://www.mpro.org/HFPassport.htm](http://www.mpro.org/HFPassport.htm))
  This link provides multiple educational resources for patients and providers pertaining to heart failure.

- **Heart Failure SBAR Form: GA**
  This 2-page form provides information for nurses to discuss changes in a patient’s condition using the Situation, Background, Assessment, and Recommendation format.

- **Dialysis Communication form: PA**
  This one-page dialysis communication form was designed to provide critical patient information as they transition from the nursing home to dialysis and back.

- **COPD red flag magnet: NJ**
  This COPD red flag magnet was designed as an educational tool for COPD patients.

- **HF red flag magnet: NJ**
  This HF red flag magnet was designed as an educational tool for HF patients.

**Setting Specific Palliative Care/ Hospice:**

- **10 Facts Physicians Need to Know about POLST: PA**
This ten facts for physicians POLST tool was designed to educate physicians regarding POLST (Physician Orders for Life-Sustaining Treatment).

• 10 Reasons to consider a Hospice Consultation: PA
  This ten reason hospice consultation tool was designed to educate physicians concerning specific conditions that could qualify patients for hospice services.

• Hospice interview to reduce readmissions: NJ
  This four-page hospice interview format was designed to assist the QIO in determining the dynamics of the hospice agency and how they could support the hospice in designing processes to reduce preventable hospital admissions.

• Hospice Change package: NJ
  This three-page hospice change package was developed for hospice agencies to improve their processes to reduce acute care hospitalization, improve the quality of care and to improve communication when transitions occur.

**Physician Office**

• Physician Practice Communication Needs Assessment: NY
  This is a one-page concise physician practice needs assessment tool to assist the QIO in determining areas for communications process improvement between the physician practice and other healthcare providers.

• Physician Practice Assessment form: NJ
  This one-page physician practice interview format was designed to assist the QIO to determine the dynamics of the physician practice and how they could support the practice in designing processes to improve communication between providers and reduce hospital readmissions.

• Physician Practice Change package: NJ
  This two-page physician practice change package was designed to assist the practice improve office systems, increase patient education, establish linkages with other providers and track and analyze hospital readmissions.

• Post-It note template: NJ
  This post-it note template was designed to inform patients and family that the physician practice is working to prevent unnecessary hospitalizations.

• Notepad template with reminders: NJ
  This notepad template was designed to provide reminders for the physician practice regarding safe care transitions.

**Home Health:**

• HH Interview to reduce readmissions: NJ
  This five-page home health agency interview format was designed to assist the QIO in determining the dynamics of the home health agency and how they could support the agency in designing processes to reduce preventable hospital admissions.
• HH Change package: NJ
This three-page hospice change package was developed for home health agencies to improve their processes to reduce acute care hospitalization, improve the quality of care and to improve communication when transitions occur.

• HH Quality Improvement campaign Best Practice Intervention Packages (BPIP)
(Please note these downloads require a free log-in)
  o Cross-Setting I (Released October 2010) link to http://www.homehealthquality.org/hh/resources/education/default.aspx
    This BPIP focuses on improving care across provider settings and more efficiently managing patients across all provider settings.
  o Cross-Setting II (Released January 2011) link to http://www.homehealthquality.org/hh/resources/education/default.aspx
    This BPIP includes information on improving care transitions for chronic care patients through disease management, self-care management and telehealth.
  o Cross-Setting III (Released April 2011) link to http://www.homehealthquality.org/hh/resources/education/default.aspx
    This BPIP includes innovative ideas to help prepare for healthcare changes.

**Skilled Nursing Facility (SNF):**

• NH Interview to reduce readmissions: NJ
This five-page nursing home interview format was designed to assist the QIO in determining the dynamics of the nursing home and how they could support the facility in designing processes to reduce preventable hospital admissions.

• SNF/Rehab Hospital Change package: NJ
This four-page skilled nursing facility/rehab hospital change package was developed for SNF/Rehab Hospitals to improve their processes to reduce acute care hospitalization, improve the quality of care and to improve communication when transitions occur.

• Discharge poster: TX
This SNF discharge poster was designed as a reminder for staff to review necessary elements of a safe transition to home prior to discharge.

• Monthly readmissions reporting form for SNFs: TX
This monthly readmissions reporting form was designed for skilled nursing facilities to document hospital readmissions and interventions implemented with a status report update.

**Miscellaneous:**

• Care Transitions Project Fact Sheet: NJ
This is a one-page document citing the facts of the care transitions project.

• Care Transitions Project Overview: NJ
This is a one-page document citing the care transitions project overview.
• 30-day readmission patient interview script: NJ
  This is a two-page readmission patient interview telephone script that also includes Q & As that patients may ask during the interview.

• Caregiver Facts – English & Spanish: NY
  This is a one-page document that provides the patient's caregiver with pertinent information and questions to ask prior to discharge. This caregiver fact sheet is also available in Spanish.
Measuring the effect of a care transitions project is an important challenge. It requires an understanding of the relevant outcomes and the processes leading to them, detecting meaningful changes in those outcomes, as well as accurately attributing improvements to your work. The usefulness of your evaluation to inform program decisions will depend on what was measured and how well it was measured.

**What to measure: process, outcome, and utilization**

**Background**

In the 9th Scope of Work Care Transitions theme, QIO performance was evaluated on measures of community-level, claims-based rates of readmission and primary care follow-up, which were provided by the QIO Support Center and the CMS data analytic contractor, as well as publicly-reported results on inpatient satisfaction. In addition, a QIO-tracked implementation measure was evaluated to ensure that improvement derived from claims data could be attributed to specific project efforts.

Care transitions teams were responsible for measuring and reporting, on a quarterly basis, the extent to which successful interventions were implemented in their respective communities. Depicting the dosage and ‘reach’ of the teams’ efforts, this implementation measure was expressed as the percentage of all transitions in the target community that were affected by effective interventions (i.e., those that had demonstrated improvement).

\[
\left( \frac{N_{\text{transitions affected}}}{N_{\text{total transitions}}} \right) \times 100
\]

Transitions affected by ineffective interventions (i.e., those failing to demonstrate improvement) did not detract from the numerator of the implementation measure. The benchmark for success was 10 percent implementation. Calculation required a two-step process:
1. Demonstrate that the chosen interventions were effective (outcome).

2. Accurately account for the number of transitions affected by each effective intervention (process), the sum of which is the numerator.

As an additional indicator of value, the care transitions teams also tracked health care utilization measures related to each intervention.

**Measuring outcomes**

In the course of designing an intervention plan, care transitions teams should perform root cause analyses to establish causal models and identify specific drivers of poor care transitions. Inherent in the plan is the expectation that specific intermediary proximal outcomes in the causal path will improve, in turn leading to better transitions and a reduction in readmissions. To demonstrate that an intervention is effective, the care transitions team should define and measure at least one indicator of a proximal outcome. This will enable the team to validate the causal model and ensure that evidence-based interventions produce improvements as deployed in the ‘real world’ of the project.

Features of an ideal proximal outcome:

- Plausible (is a logical step in the causal model)
- Measureable (has an indicator that is operationalized and clearly measured)
- Practical (has available or readily collectable indicator data)
- Moveable (is likely to demonstrate change)
- Compelling (depicts clinically meaningful change and tells a good story)

Select a proximal outcome that is plausibly affected by the intervention. For evidence-based interventions, the primary outcome reported in published results serves this role well. In absence of well-reported studies, examine the causal path: steps that are closer (i.e., more proximal) to the intervention are, by definition, more directly related to it. In the causal model for readmissions depicted in Figure 1 (below), Outcome A should be measured because it is most proximal to the intervention. However, if Outcome A is unsuitable as a proximal outcome (e.g., due to prohibitive data collection), then the team should consider measuring Outcome B instead, and so on.

![Diagram of causal model for readmission](image)

**Figure 1. Unspecified causal model for readmission**

Valid data are essential to outcomes measurement. Have a clear definition of the proximal outcome and what you intend to measure as its indicator. This will help identify barriers to accessing existing data or collecting new data. You should expect observable variation in the
indicator, which should be of sufficient magnitude to demonstrate clinically meaningful change over the intervention’s implementation period. Finally, the observed changes should be reasonably attributable to the intervention, creating a compelling argument for the intervention’s effectiveness. Again, it is important to have mapped out a causal model that is explicit and, to the greatest extent possible, evidence-based.

Figure 2 (below), based on a transitions coaching intervention, further illustrates the relationships among an intervention, its proximal outcome and the causal path to reduced readmissions. The primary aim of most transitions coaching interventions is to improve low patient activation. The expected change in patient activation is considered to occur prior to any subsequent changes in health self-management or symptom control. Thus, the effect on patient activation of a given transitions coaching intervention can be measured at the patient level, using a validated patient activation scale administered before and after coaching. Improvements in patient activation – as indicated by higher post-intervention scores – would be expected to result in better health self-management, leading to a reduced likelihood of worsened symptoms and readmission.

**Figure 2. Causal model: coaching intervention to improve patient activation**

**Measuring process**
Process measures depict an intervention’s reach in the target community. They can be used to track absolute numbers of patients offered, accepting and completing an intervention, as well as administrative details related to the engagement/training of providers other project efforts. Process measures that depict the number of transitions affected by an effective intervention (e.g., patients coached) contribute to the numerator of the implementation measure. However, accurate counting of transitions can present its own challenges. In absence of individual transition-specific patient data, as is often the case with system-wide process improvements, the number of affected transitions must be estimated (see “Process measurement: the implementation measure,” below).

**Measuring utilization**
Outcomes of health care utilization (e.g., 30-day readmission rate) add particular value to the care transitions initiative because of their direct relevance to cost-benefit analyses. Utilization measures are most often calculated from administrative claims data. However, they may be collected and reported by the providers themselves, which may offer advantages in timeliness and accuracy. Occasionally, the selected intervention aims explicitly to improve a utilization outcome (e.g., case manager deployment to ED to prevent unnecessary admissions), in which case, the proximal and utilization outcomes are one in the same.
How to measure: strategies for data collection and presentation

Having selected outcomes and their respective indicators, the next step is to design a method for measuring and demonstrating improvement. It is important here to note that evaluating the program will require a balance between scientific rigor and feasibility. Valid data and strong analytic methods are essential in supporting the project’s conclusions, but too heavy a focus on these will be to the detriment of the project’s goals, timeline and feasibility. Remember, while you may be competent in the fundamentals of clinical and social science, your job here isn’t to conduct research; review the suggestions below with the constraints of the real world in mind.

Proximal outcomes measurement

Change over time: You can depict longitudinal change by plotting outcome over several time-points (e.g., weekly, monthly, quarterly). However, the visual portrayal of rises and falls in the data, in and of itself, may be insufficient for arguing that improvement has occurred; so try to utilize a strong analytical method to demonstrate improvement. Evidence-based interventions should have a reported effect size, or at least some indication of what kind of change can be expected. Examine what has already been reported to help you to estimate clinically meaningful change and get ideas for how to effectively present the outcome data. The success of an intervention is confirmed if you can set and meet an improvement benchmark.

With at least 12 longitudinal data points, statistical process control methods (e.g., run charts, control charts) enable an intuitive, and methodologically strong, analysis of the observed variation in the outcome. With fewer data points, tests of trend (e.g., Cochrane-Armitage) may demonstrate statistical significance to support your arguments for clinical significance. Perhaps only aggregate pre- and post-intervention data are feasibly presented; be aware of the various nuances of presenting statistics such as chi-squares and t-tests.

Also, have a good understanding of the implementation timeline (e.g., intervention rollout, gaps, cutoff) and the timing of major events that would affect the intervention population. This will provide a context for observed effects (or lack thereof) and potentially provide an explanation of any peculiarities in variation.

Group comparisons: If you compare outcomes between groups, your evaluation strategy may resemble one of the basic observational study designs:

- **Cohort**: Identify a sample of patients, some who do and some who don’t receive the intervention. Follow the same group of patients, measuring the outcome before and after exposure to the intervention (baseline versus follow-up).

- **Cross-sectional**: Measure the outcome among a sample of patients, some who did and some who did not receive the intervention, at a single point in time.

Remember, you are not trying to do the work of epidemiologists, per se; so take feasibility into consideration when designing the evaluation.
**Sampling:** Often, the amount of potential observations in the entire population is substantial, making valid and efficient sampling essential to the evaluation strategy. Your samples should be representative of the population affected by your work. For group comparisons, take advantage of natural divisions that lend themselves to the creation of intervention and non-intervention groups. Ensure that good pre-intervention data are readily available within the sample. If not, examine the costs and benefits of collecting these baseline measures yourself.

Having samples of sufficient size strengthens the conclusions that are based on the evaluation results. Utilize available references and tools for determining appropriate sample size (e.g., Open Epi: www.openepi.com) to efficiently allocate data collection resources. If the recommended sample size requirements are too great, consider other outcomes that require a more attainable sample size. Failing that, you may have to settle for collecting whatever data are available, understanding that the inference of an intervention’s effectiveness may be weakened.

**Process measurement: the implementation measure**

If the scope of an intervention is sufficiently small and patient-level data are easily collected, then the number of affected transitions can simply be counted. When patient-level data are not feasibly collected, the implementation measure will require accurate estimates of the number of transitions affected. For system-wide process improvements, this may involve applying a rate of implementation to the estimated number of transitions occurring over a given time period (Examples 1 and 2, below).

**Example 1:** Discharge checklists are given to 85% of patients on Hospital Unit X, which discharges 10 patients per week. We can estimate that over a 12-week period, 102 transitions were affected by the discharge checklist intervention on Unit X.

\[(0.85) \times (10 \text{ transitions/week}) \times (12 \text{ weeks}) = 102 \text{ transitions}\]

**Example 2:** All clients of Home Health Agency Y who are hospitalized and discharged are assessed for readmission risk upon their first post-discharge home visit. Among Agency Y’s patients, five are hospitalized each month. It has been established that 90 percent admitted patients from Agency Y are discharged back to home care. Thus, the quarterly number of transitions affected by the readmission risk assessment implanted by Agency Y is 13 (rounding down).

\[(5 \text{ hospitalizations/month}) \times (.90 \text{ transitions/hospitalization}) \times (3 \text{ months/quarter}) = 13.5 \text{ transitions/quarter}\]

For quarterly reporting, the implementation measure is the sum of transitions affected by all effective interventions divided by the transitions among eligible patients in the target community.

\[\left(N_{\text{Intervention}_1} + N_{\text{Intervention}_2} + N_{\text{Intervention}_3} + \ldots + N_{\text{Intervention}_n}\right) = N_{\text{transitions affected}}\]

\[\text{Implementation Measure} = \left(\frac{N_{\text{transitions affected}}}{N_{\text{total transitions}}}\right) \times 100\]
**Utilization measurement**

Regardless of the source of data (claims-based versus provider-tracked), the level of analysis for the utilization outcome should match the scope of the implemented intervention. For example, with a coaching intervention implemented by a given provider, it would be appropriate to track provider-specific 30-day readmissions along with patient activation scores. However, it would be less appropriate to attribute improvement in community-level 30-day readmissions to the intervention, assuming it was not implemented widely throughout the community. A scenario where this would be appropriate is when the provider accounts for a large percentage of the community’s transitions.
Examples

The table below lists examples of the three levels of measurement being used by CT Theme teams for three of the most widely implemented interventions.

Table: Measurement Strategies for Three Interventions in the 9th Scope of Work Care Transitions QIOs

<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Process Measure</th>
<th>Proximal Outcome Measure</th>
<th>Utilization Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Transitions Intervention (CTI)</td>
<td>• Count of patients coached&lt;br&gt;• Count of PHRs distributed&lt;br&gt;• (Count of PHRs distributed) × (hospitalization rate)&lt;br&gt;• Count of patients who&lt;br&gt;  a) Accepted/completed CTI&lt;br&gt;  b) Accepted/did not complete CTI&lt;br&gt;  c) Rejected CTI&lt;br&gt;• Count of patients completing baseline and follow-up PAMs&lt;br&gt; • Count of coaches trained</td>
<td>• Patient activation, as shown by PAM scores (coached vs. non-coached patients)&lt;br&gt;• Percentage of coached patients who scheduled a follow-up physician appointment and/or visited the physician before 14-day telephone follow-up&lt;br&gt; • Patient satisfaction rates regarding discharge instructions and medication management as demonstrated per HCAHPS scores&lt;br&gt; • CTM scores pre- and post-CTI coaching intervention</td>
<td>• Readmission rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt;• Admission rates&lt;br&gt; • Emergency department utilization rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt; • Observation stay rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt; • Rates of physician follow-up visits within 30 days of discharge</td>
</tr>
<tr>
<td>Transitional Care Nursing Model (TCN)</td>
<td>• Count of patients who&lt;br&gt;  a) Were offered TCN services&lt;br&gt;  b) Accepted TCN services&lt;br&gt;  c) Refused TCN services</td>
<td>• HHA - acute care hospitalization QM rate&lt;br&gt; • HHA - emergent care utilization QM rate&lt;br&gt; • HHA - oral Medication management QM rate&lt;br&gt; • HCAHPS on management of medication&lt;br&gt; • HCAHPS on discharge planning</td>
<td>• Readmission rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt; • Admission rates&lt;br&gt; • Emergency department utilization rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt; • Observation stay rates (at 30, 60, 90, and 180 days post-discharge)&lt;br&gt; • Rates of physician follow-up visits within 30 days of discharge</td>
</tr>
<tr>
<td>Interventions to Reduce Acute Care Transfers (INTERACT)</td>
<td>• Number of times a care path is used&lt;br&gt; • Number of times an aide reports a change in patient condition&lt;br&gt; • Number of times nurse notified the physician of change in patient condition as a result of an aide report&lt;br&gt; • Number of times an Unplanned Transfer Form was completed&lt;br&gt; • Number of patients accompanied by Resident Transfer Forms&lt;br&gt; • Percent of providers attending group sessions&lt;br&gt; • (Percent of providers attending group sessions) × (number of transitions overseen by providers)&lt;br&gt; • Number of times that SBAR was used as a communication method within a SNF&lt;br&gt; • Number of patients assessed using the Stop &amp; Watch tool</td>
<td>• Number of times patient was treated in place&lt;br&gt; • Number of times action was taken as a result of review&lt;br&gt; • Count and percentage of patients returning to SNF appropriately&lt;br&gt; • Percentage of times appropriate documents present upon transfer from SNF</td>
<td>• Hospital readmission rate for nursing homes&lt;br&gt; • Percent of re-hospitalizations from SNFs that were avoidable&lt;br&gt; • SNF transfers to acute care as reported by SNF on Log&lt;br&gt; • SNF ED admission rate</td>
</tr>
</tbody>
</table>

Abbreviations: CTM (Care Transition Measure; Coleman); ED (emergency department); HCAHPS (...); HHA (home health agency); PAM (Patient Activation Measure; Insignia Health); PHR (personal health record); QM: (quality measure; per...); SBAR (...); SNF (skilled nursing facility)
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Process Measurement</th>
<th>Proximal Outcome Measurement</th>
<th>Utilization-based Outcome Measurement</th>
<th>Data Collection Strategies (in order of preference where applicable)</th>
<th>Available Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Care Transitions Intervention (CTI; full model fidelity)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Care Transitions Coach (who has undergone training offered by the Care Transitions Program team) introduces the program to the patient while in the hospital and arranges one post-discharge home visit and three follow-up calls over a 30-day period. Coaches use role playing, simulation, and practice to foster skill transfer with regard to the Four Pillars, build confidence, and promote use of specific tools designed to ensure that patients are able to get their needs met during transitions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimal:</strong> Count of patients coached (full vs. partial).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred:</strong> Minimal, plus measures of refusal rate, attrition and community implementation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Example:</strong> # referred for coaching; # accepting coaching; # coached [full (5 episodes) vs. partial (2-4 episodes)]; % eligible patient population coached.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimal:</strong> Pre-post implementation patient activation (measured either by the Patient Activation Assessment or the Patient Activation Measure).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred:</strong> Minimal, plus patient-level measures of change in measures that indicate fidelity to the evidence-based model with respect to the Four Pillars.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Example:</strong> # medication discrepancies identified; % patients with medication discrepancies identified; % patients with improved knowledge of red flags and the phone number to call in response;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimal:</strong> Longitudinal community-wide 30d readmissions (pre-/post-implementation).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred:</strong> Hospital- or unit-specific 30d1 case/control readmissions with frequent tracking (e.g., monthly) to demonstrate trends and special cause variation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notes:</strong> 1) Consider other relevant post-discharge periods (e.g., 60d, 180d). 2) Ensure rigorous methodology for matching cases to controls (i.e., coached vs. non-coached patients). 3) Consider other event-based utilization measures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process:</strong> Coaching staff tracks counts of eligible patients, patients approached and those coached, as well as refusals and reasons for refusal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proximal outcomes:</strong> Coaches administer patient-level assessments (e.g., patient activation), pre- and post-coaching, track progress towards patient-identified health goal and all other coaching encounter data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilization:</strong> a) Providers track their own utilization data (re: provider-specific readmission rates).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proximal outcomes:</strong> Validated patient activation assessments, with composite score [e.g., Patient Activation Measure (PAM; Insignia Health; Patient Activation Assessment, Coleman), Care Transitions Measure (CTM; Coleman)].1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>Process Measurement</td>
<td>Proximal Outcome Measurement</td>
<td>Utilization-based Outcome Measurement</td>
<td>Data Collection Strategies (in order of preference where applicable)</td>
<td>Available Tools</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>% patients with primary care follow-up appointment scheduled (or completed); % patients reporting personal health record use at final coaching visit.</td>
<td></td>
<td>(e.g., 30d emergency department visits; 30d observation status).</td>
<td>b) Community-level or provider-specific readmission rates are calculated from QIO claims data.</td>
<td>Note: 1) Proximal outcome measurement tools can also be used for intervention targeting (e.g., inpatient PAM, CTM scores).</td>
<td></td>
</tr>
<tr>
<td>CTI-type coaching, without home visit</td>
<td>Similar to the CTI (above), but adapted to accommodate patients who refuse the coaching home visit. Only the in-hospital coaching and follow-up calls are performed, which deviates from full model fidelity.</td>
<td>Minimal: Count of patients coached by number of coaching encounters.</td>
<td>Same as full CTI, above</td>
<td>Same as full CTI, above</td>
<td>Same as full CTI, above</td>
</tr>
<tr>
<td></td>
<td>Preferred: Minimal, plus measures of refusal rate, attrition and community implementation. Example: # referred for coaching; # accepting coaching; # coached (by # of encounters); % eligible patient population coached.</td>
<td>Same as full CTI, above</td>
<td>Same as full CTI, above</td>
<td>Same as full CTI, above</td>
<td>Same as full CTI, above</td>
</tr>
<tr>
<td></td>
<td>Note: 1) Validity of some patient-level assessments may threatened when administered remotely (e.g., by telephone).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The 9th SOW Experience

From 2008 – 2011, the Centers for Medicare & Medicaid Services (CMS) sponsored an effort through the 9th Statement of Work (SOW), the Care Transitions theme (http://www.cfmc.org/caretransitions), to reduce rehospitalizations within 30 days for Medicare patients leaving the hospital. CMS authorized the Quality Improvement Organization (QIO) in 14 states to work with local providers to implement evidence-based methods to improve hospital discharge and after-hospital care within a specified community. This work produced more settled and sensible processes to support Medicare beneficiaries recovering from hospitalization as they move from the hospital to the next place of care.

Learnings and observations from the 14 communities in the Care Transitions theme include:

**Community Engagement and Partnership**

- The sites ended up with quite different basic work structures. For example, some built community working groups that crossed all provider and community boundaries, working on standardization, communication, patient activation, and other broad challenges. Some worked with whole communities but organized around implementing specific proven interventions like Project RED, Care Transitions, or Transitional Care. Some worked with each hospital and its referral group of clinical providers in parallel, with each group only vaguely aware of the others working in the same community. Most governed by consensus rather than any more formal mechanism. Some were moving toward incorporation as non-profit entities, but most expected to continue the work as an informal voluntary coalition indefinitely (or to fade away when the QIO convening the work was no longer available).

- Some teams found the schisms in their community too deep to heal in just a couple of years and chose to work with separate competing hospitals in parallel. Sometimes the same pattern of parallel projects arose not from antagonisms and competition but just from lack of interest by the hospitals in working “for the community” rather than for the benefit of the providers and patients who used their hospitals. “Community-ness” is a resource that is not evenly allocated! When one hospital system has been aggressively buying up small community hospitals, the remaining providers may be too suspicious to share work or data with the acquisition leader, a situation that might dictate that parallel coalitions be formed.

- Some coalitions have developed “universal transitions forms” or checklists to ensure that transition information is complete enough. There seems to be a natural tendency for participants to aim to make one of these standard in a region, so all parties come to expect to complete it as “senders” and to get it as “receivers” in patient transfers.

- The stronger community coalitions usually included public health officials and representatives of those who pay for services (outside of Medicare).

- Social service providers, especially the Area Agencies on Aging, were quite interested, resourceful, and creative. One AAA recruited volunteers for coaching
patients, one secured funding for supplemental coaches, and others became valued participants in coalition-building. The AAA have core funding, so they are not direct competitors with clinical providers, but they often are directly providing or coordinating many of the social services for the elderly population. They were very valuable parties to recruit to the work.

- The roles of skilled nursing homes, personal care homes and observation stays in hospitals are very different across the communities. In one community, most Medicare discharges involve personal care homes (either directly or after a SNF stay). In another, about one-quarter of re-use of the hospital are not counting as re-admissions because the person is kept for observation only. Some areas send almost all fragile elderly to SNF before home, others do not.

- Some teams are finding it important to keep adding participants as the scope broadens and successes accrue. For example, one realized that “care managers” in the hospitals, which were already participating, did not mean that nursing leadership was engaged, and had to backtrack a bit to bring the nursing leaders on board. One team found it useful to reach out to the emergency medical system, and to community pharmacists.

- One team had the “receivers” join in a workgroup, which is gradually leading to the outpatient physicians and providers having more of a voice in discussing priorities and solutions with the hospital. It was curious that they were seen only as “receivers” when they are “senders” also.

- Standardization is very difficult when each provider is often part of multiple networks – the local system, their own corporate structure which may be multi-state, and their professional peer group that often sets standards.

- Except in the community where the “receivers” were organized into a working group, it has been difficult to engage practicing physicians in the work of reducing rehospitalization. Some of this is protecting time or financial self-interest, but some has to do with the paucity of opportunities for physicians to get together with one another – they simply do not have many points of contact or pre-existing organizations that can take the lead in working out the details.

**Communication**

- Many providers who share patients do not know one another or the other person’s care setting. Major gains come from simply getting people to meet, to talk about shared patients, and to build the sense that the providers share responsibility. One participant said: “Getting together in our clusters has become like family!” Another said: “Many of the ‘Aha moments’ in this project are just to know what happens outside of our facility – it is astonishing how much we just don’t know!”

- Very often, these initial meetings are very awkward, with the different parties having long-standing patterns of blaming the other parties and having quite different values and language. For example, the hospitals appear to nursing homes as being resource-rich and inattentive to costs and to harms like pressure ulcers and
delirium, while hospitals perceive nursing homes to have inadequate medical skills and evaluation. Usually, sharing in mapping the processes involved in a transfer or sharing recent stories about shared patients “breaks the ice” and forges alliances.

• Feedback from downstream to upstream providers is a critical link, but hard to achieve. Many downstream providers feel themselves to be dependent upon the upstream provider for referrals, so they don’t want to be seen as complainers. The upstream providers simply never realize that their practices are causing trouble, or the issue arises so infrequently that they assume that a problem arose for an unusual reason (including inappropriate provider behavior at the receiving end). So, one major intervention is to get upstream providers to seek feedback and to protect parties who give useful critiques from adverse action. More effective communication can be key.

• The QIOs and their partners generated a number of instruments, videos, and checklists that should be of use to future improvement efforts concerning transitions in setting of care.

Setting-Specific

• Most hospital-based providers believe that chronically ill Medicare patients are not financially attractive to the hospital and are therefore willing to set aside what might otherwise be intense competition for other patients among hospitals. This is not always true, of course, and longstanding antagonism, competition, or disrespect can require that care transitions work be split up with one coalition per hospital.

• Even though nursing homes and home care are often even more intensely competitive for “market share,” there has been much less challenge in getting multiple providers to share in problem-solving with their hospital(s). Perhaps nursing homes and home care (including hospice) are so much less powerful in the local system that they are willing to cooperate in order to work out standard practices with their referral hospitals.

• Clinicians often become enthused when frequent patient problems are averted and resolved. They have more “joy in the work” and professional pride. Better patient care is a powerful motivator!

• Multiple hospitals involved in the Care Transitions theme figured out how to provide EMR information to outpatient and nursing facility partners during the initiative. In some cases, they even provided EMR access to competing hospitals, for patients who ended up in the other hospital’s care. One hospital prudently insisted on their partners adopting a formal promise to immediately dismiss any employee found using personal health information improperly, and then they allowed read-only access to the hospital’s EMR.

• One important observation from a ward nurse is that working within the coalition is not much different from working in a hospital with an open physician staff: “You have to convince a lot of people who are able to act independently to develop standards and work together!”
• If SNFs are going to keep sicker patients on-site rather than hospitalize them right away, they have to enrich their clinical services to provide safe care – e.g., by having physicians more readily available, or having more stable and clinically well-trained nursing staff. Hospitals often helped by providing trainings and sometimes by doing telephone consults without moving the patient to the hospital.

• One community had a practice of using home health agencies as technicians for special interventions (like wound care, for example) and assumed that ordering HHA for three visits for wound care required no particular knowledge of the patient, medications, or much else. The discharge summaries and medication lists did not go to the HHAs. The meetings of the coalition have illuminated the shortcoming and corrected it so that now any ensuing provider will get the basic discharge information.

Interventions

• Research has established the merits of certain interventions (i.e. the hospital discharge process). The QISOC has published information on their results, which can be accessed from the following URL, http://www.cfmc.org/caretransitions/files/CareTransition_Article_Remington_Report_Jan_2010.pdf. Most of the communities chose to implement one or more of these, sometimes with substantial adaptation to local conditions, and others are looking to be promising, based upon experience.

• Coaching to patients was not always accepted by the patients. One site that used older volunteers who had hospital badges and support of the hospital staff had less problem with refusals, while a site that used student volunteers had a great many refusals. Sites that used nurses had very low rates of refusal.

• Medication reconciliation is a major challenge, but so is medication management with a reconciled list of medications. Getting the medications and getting them taken remain challenges, even with a fully reconciled list.

• One of the Care Transitions teams made major adaptations to the Naylor model to have the home care coordinator (full time in-hospital position funded by home care agency) assess all patients before home care discharge to target the ones that are most likely to benefit from transitions coordination. Those patients get a special home care team for their first few visits – a team trained in the Naylor method of coaching, medication reconciliation, and other support.

• The measurements in use to monitor improvement are undergoing improvement themselves. Rates of discernible error are probably the most direct and sensitive, though rates of rehospitalization have been most used. Other measures to look are cost and patient experience.
Related Links

Any links or sites included below are not under the control of CFMC. CFMC is not responsible for the contents, changes, or updates of any linked site. CFMC provides these links and resources as a convenience, and the inclusion of any link does not imply endorsement by CFMC or CMS of the site or any association with its operators.

- Center to Advance Palliative Care (CAPC) ([http://www.capc.org/](http://www.capc.org/))
- Chronic Care Model (CCM) ([http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2](http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2))
- Community Based Care Transition Program (CCTP) ([http://www.cms.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=3&sortOrder=descending&itemID=CMS1239313&intNumPerPage=10](http://www.cms.gov/DemoProjectsEvalRpts/MD/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=3&sortOrder=descending&itemID=CMS1239313&intNumPerPage=10))
- Institute for Healthcare Improvement (IHI) ([http://www.ihi.org](http://www.ihi.org))
- National Association of Area Agencies on Aging (N4A) ([http://www.n4a.org/](http://www.n4a.org/))
- National Transitions of Care Coalition (NTOCC) ([http://www.ntocc.org](http://www.ntocc.org))
- State Refor(u)m ([http://www.statereforum.org/](http://www.statereforum.org/))

Campaigns and Initiatives

- Advancing Excellence in America's Nursing Homes Campaign ([http://www.nhqualitycampaign.org](http://www.nhqualitycampaign.org))
  The Advancing Excellence campaign involves an unprecedented partnership of nursing home groups, organizations representing nursing home staff, federal and state government agencies and advocacy and consumer groups working together to make nursing homes better places to live, work and visit.

  The Home Health Quality Improvement (HHQI) National Campaign is a grassroots movement designed to unite home health stakeholders and multiple health care settings under the shared vision of reducing avoidable hospitalizations and improving medication management.
• **Hospital to Home National Quality Initiative (H2H)** ([http://h2hquality.org/](http://h2hquality.org/))
  Co-sponsored by the American College of Cardiology ([http://www.acc.org/](http://www.acc.org/)) and the Institute for Healthcare Improvement ([http://www.ihi.org/ihi](http://www.ihi.org/ihi)), H2H is an effort to improve the transition from inpatient to outpatient status for individuals hospitalized with cardiovascular disease.

• **Partnership for Patients** ([http://www.healthcare.gov/center/programs/partnership/index.html](http://www.healthcare.gov/center/programs/partnership/index.html))
  Launched by the Obama Administration, the Partnership for Patients is a new public-private partnership that will help improve the quality, safety, and affordability of health care for all Americans. The Partnership for Patients brings together leaders of major hospitals, employers, physicians, nurses, and patient advocates along with state and federal governments in a shared effort to make hospital care safer, more reliable, and less costly.

• **Speak Up Initiative** ([http://www.jointcommission.org/GeneralPublic/Speak+Up/](http://www.jointcommission.org/GeneralPublic/Speak+Up/))
  The Joint Commission, together with the Centers for Medicare and Medicaid Services, launched a national campaign to urge patients to take a role in preventing health care errors by becoming active, involved and informed participants on the health care team.

---

**Questions or Comments?**

The Integrating Care for Populations and Communities Aim National Coordinating Center (ICPCA NCC) values your questions, ideas, and feedback.

We want to hear from you! Please contact the Integrating Care for Populations and Communities Aim National Coordinating Center (ICPCA NCC) at [CO-ICPCTechnical@coqio.sdps.org](mailto:CO-ICPCTechnical@coqio.sdps.org) or visit [www.cfmc.org/caretransitions](http://www.cfmc.org/caretransitions).