

The Tennessee Nursing Home Improvement Collaborative (TNHIC) is sponsored by Qsource, the Medicare Quality Improvement Organization (QIO) for Tennessee. It is part of the national Nursing Home Quality Initiative (NHQI) that is funded through a contract with the Centers for Medicare & Medicaid Services (CMS).

Modeled after the Institute for Healthcare Improvement's (IHI) Breakthrough Series Collaborative Framework, this change package will support both QIOs and nursing home practitioners in their efforts to reduce and/or eliminate the use of physical restraints. We gratefully acknowledge the staff from CMS, Quality Partners of Rhode Island, Qualis Health, and other quality improvement organizations who worked with a technical expert panel to develop the framework used in this collaborative. The panel included national leaders in resident-centered care; nursing professionals in clinical and academic centers; gerontologists; experts in physical restraint use, falls management and the judicial system; and national survey and certification officers. A list of those participating in the development of the framework is found on the following page.

In addition, Qsource wishes to thank all of the following TN NHQI stakeholders for their invaluable support during the preparation and implementation of this collaborative.

- Life Care Centers of America
- Long-term Care Ombudsmen
- National Healthcare Centers
- Tennessee Department of Health
- Tennessee Department of Health, Division of Health Care Facilities
- Tennessee Health Care Association (THCA)
- Tennessee Health Management

## **Organizations**

Arkansas Foundation for Medical Care (QIO for Arkansas)  
Centers for Medicare & Medicaid Services  
Lumetra (QIO for California)  
Medical Review of North Carolina (QIO for North Carolina)  
Qualis Health (QIO for Washington, Idaho and Alaska)  
Quality Partners of Rhode Island (QIO for Rhode Island)  
Qsource (QIO for Tennessee)

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### **Glossary**

This handbook contains essential information about the Tennessee Nursing Home Improvement Collaborative for restraint reduction for participating nursing facilities. Its purpose is to provide background and reference information on the TNHIC and to help the teams prepare for a successful start to this initiative.

The **Introduction** sets the stage by providing background information as well as a tentative schedule of events and time periods.

The section on **Pre-Work** activities guides your team step-by-step through preparation for the first learning session on restraint reduction. All of the forms needed to complete these activities are included.

The **Collaborative Framework** contains the charter and problem statement, which provide background on restraint reduction and elimination; defines the overall mission, goals, and methods; and outlines expectations for participants. The framework also contains the **Change Package** and **Measurement Strategy**, presented under separate tabs.

- The **Change Package** contains a variety of strategies for changing processes of care related to restraint reduction. You will refer to it throughout the collaborative.
- The **Measurement Strategy** section defines the required and optional measures. It describes data that your team will collect and analyze to monitor progress.

A selection of **References** about restraint use and related clinical topics includes selected books, manuals, videos and web sites.

A list of **Qsource Staff** provides names and contact information.

A **Glossary** defines terms and concepts related to the IHI collaborative model.

***A Collaborative is a systematic approach to quality improvement using teams for best practice sharing within and between participating facilities.***

This section contains information about the collaborative model, the Tennessee Nursing Home Improvement Collaborative (TNHIC), and a calendar of activities and events.

## **Overview**

A collaborative is a systematic approach to healthcare quality improvement in which organizations and providers test and measure new practices. Teams then share their experiences to increase learning and widespread implementation of best practices. In 1995, the Institute for Healthcare Improvement (IHI) held the first Breakthrough Series Collaborative. Since then, more than 700 teams from over 400 international healthcare organizations have participated in collaboratives. Nursing homes from a number of states recently participated in a National Nursing Home Improvement Collaborative for Pressure Ulcer Prevention and Treatment sponsored by CMS. This approach proved to be very successful and since has led to other collaborative work in long-term care. An example is the pilot collaborative on restraint reduction which involved 15 select nursing homes in the state, the first initiative of its kind for the nursing home industry in Tennessee. This collaborative ended in January 2006, and due to its success, became the model for the successful Tennessee 8<sup>th</sup> Scope of Work (SoW) clinical initiative. Successes and lessons learned by these nursing homes will be shared with the current 9<sup>th</sup> SoW Identified Participants, of which your nursing home is a part, in the coming months, as will successes and lessons learned by the current participants. In addition, our experience in Tennessee has provided important information for the development of other CMS-sponsored collaboratives for restraint reduction throughout the country.

The full IHI collaborative model requires a large amount of resources with an extended time period to complete all of the required activities. Qsource has adapted and scaled down the IHI methods as well as the collaborative framework developed by CMS and the expert panel to suit the needs of our provider community.

## **The Tennessee Nursing Home Improvement Collaborative (TNHIC)**

The TNHIC will involve a select group of facilities located throughout Tennessee to improve the clinical quality provided to nursing homes residents in the area of physical restraints. These facilities will work together over the next two years to test system changes aimed at making improvements in the reduction of physical restraints and to collectively share experiences and best practices. Qsource staff members will be available for consultation on content and methods as well as their application.

### **The four main components of the TNHIC are:**

- **Pre-work Activities**
- **Learning Sessions**
- **Action Periods**
- **Outcomes Congress**

**Pre-work** is the period between receipt of this handbook and the first learning sessions, targeted for October 2011 across the three grand regions of the state. During this time, the nursing facility has several important tasks to complete in order to prepare for the

first learning session. The **Pre-work** section of this handbook details these tasks, provides a checklist for activities, and supplies all of the necessary forms.

**Learning sessions (LS)** are the major interactive events of the collaborative. Through group sessions, small group discussions, and team meetings, teams have the opportunity to:

- Learn from Qsource staff and peers
- Receive individual coaching
- Gather knowledge on the subject matter and on process improvement
- Share experiences and collaborate on improvement plans
- Problem-solve barriers to improving care

The collaborative will be kicked off by a learning session held at three sites across the state (Memphis, Nashville, and Knoxville). Additional sharing of information and experiences will occur via monthly teleconference calls, site visits, etc.

**Action Periods** are the times between learning sessions. During action periods, teams work within their facilities to test and implement changes aimed at restraint reduction. Teams share the results of their improvement efforts in monthly Senior Leader Reports (SLRs) and also participate in shared learning through conference calls. Participation in Action Periods is not limited to those who attend the learning sessions; we encourage and expect the participation of other team members and supporters in the facility.

At the end of the collaborative, participants will share their findings and achievements at an **Outcomes Congress (OC)** to highlight the accomplishments and present effective models related to restraint reduction.

**Schedule**

<b>LS 1</b>	<b>LS 2</b>	<b>LS 3</b>	<b>Outcomes Congress</b>	
<b>October</b>	<b>March</b>	<b>August</b>	<b>February</b>	
<b>2011</b>	<b>2012</b>	<b>2012</b>	<b>2013</b>	
Prewrite	Action Period 1	Action Period 2	Action Period 3	Spread

***LS 1:***

Nashville  
Knoxville  
Memphis

October 2011  
October 2011  
October 2011

Dates TBA  
Dates TBA  
Dates TBA

**Action Period 1**

Time between Learning Sessions  
Monthly teleconferences every third Wednesday  
Senior Leader Report and tracking tool due 2<sup>nd</sup>  
Wednesday of each month

***LS2:***

**March 2012**

**Action Period 2**

Time between Learning Sessions  
Monthly teleconferences every third Wednesday  
Senior Leader Report and tracking tool due 2<sup>nd</sup>  
Wednesday of each month

***LS 3:***

**August 2012**

**Action Period 3**

Time between Learning Sessions  
Monthly teleconferences every third Wednesday  
Senior Leader Report and tracking tool due 2<sup>nd</sup>  
Wednesday of each month

***Outcomes Congress***

**February 2013**

**Teleconferences:** In between the learning sessions, each team is expected to participate in monthly teleconferences with other participating facilities. Calls will be for one hour on every third Wednesday of the month. To participate in a teleconference, please dial 1-800-615-2820. When asked, enter 848325 followed by the # sign for your pass code. All conferences will begin promptly at 10 AM central time. Be sure to use teleconference etiquette by not putting the call on hold at any time and maintaining a quiet environment except when speaking. Qsource will host the teleconferences.

<b>Monthly Teleconferences 2008-2010</b>	
<b>Time:</b>	10 AM Central Time
<b>Length:</b>	60 minutes
<b>Participants:</b>	Team members from each participating nursing home; Qsource staff; selected experts
<b>Dates:</b>	Dates to be determined
<b>Instructions:</b>	<p>Dial 1-800-615-2820. When asked, enter 848325 followed by the # sign for your pass code.            Do not put the line on hold at any time.            Keep background noise low. You may dial *6 to mute and *6 to un-mute.            Dial *4 to increase conference volume, *7 to decrease conference volume, *5 to increase your voice volume and *8 to decrease your voice volume.            If you have any trouble joining the conference, please dial 1-888-569-3848.</p>
<b>Purpose:</b>	<p>Teams will share successes and barriers related to implementation.</p> <p>Qsource staff and speakers will present topics related to the Collaborative.</p>

This section includes a checklist of pre-work activities, information about how to complete each pre-work activity, and related forms for documentation.

### **Checklist for completing pre-work activities prior to Learning Session 1**

1. Form a team.
2. Read collaborative framework.
3. Register for learning sessions.
4. Obtain Microsoft® Excel 97 or higher for using the TNHIC electronic tracking software to track data within your nursing facility. *This is not a requirement as paper tools and logs may be used. However, Qsource staff will provide training sessions on this easy to use electronic software.*
5. Complete the pre-work activities worksheet.
6. Develop a draft aim statement.
7. Identify a population of focus.
8. Define optional measures.
9. Prepare for monthly reports.
10. Assess your facility.
11. Survey staff.

The following pages provide more detail about each task.

# 1. Forming a Team

Each facility needs to form a collaborative team to test and implement system changes related to restraint reduction.

## Selecting Team Leaders

The first step in forming your collaborative team is to fill four leadership roles. They are:

- Senior Leader
- System Leader
- Clinical Champion
- Day-to-Day Leader

Individuals in these roles represent the team at the Learning Sessions and the Outcomes Congress and share their learning with other members of the team. Team members will report progress to the Senior Leader, who is encouraged to attend all learning sessions and the Outcomes Congress. In smaller homes, the roles may overlap; however, at least three staff with the ability to cover the following roles should be selected.

Ideal team leaders are described below.

### The Ideal Senior Leader

- Has ultimate authority to allocate the time and resources to achieve the team's aim
- Has ultimate authority over all areas affected by the change
- Will champion the spread of successful changes throughout the facility

Examples of Senior Leaders are the nursing home administrator or director of nursing.

### The Ideal System Leader

- Has direct authority to allocate the time and resources to achieve the team's aim
- Has direct authority over the particular systems affected by the change
- Will champion the spread of successful changes throughout the department or service area

An example of a System Leader would be the director of nursing or a nurse manager. The System Leader should attend all learning sessions and the Outcomes Congress.

### **The Ideal Clinical Champion**

- Is a respected clinical staff person with interest and expertise in the areas of risk related to restraint use
- Understands current processes of care
- Has a good working relationship with peers and the Day-to-Day leader
- Wants to drive improvements in the system

An example of a Clinical Champion would be a physician, consultant pharmacist, geriatric nurse practitioner, physician assistant, clinical nurse specialist or other nurse/health professional with clinical expertise in this area. It is essential to have a Clinical Champion on the team. It is recommended that the Clinical Champion attend all learning sessions and the Outcomes Congress.

### **The Ideal Day-to-Day Leader**

- Has good clinical skills with interest in falls management, behavior management and restraint reduction
- Drives the project and ensures that cycles of change are tested, implemented, and documented
- Coordinates communication between the team and the collaborative
- Oversees data collection
- Works with the Clinical Champion

The Day-to-Day Leader should understand how changes will affect systems and have the time to keep the project moving forward. The Day-to-Day Leader needs the skills necessary to write summary reports of progress (Senior Leader Reports). A quality improvement, charge, management or highly motivated staff nurse might serve as Day-to-Day Leader. The Day-to-Day Leader attends all learning sessions and the Outcomes Congress.

### **Selecting Other Team Members**

In addition to the four leaders, the collaborative team should include staff from departments affected by system changes related to restraint reduction. This will ensure that the team understands the system that is being redesigned and will promote buy-in for the changes. These other team members will not need to attend the learning sessions.

These members learn about the collaborative from the four team leaders and participate in implementation at the facility level. Potential team members include:

- Certified nursing assistants
- Licensed nurses
- MDS Coordinators
- Restorative care staff
- Occupational and physical therapy staff
- Activities staff
- Social services staff
- Staff development personnel
- Health information managers
- Maintenance and environmental services

### **Tips for Selecting Team Members**

An effective team has members who work well together and who have a combination of skills, styles, and competencies. An effective team has members who:

- Are leaders
- Are team players
- Have specific skills and technical proficiencies relevant to restraint reduction and fall prevention
- Possess excellent listening skills
- Communicate well verbally
- Are problem-solvers
- Are motivated to improve current systems and processes
- Believe it is possible to improve restraint use
- Are creative, innovative, and enthusiastic

## **2. Reading the Collaborative Framework**

It is important that each member of the team read and understand the material provided in this handbook. One copy will be provided to each team, along with an electronic copy should the facility need to make additional copies. Questions will be addressed during the **Pre-work** teleconferences.

## **3. Registering and Arranging for Travel**

All facilities will be contacted for registration by Qsource faculty. Each learning session will be held regionally in Knoxville, Nashville and Memphis. Each facility will be responsible for travel arrangements and meals, which will not be reimbursed by Qsource.

## 4. Obtaining Microsoft® Excel 97

Facilities are encouraged to obtain Microsoft® Excel version 97 *or higher* in order to use the TNHIC software for tracking data. This electronic tracking tool assists staff in both collecting and summarizing data and provides one common tool for all participating facilities.

Once data is entered, the electronic tool will automatically generate run charts to track performance for both the required and optional measures. The data entered into the Excel tool must be submitted, along with the Senior Leader Report to Qsource each month.

Microsoft® Excel 97 is not mandatory, but it is an easy and quick method to collect and analyze data which staff find very helpful. Training sessions on this tracking tool will be available at Learning Session 1. An alternate method is use of paper tools and logs.

## 5. Completing the Pre-Activities Worksheet

The pre-work activities worksheet at the end of this section will help you document progress as your facility:

- forms a team
- develops an aim statement
- identifies a population of focus
- begins to define measures

## 6. Developing an Aim Statement

The TNHIC is modeled after the IHI Model for Improvement, a “trial-and-learn” approach to quality improvement. The model for improvement combines three important questions with small cycles of change:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in an improvement?

The first question is answered in an aim statement. An aim statement is a short written statement describing **what the team expects to accomplish in the collaborative**; it should guide the team’s specific improvement efforts. The aim statement ensures that team activities are in line with the goals of the facility. Involving administrative leadership in developing an aim statement can help teams ensure support for their work.

An example of an aim statement consistent with the goals of this collaborative is as follows:

*An interdisciplinary team will develop individualized care plans that address fall risk, behavioral symptoms and other associated resident care issues in order to meet specific resident needs without using physical restraints. All full or attached restraints will be eliminated within the first 60 days and least restrictive devices used for longer than six days will be used with no more than 2% of our residents.*

In setting your aim, be sure to:

- 1. Involve Senior Leaders.** Senior Leaders must align the aim with strategic goals of the facility. They must also provide for personnel the necessary support and resources from information systems, finance and reimbursement, nursing, etc.
- 2. Base your aim on data or facility needs.** Examine data within your facility. Refer to the collaborative charter and focus on issues that matter at your nursing facility.
- 3. State the aim clearly and use numerical goals.** Teams make better progress when they have a clear, specific aim. Setting numerical targets clarifies the aim, helps create tension for change, and directs measurement.

For example, an aim to “ensure that all full or attached restraints will be eliminated from the facility within the first 60 days” will be more effective than an aim to “decrease restraints.”

Teams will refine their aim statement during the course of the collaborative.

## **7. Identifying a Population of Focus**

During the collaborative, teams will be piloting tests of change among a small group of residents who are currently restrained or are potential candidates for restraint. If the outcomes for these residents result in improvement, teams will then spread the interventions to other residents facility-wide.

## **8. Defining Measures**

Measuring performance helps the team to evaluate the impact of changes it makes in an effort to improve care. Performance measurement is not an end in itself. Measurement should speed up improvement, not slow it down.

Each team will monitor progress on the required measures. It is strongly suggested each team choose a minimum of two additional, or “optional,” measures.

## Required Measures

The required outcome measures for this collaborative are:

- *Proportion of residents physically restrained any time within two calendar days of admission*
- *Percentage of residents with falls resulting in a serious injury*
- *Percentage of residents who were physically restrained on the LAST FRIDAY of the month*

*The following outcome measure will be provided to you on a quarterly basis:*

- *Percentage of residents restrained daily during the seven-day assessment period*

The required process measure is:

- *Proportion of residents physically restrained that received a re-evaluation to reduce or eliminate the restraint*

## Optional Measures

Suggested optional process measures are:

- *Percentage of residents who have had two or more falls any time within a six-month timeframe*
- *Percentage of families provided education about restraint reduction and facility policy upon admission or consideration of restraint*
- *Percentage of residents with non-restraint interventions tried prior to initiating a physical restraint*
- *Percentage of residents who fall that had an immediate intervention within 24 hours and their care plan reviewed and modified within 72 hours of the fall*
- *Percentage of direct care staff who have an appropriate level of training in restraint reduction, monitoring and use of least restrictive alternatives*

*Suggested optional balancing measures are:*

- *Percent of residents with a psychotropic medication ordered (including dose increase) during or after restraint removal*

## 9. Preparing for Monthly Reports

### Senior Leader Report

Each facility will be expected to prepare a monthly report tracking the team's progress on the selected measures and documenting the tested system changes. This report goes to the senior leadership at the nursing facility and is also shared with other QI collaborative participants and the Qsource staff. More information about the Senior Leader Report (templates, tools, etc.) will be distributed at the first learning session.

## **Run Charts**

The standard for monitoring progress is a run chart for each of the required and optional measures. Data points should be plotted monthly on a run chart and submitted with Senior Leader Reports. A Microsoft® Excel tracking tool that automatically produces the run charts will be provided to collaborative participants, along with tool training at the first learning session.

## **10. Assessing Your Facility**

Complete the self-assessments for restraints, falls and behavioral symptoms by answering questions related to your facility policies and procedures and by conducting a brief chart audit. In doing so, you will assess what areas of management and care need improvement in your facility. This process of identification will help you when selecting areas for small scale rapid cycles of improvement. Be honest. This assessment is for use within your team only and is meant to establish a baseline so that you can determine progress through comparison when these assessments are repeated at later points.

## **11. Surveying Staff**

The purpose of the one-page Restraint Knowledge and Attitudes Survey is to assess staff knowledge and attitudes about physical restraint use. The process of answering these questions will help staff examine their personal beliefs and level of knowledge about physical restraints. Use this survey with all direct care staff to increase awareness and build interest in your restraint reduction program. Asking other facility staff to complete the survey may be helpful in establishing widespread commitment to and understanding of a restraint-free environment.

# Pre-Work Activities Worksheet

**1. Team Members:            (Name)            (Title)**

**a. Senior Leader:** \_\_\_\_\_

**b. System Leader:** \_\_\_\_\_

**c. Clinical Champion:** \_\_\_\_\_

**d. Day-to-Day Leader:** \_\_\_\_\_

**e. Other Team Members:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2. Working draft of aim statement:**

**3. Working list of measures selected:** *(For additional information, please refer to the Measurement Strategy.)*

The required outcome measures for this collaborative are:

- *Proportion of residents physically restrained any time within two calendar days of admission*
- *Percentage of residents with falls resulting in a serious injury*
- *Percentage of residents who were physically restrained on the **LAST FRIDAY** of the month*

The required process measure is:

- *Proportion of residents physically restrained that received a re-evaluation to reduce or eliminate the restraint*

**Optional measure(s):**

Suggested optional process measures are:

- *Percentage of residents who have had two or more falls any time within a six-month timeframe*
- *Percentage of families provided education about restraint reduction and facility policy upon admission or consideration of restraint*
- *Percentage of residents with non-restraint interventions tried prior to initiating a physical restraint*
- *Percentage of residents who fall that had an immediate intervention within 24 hours and their care plan reviewed and modified within 72 hours of the fall*
- *Percentage of direct care staff who have an appropriate level of training in restraint reduction, monitoring and use of least restrictive alternatives*

**Suggested optional balancing measures are:**

- *Percent of residents with a psychotropic medication ordered (including dose increase) during or after restraint removal*

**Potential issues in collecting data for the required measures:**

**Please select at least two (2) optional measures. Pick from the optional list above or create your own:**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

**Potential issues in collecting data for the optional measures selected:**

## Restraints: Self-Assessment Tool

### Purpose:

- To identify what processes of care your facility has in place
- To identify what areas need improvement

### Topics included in the self-assessment for physical restraints:

- A. Organizational commitment and team work
- B. Staff training and education
- C. MDS coding
- D. Assessment
- E. Care plan development
- F. Monitoring implementation and resident response

### Directions:

- The self-assessment should be completed by the director of nursing (DON), quality improvement director, or other management staff.
- Use your facility policies, procedures and general practices to answer questions under topics A and B.
- Review the medical records of 5 residents who have been restrained daily during the last 7 days to answer questions under topics C, D, E, and F.
- Consult with other staff as needed.
- Check the appropriate boxes **Yes** or **No** and add comments to clarify answers.
- Please answer all questions honestly, as the first step in quality improvement is assessing current practices in order to identify opportunities for improvement.

## A. Organizational Commitment and Team Work

	Yes	No	Comment
1. Have key staff members been identified to form an interdisciplinary restraint elimination team?			
2. Does the team meet regularly to discuss all residents currently in restraints and those at risk for restraint?			
3. Is there a system for tracking and identifying residents for assessment and reassessment by the interdisciplinary team?			
3. Are policies and procedures updated to reflect a restraint-free environment?			
4. Does your facility maintain stable administrative and clinical leadership committed to the elimination of restraints?			
5. Does your process include analyzing current clinical practices such as assessments, restraint alternatives, documentation, and interventions?			
6. Does your facility monitor side rail use and provide ½ length when side rails are needed?			

<i>Organizational Commitment And Team Work, continued</i>	Yes	No	Comment
7. Do you provide education for family, and residents on:			
• The dangers of physical restraints			
• Implementing less restrictive and non-restraint alternatives			
• Federal regulations on physical restraints			
• Person-centered care			
8. Does your facility celebrate restraint reduction/elimination success stories, and reward staff and family members for positive attitudes and assistance in creating a restraint- free environment?			
9. Does your facility provide appropriate resources for the elimination of physical restraints such as:			
• Adequate staffing			
• Continuing education			
• Functional communication systems and tools			
• Environmental modifications and equipment			
• Structured activities for cognitively intact and cognitively impaired residents?			

## B. Staff Training and Education

	Yes	No	Comment
1. Does your facility provide information regarding restraint elimination and facility policies for:			
• All new staff			
• All primary care providers			
2. Does your facility provide annual staff in-services on restraint elimination?			
3. Do the educational materials or in-services address:			
• Purpose of interdisciplinary restraint elimination team			
• Facility's philosophy and goals regarding restraint elimination			
• Individual expectations, roles, and responsibilities of each caregiver			
• Process of referral to the restraint team if restraints are being considered			
• Parameters of emergency restraint use: time frame, application, physician's orders, consent, etc.			
• Regulations regarding restraint use			
• Adverse effects of physical Restraints			
4. Is there documentation that reflects staff training and understanding of roles and responsibilities of restraint elimination programs (such as pre- and post testing)?			

## C. MDS Coding

Select the charts of five residents who have been restrained daily during the last seven days. For each resident, read the chart and care plan to answer all questions. Check **Yes** or **No** or write **NA** in either box if the question is not applicable.

	<i>Chart 1</i>		<i>Chart 2</i>		<i>Chart 3</i>		<i>Chart 4</i>		<i>Chart 5</i>	
	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>
1. Was the MDS completed in a timely manner?										
2. Does the coding of Item P4 accurately reflect the frequency, over the last seven days, with which the resident was restrained?										
3. Does interdisciplinary documentation support the coding of Item P4?										
4. Was nursing documentation consistent across all shifts for the seven-day review period?										
5. Does observation of the resident across shifts match the coding?										
6. Was information gathered from multiple sources prior to coding Item P4 - i.e., interviews/discussion with the resident and direct care staff on all three shifts, including weekends and review of documentation used to communicate with staff across shifts?										
7. If use of devices and restraints varied from shift to shift, does the MDS capture the differences?										

#### **D. Assessment**

Select the charts of five residents who have been restrained daily during the last seven days. For each resident, read the chart and care plan to answer all questions. Check **Yes** or **No** or write **NA** in either box if the question is not applicable.

	<i>Chart 1</i>		<i>Chart 2</i>		<i>Chart 3</i>		<i>Chart 4</i>		<i>Chart 5</i>	
	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>
1. Is there an interdisciplinary assessment to address underlying clinical problems to include:										
• Medication use										
• Gait and mobility problems										
• Cardiovascular insufficiency										
• Infection										
• Hyperglycemia/hypoglycemia										
• Pain										
• Sleep patterns										
• Mental status and cognition										
2. Is there information from resident and family regarding the resident's personal and social history:										
• Previous life experiences										
• Interests										
• Social patterns										
3. Is there evidence of reassessment at least monthly until the resident is achieving the highest level of functioning in the least restrictive environment?										
4. Does assessment include side rail use and bed safety?										

### **E. Care Plan Development**

Select the charts of five residents who have been restrained daily during the last seven days. For each resident, read the chart and care plan to answer all questions. Check **Yes** or **No** or write **NA** in either box if the question is not applicable.

	<i>Chart 1</i>		<i>Chart 2</i>		<i>Chart 3</i>		<i>Chart 4</i>		<i>Chart 5</i>	
	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>
1. Does the care plan reflect an underlying condition or event, requiring a physical restraint?										
2. Has medical necessity been established?										
3. Does the care plan include the following:										
• Type of restraint										
• Person responsible for implementing and monitoring restraint application										
• Action plan or future trials of alternate interventions and least restrictive options										
• Outcomes of trials of alternate interventions										
• Interventions for highest level of functioning and improvement in function										
• Identification of potential problems or risk associated with restraint removal										
4. Is there evidence to support involvement (if the resident wishes) of the resident and/or legal guardian with formulating the care plan?										

**F. Monitoring Implementation and Resident Response**

Select the charts of five residents who have been restrained daily during the last seven days. For each resident, read the chart and care plan to answer all questions. Check **Yes** or **No** or write **NA** in either box if the question is not applicable.

	<i>Chart 1</i>		<i>Chart 2</i>		<i>Chart 3</i>		<i>Chart 4</i>		<i>Chart 5</i>	
	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>
1. Is there evidence that the plan of care has been implemented? (For example, ensure least restrictive environment, monitoring the resident, provision of proper hydration and ADL needs, access to call light, education, and environmental adaptations.)										
2. Is there evidence to support prevention of complications such as contractures, ski breakdown, and incontinence?										
3. Is there evidence that the plan of care has been updated or revised based on resident response and staff feedback?										

## **Falls: Self-Assessment Tool**

### **Purpose:**

- To identify what processes of care your facility has in place
- To identify what areas need improvement

### **Topics included in the self-assessment for falls:**

- A. Cultural, Organizational Commitment and Team Work
- B. Staff Training and Information for Primary Care Providers, Families and Residents
- C. Data Collection and Analysis
- D. Environment and Equipment Safety

### **Directions:**

- The self-assessment should be completed by the director of nursing (DON), quality improvement director or other management staff.
- Use your facility policies, procedures and general practices to answer questions under topics A, B, C and D.
- Consult with other staff as needed.
- Check the appropriate boxes **Yes** or **No** and add comments to clarify answers.
- Please answer all questions honestly, as the first step in quality improvement is assessing current practices in order to identify opportunities for improvement.

## A. Organizational Commitment and Team Work

	Yes	No	Comment
1. Are policies and procedures updated to include screening, assessment, care plan development, and monitoring of patients with high fall risk?			
2. Does the fall reporting process require immediate investigation of all details by direct care staff and discourage the use of "unknown" in the report?			
3. Does your facility have a falls assessment that reflects an interdisciplinary approach to address the following risk factors:			
• Underlying medical condition(s)			
• High-risk medication use			
• Orthostatic hypotension			
• Poor vision			
• Mobility/gait/transfer problems			
• Wheelchair seating problems			
• Unsafe behavior(s)			
• Environmental hazards			
• Unsafe footwear/foot care			

## Restraints Knowledge and Attitude Survey

Nursing Facility: \_\_\_\_\_

Position/Title: \_\_\_\_\_

Department: \_\_\_\_\_

Shift: Days\_\_\_\_ Evenings\_\_\_\_ Nights\_\_\_\_ (Please Check One)

Please circle *true* (T) or *false* (F) to each of the following statements.

- T F A restraint device is always a restraint.
- T F We have a documented facility protocol addressing the use of physical restraints.
- T F Restraints prevent falls.
- T F Restraints prevent injury.
- T F It is our moral responsibility to safeguard our residents from harm by using restraints.
- T F Failure to use restraints puts the facility at legal risk.
- T F Residents don't mind being restrained; it makes them feel secure.
- T F Restraints must be used because there isn't enough staff to monitor everyone.
- T F We use restraints because we don't know what else to do.
- T F If the use of a restraint is necessary the least restrictive device should be used.
- T F I believe in using an alternative to a physical restraint when it is appropriate.
- T F It is important to know what the resident's normal routine was at home.
- T F Family input should be considered when assessing the need for a physical restraint.

## Restraints Knowledge and Attitude Survey KEY

Nursing Facility: \_\_\_\_\_

Position/Title: \_\_\_\_\_

Department: \_\_\_\_\_

Shift: Days \_\_\_\_\_ Evenings \_\_\_\_\_ Nights \_\_\_\_\_ (Please Check One)

Please circle *true* (T) or *false* (F) to each of the following statements.

- F A restraint device is always a restraint.
- T F We have a documented facility protocol addressing the use of physical restraints.
- F Restraints prevent falls.
- F Restraints prevent injury.
- F It is our moral responsibility to safeguard our residents from harm by using restraints.
- F Failure to use restraints puts the facility at legal risk.
- F Residents don't mind being restrained; it makes them feel secure.
- F Restraints must be used because there isn't enough staff to monitor everyone.
- F We use restraints because we don't know what else to do.
- T If the use of a restraint is necessary the least restrictive device should be used.
- T F I believe in using an alternative to a physical restraint when it is appropriate.
- T It is important to know what the resident's normal routine was at home.
- T Family input should be considered when assessing the need for a physical restraint.

## **Introduction**

The Centers for Medicare & Medicaid Services' (CMS) Quality Initiative is challenging providers in long-term care settings to continually enhance an environment that promotes transformational change in the area of quality of care and quality of life.

Transformational change occurs through collaboration, partnership, and commitment to a paradigm shift—in this case, a person-directed care (PDC) approach to quality improvement. The foundation of transformational change rests on a positive organizational culture that is directed and supported by the administrator, director of nursing, and countless other leaders in today's nursing home. The PDC model is an innovative approach in long-term care, enhancing residents' quality of life by changing the culture in nursing homes. An integrated PDC approach supports an environment that ideally promotes residents' freedom, independence, and autonomy in a restraint-free environment. The purpose of this framework is to provide the foundation necessary for staff to reduce and/or eliminate physical restraints in their facility.

## **Problem Statement**

Nursing homes have taken significant steps to reduce the use of physical restraints since the 1987 Omnibus Budget Reconciliation Act (OBRA). In 1988, the Healthcare Financing Administration, now CMS, reported the use of physical restraints in nursing homes at 41%. Although the prevalence rate has dropped over the last 14 years to a national average of 7.3% in the second quarter of 2004, with Tennessee's rate at 11%,<sup>1</sup> the use of physical restraints with nursing home residents is still considered too high by many residents, families, advocates, healthcare practitioners, and government officials.

## **Background**

CMS' Quality Initiative, launched in November 2002, seeks to assist nursing homes in improving the quality of care and quality of life for all residents. The regulations protect and promote the resident's right to participate in and direct his/her own care. More importantly, as a society we have a moral and ethical responsibility to support an environment that promotes respectful caring for our frail elders. It is, therefore, necessary to facilitate the residents' autonomy and sense of control over their lives and move away from our current system, which is unintentionally designed to foster dependence "by keeping residents well cared for, safe, and powerless."<sup>2</sup>

According to federal regulations, "the resident has the right to be free from any physical or chemical restraints imposed for the purpose of discipline or convenience, and not required to treat the resident's medical symptoms."<sup>3</sup>

Therefore, a physical restraint may only be used to treat a medical symptom and only after a comprehensive assessment identifies interventions that allow the resident to reach his/her highest practicable level of functioning.

### **Current Use of Restraints**

In a nursing home population, where the majority of residents are frail, elderly, medically complex, and cognitively impaired, physical restraints are typically applied in nursing homes for any of three main reasons:

- Safety
- Convenient management of situations that may be difficult or time-consuming for staff (such as altered mental status, disruptive behavior, and functional dependence)<sup>4</sup>
- Prevention of treatment interference (such as removing intravenous tubing or scratching a wound)

Quality measure (QM) scores indicate continued, yet varied, restraint use in the nation's nursing homes. For example, the QM in Tennessee ranges from a low of 0% at one nursing home to a high of 58% in another.<sup>5</sup>

Factors contributing to the wide variation in restraint use include the individual facility's staffing mix and workload; the facility's leadership support; the availability (actual or perceived) of restraint-free alternatives; differing methods of staff education and organizational change; beliefs whether restraints provide a safer environment; and preferences of families and residents.

### **Safety**

In the past, physical restraints were viewed as preventative measures. However, research studies have provided evidence to the contrary—using physical restraints does not lower the risk of falls or fall-related injuries,<sup>6</sup> and removing restraints does not increase those risks.<sup>7</sup> Further, Tinetti et al found that restrained residents were three times more likely to be injured during a fall or related incident than were unrestrained residents.<sup>8</sup>

It is estimated that as many as 200 deaths occur every year as a result of strangulation or suffocation from restraints, even when they are applied according to manufacturer's instructions.<sup>9</sup> While Miles and Irvine estimate a number much higher, as many as 1 in 1,000 deaths of nursing home residents are a result of restraint use.<sup>10</sup>

### **Adverse Effects and Quality of Life**

Research identifies many adverse impacts of restraint use, not only in terms of negative health outcomes, but also in the consumption of financial resources necessary to address those poor outcomes. Physical restraint use has the potential to negatively impact the resident's physiological and psychological health status.

Concerns include:<sup>11</sup>

- Urinary incontinence
- Increased agitation

- Circulation impairment
- Skin breakdown
- Decreased mobility
- Physiologic stressors
- Social isolation
- Reduced sensory and perceptual input
- Abnormal changes in body chemistry, basal metabolic rate, and blood volume
- Orthostatic hypotension
- Contractures
- Edema
- Decreased muscle mass, tone, and strength
- Nosocomial infection
- Cardiac stress
- Problems with elimination
- Loss of dignity
- Increased confusion and combativeness

### **Staff Resources**

Research has shown that residents who are restrained consume more staff resources than do unrestrained residents.<sup>12</sup> This is due, in part, to federal law which mandates that restrained residents be freed from the restraint and exercised every two hours. After repositioning and reapplying the restraint, staff must then document accordingly to be in regulatory compliance. Not only does the documentation and care of restrained residents take considerable staff time, but infections, pressure ulcers, and other medical conditions resulting from prolonged restraint use will require additional (avoidable) care.

A number of studies have found the number of full-time staff remains the same in a restraint-free environment. The nature of the staff's activities do change, though, as restraint use declines.<sup>13</sup>

### **Litigation**

Staff mistakenly use physical restraints as a risk management tool to reduce the possibility of lawsuits. However, the use of physical restraints to prevent injury is not the standard of care. Furthermore, there is a growing trend of lawsuits filed against nursing homes for restraint-related injury or death.<sup>14</sup>

Liability insurance rates for nursing homes have dramatically increased in the past decade. According to one national survey, the average amount awarded to plaintiffs involved in suits against nursing homes is also on the rise.<sup>15</sup> This means

that substantial financial savings may be possible when just one lawsuit due to a restraint-related injury is prevented.

The lack of consistency in nursing homes, state survey agencies and court rulings has contributed to the confusion about restraint use and classification. Widespread educational programs, for both healthcare professionals and consumers, are needed to call attention to residents' rights regarding physical restraints and raise awareness of the risks in using, or not using, them.<sup>16</sup>

### **Benefits of Removing Restraints**

Residents who are not restrained tend to be less agitated, less fatigued, and more social. They are able to attend activities and social gatherings with friends and families, which increases communication and appropriate physical and sensory stimulation. Unrestrained residents exhibit greater independence with toileting, mobility, feeding, dressing, and strength—which decreases the burden of care and saves time and supplies as well. The resident's autonomy and dignity improves without the confinement of physical restraints.

Achieving restraint-free care also results in a sense of pride for caregivers. Staff gain a reputation for providing high quality care to their residents, serious injuries significantly decline, staff turnover decreases, staff morale increases, and families support restraint-free care.<sup>17</sup> Restraints can be significantly reduced without increases in serious injuries, staffing, or substitution of psychoactive drugs.<sup>18</sup>

Reducing the number and type of physical restraints not only meets the federal regulation requirements, it also improves daily life for residents and staff. It is a start toward creating the ideal nursing home environment.

### **Overcoming the Barriers**

Best practices in nursing homes are based on individualizing care: tailoring the environment and staff support to the unique needs of each resident. The goals of individualized care include promoting comfort and safe mobility, optimizing function and independence, and achieving the greatest possible dignity and quality of life. Individualized care not only reduces restraint use, it also lowers specific fall risk factors and minimizes difficult behavior. Staff immediately investigate whether residents who are exhibiting behaviors which precipitate consideration of restraint use are experiencing changes in health status or expressing unmet needs.

However, nurses and certified nurse assistants (CNAs) identify a host of barriers to individualized care—including cost, insufficient staff, safety and regulatory concerns, lack of team cooperation and communication, lack of input by the nursing assistants for care planning, and staff and family attitudes.<sup>19</sup> Furthermore, our legal environment and fear of negative state and federal survey consequences impede the widespread application of standardized, effective strategies to promote restraint elimination. The interaction of all these factors, only a portion of which are controlled by the nursing home, contribute to the complexity and challenge of implementing non-restraint efforts.

To reach the goal of a restraint-free environment in all nursing homes, changes must occur at several levels, including clinical practice, leadership support, regulatory re-alignment, and risk management consideration of financial and legal implications.

The impetus for change, however, is the responsibility of facility administrators, directors of nursing, and other leaders. The success of a restraint elimination program is dependent upon the support of the owners, governing board, administrator, director of nursing, family, and health team members.<sup>20</sup> According to Williams and Finch, administrator support may be the single most important element of a successful restraint-free program.<sup>21</sup> Likewise, Dunbar et al, observed that “one of the most important factors in reducing the use of restraints was the attitude and commitment of administrators to be knowledgeable about restraint-free care, willing to advocate for its implementation, and able to guide and lead their facilities through the process.”<sup>22</sup>

## **Mission**

The mission of this improvement effort is to achieve a decrease in the use of physical restraints while working towards the elimination of all physical restraints in long-term care. This collaborative will support nursing homes in the creation of effective, interdisciplinary restraint reduction programs-resulting in a constant level of comfort and safety for residents.

The Qsource staff will help each nursing home achieve this mission and their facility-specific aim. The Qsource staff will support the team in meeting the Collaborative goals by sharing the best available scientific knowledge and experience on creating safe systems in clinical areas and by teaching and applying methods for organizational change and improvement.

## **Improvement Goals**

The ultimate objective is to eliminate all physical restraints in long-term care. For nursing homes participating in a collaborative, initial goals to support that challenge are:

- No more than 2% of residents are in daily restraints for greater than six consecutive days.
- All (100%) of the eligible resident population receives appropriate assessment, care planning, and monitoring for the management of falls, behavioral symptoms, and other associated resident care issues.
- Deepen the organizational commitment to improved systems of care for the frail elderly by minimizing or eliminating physical restraint use.

Further, participating organizations will set additional goals based on: a) their own QM score and b) other issues they identify as priorities.

## **Methods**

Each participating nursing home facility is expected to develop an aim statement (a statement on what the team expects to accomplish) that includes the specific goals stated above and any others that relate to reducing physical restraints. Nursing facilities may begin restraint reduction efforts for a small group of currently restrained residents within their facility and should select initial populations of focus based on the need for improvement in care processes or outcomes. Overall, the population of focus for this improvement effort will be all residents. The ultimate goal is to spread the improvements to other populations either within or beyond the facility.

Both process and outcome measurement strategies will be used to assess progress toward achieving the goals.

Nursing facilities will learn an improvement strategy that includes breakthrough goals and a method to develop, test, and implement changes in their processes of care and infrastructure. Teams will be expected to collect well-defined data on a monthly basis that relate to their aim and to plot these data over time. Run charts (see Glossary) will be used to assess the impact of changes.

# Expectations

## **The Qsource staff will:**

- Provide information on subject matter, its application and methods for process improvement, both during and between Learning Sessions
- Offer coaching to teams
- Provide an electronic mailing list (email list or listserv) and other communication methods for shared learning
- Assess team progress and provide feedback to teams monthly
- Assist in the collection and summary of data
- Plan and facilitate the four face-to-face meetings (three Learning Sessions and an Outcomes Congress)
- Provide resources to accelerate spread statewide
- Facilitate monthly conference calls
- Maintain and safeguard the confidentiality of privileged data or information in compliance with HIPAA regulations—whether written, photographed, or electronically recorded and whether generated or acquired by the team—which can be used to identify an individual patient, practitioner, nursing facility, health plan or patient population

## **Nursing facilities will:**

- Perform Pre-work Activities
- Connect the collaborative goals to the goals of the facility
- Identify a Senior Leader to sponsor and actively support the team
- Provide the resources necessary for staff to attend learning sessions and to devote sufficient time and effort to the program (approximately one FTE for the duration of the collaborative)
- Send the team leaders to each learning session and the Outcomes Congress
- Plan, design, test and implement small scale improvement cycles
- Participate in teleconferences
- Submit monthly Senior Leader Reports, including the Excel data tracking tool
- Create storyboards for presentation at Learning Sessions II, and III and the Outcomes Congress
- Partner with Qsource staff to promote best practices statewide
- Maintain and safeguard the confidentiality of privileged data or information in compliance with HIPAA regulations—whether written, photographed, or electronically recorded and whether generated or acquired by the team—which can be used to identify an individual patient, practitioner, nursing facility, health plan or patient population

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**Physical  
Restraint  
Reduction**

**Integrate**

**Optimal  
Quality of  
Life**

## **Nursing Facility**

Residents, family, staff, primary care providers

### **1. Community**

- **Resources**
- **Policies**
- **Healthcare  
Providers**
- **Litigation**
- **Regulation**

### **2. Care Planning to Support a Restraint-Free Environment**

#### **3. Assessment**

#### **4. Treatment**

#### **5. Monitoring & Reassessment**

### **6. Organizational Commitment**

**to a culture of continuous quality improvement and person-centered care**

**Table 1: Key Improvement Strategies and Changes**

Improvement Strategy	Key Changes Supporting a Restraint-Free Environment in the Long-Term Care Setting
1. Community	<p data-bbox="394 358 1801 423">Instill principles of person-directed care such that residents and families understand a) the risks and consequences of physical restraints and b) the facility’s commitment to a restraint-free environment.</p> <p data-bbox="394 464 1892 565">Work actively with other healthcare organizations (e.g., with other nursing homes, hospitals, home health, medical transporters, adult day care, assisted living facilities, etc.) to reduce physical restraint use across clinical settings.</p> <p data-bbox="394 605 1934 743">Use local and regional networks of healthcare organizations (e.g., Quality Improvement Organizations, corporate resources, long-term care ombudsmen, state survey and certification agencies, long-term care trade associations, long-term care advocacy groups, professional healthcare associations, low restraint-use states, and successful restraint-free nursing facilities) as resources for supporting a restraint-free environment.</p> <p data-bbox="394 784 1913 849">Use community-based restraint alternative expertise (e.g., recreational therapists, occupational and physical therapists) to augment facility resources if needed.</p> <p data-bbox="394 889 1822 954">Mobilize community resources and engage families and volunteers to meet the daily activity needs of residents.</p> <p data-bbox="394 995 1772 1057">Include personal injury defense attorneys, insurance company attorneys, and/or risk managers in redesigning policies and procedures that support a restraint-free environment.</p>

**Table 1: Key Improvement Strategies and Changes, continued**

Improvement Strategy	Key Changes Supporting a Restraint-Free Environment in the Long-Term Care Setting
2. Care Planning	<p data-bbox="369 310 1850 375">Offer adequate activity and exercise for all residents in an environment that provides frequent structured supervision.</p> <p data-bbox="369 412 1818 444">Designate responsibility and accountability for care plan development, implementation, and oversight.</p> <p data-bbox="369 482 1892 547">Ensure that the care plan adheres to accepted clinical guidelines that include both pharmacological and non-pharmacological interventions and addresses resident-specific goals and actions.</p> <p data-bbox="369 584 1934 649">Develop individualized, targeted interventions and goals related to providing the highest functional status and least restrictive environment.</p> <p data-bbox="369 686 1797 751">Integrate approaches for restraint elimination and prevention of complications (i.e., contractures, skin breakdown, and incontinence) in care plans.</p> <p data-bbox="369 789 1898 854">Implement an interdisciplinary team approach (including CNAs, nurses, and other facility staff who interact with residents) for achieving the goals on the care plan.</p> <p data-bbox="369 891 1898 956">Involve the resident and family in development of an individualized care plan to meet the specific social and personal needs of the resident.</p> <p data-bbox="369 993 1908 1058">Use an interdisciplinary approach and, as appropriate, add orders from primary care provider, therapist, and other professionals to care plan.</p> <p data-bbox="369 1096 1871 1161">Address individual needs for staff assistance and equipment during toileting, transfer, ambulation, and all activities of daily living to promote safety.</p> <p data-bbox="369 1198 1948 1263">For residents with additional unsafe behaviors, include general behavior management strategies and specific individualized strategies to reduce risk of injury, increase comfort, provide assistance, and increase surveillance.</p> <p data-bbox="369 1300 1325 1333">Incorporate assessment data/information into resident plan of care.</p>

**Table 1: Key Improvement Strategies and Changes, continued**

Improvement Strategy	Key Changes Supporting a Restraint-Free Environment in the Long-Term Care Setting
3. Assessment	<p>Screen residents for fall risk, behavioral symptoms, medical treatments that increase fall risk, and any other associated resident care issues at each of the following times:</p> <ul style="list-style-type: none"> <li>▪ Within 24 hours of admission or readmission</li> <li>▪ After a change in condition</li> <li>▪ After a change in medication</li> <li>▪ After a fall</li> <li>▪ Annually</li> </ul> <p>Designate responsibility and accountability for risk assessment.</p> <p>Empower all members of the interdisciplinary team to continually assess the residents currently restrained or being considered for restraints.</p> <p>Empower all members of the interdisciplinary team to continually assess problems, such as fall risk, that may lead to restraint use.</p> <p>Ensure assessment tools capture the necessary data to address risk factors related to falls, behaviors, and related resident care issues.</p> <p>Obtain information from resident, family, or caregivers regarding the resident’s previous life experiences, interests, and social patterns in order to provide an individualized approach to restraint-free care.</p>

**Table 1: Key Improvement Strategies and Changes, continued**

Improvement Strategy	Key Changes Supporting a Restraint-Free Environment in the Long-Term Care Setting
4. Treatment	<p>Determine which alternatives to restraints might be successful in each situation, and implement the alternative method.</p> <p>Individualize seating for residents to improve positioning and comfort, ensuring correct fit to meet both the resident’s care and quality of life needs.</p> <p>Modify the environment to accommodate special needs and limitations of residents.</p> <p>Assure that treatment is addressing the true root of the problem.</p> <p>Standardize processes for communicating treatment plans to all members of the interdisciplinary care team, resident, and family members.</p> <p>Provide meaningful individualized activity and exercise for residents.</p>
5. Monitoring and Reassessment	<p>Regularly inspect and repair environmental safety hazards (clutter, poor or insufficient lighting, unstable furniture, hard-to-reach personal items, unsafe flooring) in all resident rooms, bathrooms, hallways, and common areas.</p> <p>Regularly inspect and repair all wheelchairs, canes, walkers, and other equipment such as gerichairs and lifts.</p> <p>Provide a supportive structure to staff, family, and residents to allow for feedback on care planning, environment and equipment, safety, and satisfaction.</p> <p>Reassess residents and modify care plans until residents are achieving the highest level of functioning in the least restrictive environment.</p> <p>Incorporate assessment data/information into resident plan of care. Standardize processes for monitoring and documenting the resident’s response to the plan of care and for care plan revision.</p>

**Table 1: Key Improvement Strategies and Changes, continued**

Improvement Strategy	Key Changes
6. Organizational Commitment	<p data-bbox="415 272 1967 310"><b>Supporting a Restraint-Free Environment in the Long-Term Care Setting</b></p> <p data-bbox="415 310 1967 347">Establish a facility-wide commitment to developing and maintaining a restraint-free environment.</p> <p data-bbox="415 347 1967 384">Consistently assign staff to resident or unit to encourage learning resident routine and preferences.</p> <p data-bbox="415 384 1967 422">Articulate a vision of a high quality, restraint-free environment.</p> <p data-bbox="415 422 1967 459">Provide stable administrative and clinical leadership committed to a high quality, restraint-free environment.</p> <p data-bbox="415 459 1967 496">Identify a team of key staff from various roles and skill levels to participate in interdisciplinary physical restraint elimination.</p> <p data-bbox="415 496 1967 534">Embed physical restraint guidelines and accepted practices into daily procedures.</p> <p data-bbox="415 534 1967 571">Continually evaluate the effectiveness of the physical restraint elimination program.</p> <p data-bbox="415 571 1967 609">Provide effective ongoing training on physical restraint elimination for staff, volunteers, family members, and residents.</p> <p data-bbox="415 609 1967 646">Consistently provide the number and skill-mix of staff and resources necessary to implement high quality, restraint elimination processes and activities 24 hours a day, 365 days a year.</p> <p data-bbox="415 646 1967 683">Consistently provide rewards and incentives in recognition of physical restraint elimination quality improvement to staff volunteers, family members, and residents.</p> <p data-bbox="415 683 1967 721">Actively seek out improvements in physical restraint elimination and spread them throughout and beyond the organization.</p>

**Table 1: Key Improvement Strategies and Changes, continued**

Improvement Strategy	Key Changes
6. Organizational Commitment (cont.)	Supporting a Restraint-Free Environment in the Long-Term Care Setting Implement policies and protocols related to restraint-free environment. Incorporate general and specific behavior management strategies, comprehensive falls management, and appropriate fall-response techniques into new employee orientation and annual training for all staff.

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## Measurement Strategy revised 1/11/06

### Required Outcome Measures

Measure	Numerator	Denominator	Appropriate Goal	Data Location	Rationale
Proportion of residents physically restrained any time within two calendar days of admission (NHIFT 1) <i>Restraint defined as any device used to prevent resident from independent movement/activity.</i>	Number of residents physically restrained any time within two calendar days of admission	Total number of admitted residents in the last month	0%	Restraint log	Individualized strategies to address underlying problems should replace the restraint of newly admitted residents.
Percentage of residents with falls resulting in serious injury (any fracture, laceration with suture or closed head injury)	Number of residents who had a fall resulting in a serious injury in the last month	Total number of residents who have fallen in the last month.	Reduce to <10%	Incident log	The 10% of falls in nursing homes that result in serious injury may be reduced through individualized care planning and restraint elimination.
Percentage of residents who were physically restrained on <b>LAST FRIDAY</b> of month	Number of residents physically restrained on the LAST FRIDAY of month	Number of residents on the LAST FRIDAY of month	<b>Initial: 2%,</b> Long-term: 0%	Restraint Log	All residents have the right to independence and autonomy in a restraint-free environment
<b>The following measure will be provided for you.</b>					
Percentage of residents who were physically restrained ( <i>as defined by CMS</i> ) daily during the seven-day assessment period (CMS QM)	Number of residents physically restrained daily during the previous month's seven-day assessment period	Total number of residents in the last month	Initial: 2%, Long-term: 0%	NURSING HOME COMPARE Quarterly Basis by Qsource	All residents have the right to independence and autonomy in a restraint-free environment.

### Required Process Measures (cont.)

Measure	Numerator	Denominator	Appropriate Goal	Data Location	Rationale
<p>Proportion of residents physically restrained that received a re-evaluation to reduce or eliminate the restraint. (NHIFT 2)</p> <p><i>Restraint defined as any device used to prevent resident from independent movement/activity.</i></p>	Number of residents physically restrained in the last month who received a re-evaluation to reduce or eliminate the restraint	Total number of physically restrained residents in the last month	100%	Restraint log	Efforts to reduce physical restraint use should be continuous.

### Optional Process Measures

Measure	Numerator	Denominator	Appropriate Goal	Data Location	Rationale
<p>Percentage of families provided education about restraint reduction and facility policy upon admission or consideration of restraint</p> <p><i>(Educational materials determined at local facility.)</i></p>	Number of families provided education upon admission or consideration of restraint in the last month	Number of families who have had a resident admitted or consideration of restraint in the last month	100% of families will be educated about restraint reduction upon admission	Admission packet Check-off list	Informing families and residents may increase cooperation and aid staff in reduction efforts.
Percentage of residents with non-restraint interventions tried prior to initiating a physical restraint	Number of residents with at least one non-restraint intervention tried prior to initiating a physical restraint	Total number of residents restrained in the last month	100%	Restraint log Care plan Observation check (random sampling)	Often a non-restraint intervention may be effective and should always be tried prior to restraint use.
Of those residents who have fallen in the last month, percentage who have fallen two or more times within a six-month timeframe	Number of residents who have fallen a) during the last month and b) two or more times within a six-month timeframe	Total number of residents in the last month	Reduce by 20%	Incident log	Identifies the need for “frequent faller” interventions.

**Action Period**

This period is the time between learning sessions when teams work on improvement in their nursing homes. During this time, team members are supported by the Qsource staff and they are connected to other Collaborative team members.

**Aim or Aim Statement**

This is a written, measurable and time-sensitive statement of the accomplishments a team expects to result from its improvement effort. The aim statement contains a general description of the work, the population of focus, numerical goals and a statement on spreading the changes to another population.

**Annotated Run Chart or Annotated Time Series**

This is a line graph showing results of improvement efforts plotted over time. The implemented changes are called annotations that are noted on the chart at the time they occur, allowing the viewer to connect changes made with specific results.

**Assessment Scale**

A numerical scale is used to assess the progress teams make in reaching their aim. One equals forming a team and five equals outstanding, sustainable improvement. In each Collaborative, faculty assesses the teams and may also ask them to evaluate their own progress using this scale. The expected level of attainment by the end of the Collaborative is a four, which equals significant progress.

**BTS Collaborative**

Breakthrough Series Collaborative (See Collaborative)

**Change Concept**

This is a general idea for changing a process. Change concepts are usually at a high level of abstraction, but lead to multiple specific ideas for how to change processes. “Simplify” and “Consider all parties as part of the same system” are examples of change concepts.

**Change Package**

This is a collection of change concepts and key changes.

**Clinical Champion**

This person is a strong believer in the improvements and is willing to try them and involve others in the change process. Teams need at least one nurse champion. Champions in other disciplines who work on the processes are important to have on the team as well. The clinical champion becomes a resource person for the team and others.

**Collaborative**

This effort is a time-limited initiative (usually 6-13 months) made by multiple organizations that come together with faculty to learn about and create improved processes on a specific topic. The expectation is that the teams share expertise and data with each other. Everyone learns and everyone teaches.

**Collaborative Chair**

This is the leader of the Collaborative who is usually an expert in the topic.

**Collaborative Team**

This team consists of those individuals from the nursing homes that drive and participate in the improvement process. A core team of 3-4 individuals attends the learning sessions, but a larger team of 6-8 people from various disciplines within the nursing home participates in the improvement process.

**Community of Practice**

This community is made of groups of people who share a concern, set of problems, and sense of purpose. They complement existing structures by promoting collaboration, information exchange, and sharing of best practices across the boundaries of time, distance, and organizational hierarchies. A great deal of knowledge may be generated in these groups.

**Collaborative Coordinator(s)**

This Qsource staff member is responsible for the day-to-day activities of the Collaborative, including meetings, materials, phone calls, reports, and information management.

**Cycle**

See PDSA cycle.

**Day-to-Day Leader**

This person on the nursing home's team is responsible for driving the improvement process every day. This person manages the team, arranges meetings, and assures that tests are completed and that data are collected.

**Director**

This manager of a Collaborate works with the Qsource staff, teaches and coaches teams, and plans and executes learning session and action period activities.

**Early Adopter**

In the improvement process, the opinion leader within the nursing home brings in new ideas from the outside, tries them, and uses positive results to persuade others in the organization to adopt the successful changes. A person who implements these changes in this initial phase is an early adopter.

**Early Majority/Late Majority**

Nursing home staff who will adopt the changes during the initial phase are considered the early majority. The late majority are those in the nursing home who will adopt a change only after it is tested by an early adopter or after the majority of the organization is already using the change.

**Electronic Mailing List or E-mail list**

This communication system allows teams to stay connected with the leadership team and each other during the action periods. Sharing information, getting questions answered, and solving problems are all part of e-mail list activity.

**Handbook**

This manual is the complete description of the Collaborative, along with expectations and activities to complete before the first Collaborative meeting.

**IHI**

Institute for Healthcare Improvement

**Implementation**

This happens when staff makes a change a permanent part of the system of care. A change may be tested first in a pilot population and then implemented throughout the organization.

**Improvement Advisor**

This is the expert in process improvement and measurement who assists the Qsource staff and director in guiding the Collaborative's work and coaching teams.

**Improvement Cycle**

See PDSA cycle.

**Key Changes**

These are the essential process changes that will help lead to breakthrough improvement. These changes are usually developed by the faculty and leadership team and are based on the literature and their experiences.

**Key Contact**

This individual on the nursing home team takes responsibility for communication between the team and Qsource, including monthly reporting and distributing information to team members. The key contact is often the day-to-day leader on the team.

**Key Messenger**

This person will spread ideas to others within the nursing home.

**Knowledge Management**

This is a method for gathering information and making it available to others.

**Leadership Team**

This small group of topic experts assists the Qsource and director in teaching and coaching teams. Usually the leadership team contains representatives from all of the disciplines affected by the change process.

**Learning Session**

During a one or two day meeting, team members meet with faculty and collaborate to learn key changes in the topic area, including how to implement changes, accelerate improvement, and overcome barriers. Teams leave this meeting with new knowledge, skills, and materials that prepare them to make immediate changes.

**Measurement Strategy**

This collection of required and optional measures describes in detail how to analyze data related to outcomes and processes within the change process. These measures provide direction on appropriate goals.

**Measure**

This is a focused, reportable unit that will help a team monitor its progress toward achieving its aim.

**Model for Improvement**

This approach to process improvement was developed by Associates in Process Improvement and helps teams accelerate the adoption of proven, effective strategies.

**Outcome Measure**

This is a method for measuring change or lack of change in the well-being of a defined population. Improvement in an outcome measure reflects the health status of the resident, whereas a process measure reflects the care delivery to the resident. Improvement in an outcome measure has a direct effect on morbidity and mortality.

**Outcomes Congress**

This is a meeting at the end of the Collaborative during which best practices in the topic area are presented to others interested in making improvements in the area.

**PDSA Cycle**

PDSA is an abbreviation for plan, do, study and act that is a structured trial of a process change. Drawn from the Shewhart Cycle, this effort includes the following steps:

plan – a specific planning phase

do – a time to try the change and observe what happens

study – sometimes called “check,” an analysis of the results of the trial

act – developing next steps based on the analysis

The PDSA cycle will naturally lead to the “plan” component of a subsequent cycle. PDSA cycles are also called “rapid cycles” or “improvement cycles.”

**Pilot Population**

See population of focus.

**Pilot Site**

This is the location within the nursing home where changes are tested. After implementation and refinement, team members and staff will spread the changes to additional locations.

**Population of Focus**

This is a designated set of residents who will be monitored to determine whether changes resulted in improvements. For this Collaborative, a pilot population might be defined as residents who are currently in physical restraints.

**Pre-Work Period**

This time period is before the first learning session when teams prepare for their work in the Collaborative. Pre-work activities include selecting team members, registering for the first learning session, scheduling initial meetings, preparing an aim statement, defining a pilot population, selecting measures, and initiating data collection.

**Process Change**

This is a specific change in process within the nursing home. More focused and detailed than a change concept, a process change describes what specific changes should occur. “Instituting a falls assessment for residents who fall and those found at high risk during screening upon admission, annually and after change in condition” is an example of a process change.

**Process Measure**

This is a method for measuring change or lack of change in the processes of care related to the topic. This measure reflects the process of care delivery to the resident.

**QIO**

This is an abbreviation for a quality improvement organization. Each state has a QIO that is under contract with the Centers for Medicare & Medicaid Services (CMS) to monitor and improve the quality of care for people with Medicare.

**Rapid Cycle**

See PDSA cycle.

**Run Chart**

See annotated time series.

**Sampling Plan**

This is a specific description of the data collected by the team that includes the time period of the data collection and the subjects involved. The sampling plan is included on all senior leader reports. It emphasizes the importance of gathering samples of data to obtain “just enough” information.

**Senior Leader**

This person is the executive in the nursing home who supports the team and controls the resources used in the processes to be changed. This person is usually at the administrator level or higher. The senior leader works to connect the team's aim to the organization's mission, provides resources for the team, and promotes the spread of the team's work to others.

**Senior Leader Report**

This report is the standard format for monthly progress updates in a Collaborative. This two-page report includes an aim statement, measures to be used, a sampling plan, a listing of the changes made, and the results displayed graphically in run charts. The nursing home team prepares the report and sends it to the senior leader and to Qsource. Qsource staff review and summarize monthly reports.

**Spread**

This is the intentional and purposeful expansion of the number and type of people, units or organizations using the improvements. The theory and application of spread comes from the literature on diffusion of innovation.

**Staging Plan**

This plan details which populations will be included in the spread and in what order.

**System Leader**

This team leader in the nursing home has direct authority to allocate the time and resources needed to achieve the team's aim, has direct authority over the particular systems affecting the change, and will champion the spread of successful changes to other resident populations. This person may be the administrator or director of nursing services.

**Technical Expert**

This team member in the nursing home has a strong understanding of the process to be improved and changes to be made.

**Test**

This is a small-scale trial of a new approach or a new process of care. A test is designed for staff to learn if the change results in improvement and allows staff to fine-tune the change to the nursing home and residents. Tests are carried out using one or more PDSA cycles.

**Tipping Point**

This concept states that small changes will have little or no effect on a system until a critical mass is reached. Then, a further small change tips the system and a large effect is observed.

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