NJHA Institute for Quality & Patient Safety’s Initiative
To Reduce the Incidence of Pressure Ulcers across the Continuum of Care

Introduction
Welcome to the New Jersey Hospital Association Institute for Quality and Patient Safety’s Pressure Ulcer initiative. This section of the Charter Handbook will give you some general information about the collaborative experience. The second section will provide you with more specific guidance about preparing for the project.

Some preliminaries about collaborative structure and methodology: The NJHA collaborative will involve many teams working together intensely. During the collaborative, participants will engage in face to face Learning Sessions, and maintain continual contact with other registered teams and faculty members via site visits, conference calls, a dedicated Internet Web site, listserv and e-mail. A Change Packet, defined as a collection of evidence-based ideas and tools supported by medical and nursing literature, will be given to all participating organizations.

Collaborative Expectations

- Provide education on the latest and best subject matter application and research, as well as tools and interventions for process improvement, both during and between Learning Sessions
- Coach teams and organizations
- Assess participants’ progress on a monthly basis and provide feedback to each organization regarding its progress

Participating organizations are expected to:

- Connect the goals of the collaborative work to a strategic initiative in their organization
- Provide a senior leader to sponsor and actively support the team and champion the spread of improvements within the facility
- Provide the resources to support the team, including resources necessary for Learning Sessions and staff time to devote to this effort;
- Provide expert staff from key support units in the organization to support the team as needed
- Perform tests of change leading to process improvements within the organization
- Communicate regularly with their partners in other healthcare settings
- Share information with the collaborative, including details of changes made and data to support these changes, both during and between Learning Sessions
Problem Statement
Pressure ulcers are a common, serious and significant healthcare occurrence in the frail and elderly, causing pain, disfigurement and slow recovery from co-morbid conditions, as well as interfering with activities of daily living. Pressure ulcers are strongly associated with mortality and lengthy stays in acute-, post-acute, and long term care settings.

Every year, pressure ulcers affect over 1 million patients and residents in hospitals and nursing homes. Costs associated with pressure ulcer treatment exceed $1.335 billion, 1 and of that, more than $355 million is spent on treatment in the long term care setting2. While financial costs associated with pressure ulcers are high, the human toll of pain, depression, altered self-image, stress, infection and increased mortality and morbidity is immeasurable. Hospital-acquired pressure ulcers are associated with a greater risk of death within one year of hospitalization.3

Healthy People 2010 has made one of its objectives to “reduce the proportion of nursing home residents with a current diagnosis of pressure ulcers.” The National Quality Forum has identified “Stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility” as one of its serious reportable events, and this has been incorporated into the recently signed New Jersey Patient Safety Act. The recent Institute of Medicine report, Crossing the Quality Chasm: A New Health System for the 21st Century (2001), calls for greater integration of healthcare delivery systems across different settings to improve quality of care transitions and reduce the threat of medical errors.

Approximately 70 percent of all pressure ulcers occur in persons older than 70 years4, which may be related to the changes in aging skin. Risk factors include (not an all inclusive list): immobility or limited mobility, chronic illness, urinary and fecal incontinence, malnutrition, contractures, edema, fever, medications and hospital visits to the emergency department, radiology department, etc.

Factors that contribute to skin breakdown are pressure, shear, friction and moisture:

- Pressure over bony prominences can impede blood flow to the skin and underlying tissues. Because muscle and subcutaneous tissue are more susceptible to pressure-induced injury than epidermis, pressure ulcers often are worse than their initial appearance. Visible changes may not reveal what lies beneath.
- Shearing is the sliding of adjacent structures. The overall effect is tissue ischemia.
- Moisture from urinary or fecal incontinence or perspiration can lead to tissue maceration, and when any of the other factors are present, may result in skin breakdown.

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Pressure ulcers were defined by the Agency for Health Care Policy and Research (AHCPR) in 1992 and incorporated in the definition of CMS’ F314-tag at 42 CFR §483.25 (c) as “any lesion caused by unrelieved pressure resulting in damage to the underlying tissue.” Pressure ulcers are usually located over bony prominences with 95 percent occurring in the lower part of the body.

Mission
In this collaborative, the mission of the NJHA Institute for Quality & Patient Safety and participating healthcare organizations is to achieve breakthrough improvement in the quality of care provided to elderly patients in pressure ulcer prevention. The mission also includes developing a means to spread the initial learning and improvement more widely within the participating organizations.

Our goals are to close the gap between what is known and what is practiced and to establish new systems of care that will produce: better clinical outcomes, fewer adverse events, much higher levels of patient and family satisfaction, lower costs, better coordination of care and enhanced communication among multiple healthcare settings. This will be achieved by implementing a systemwide model of care, one that includes establishing a culture of safety within the facilities, developing and maintaining a skilled, coordinated and collaborative care team that focuses on assessment and prevention of pressure ulcers across settings, improving communication and improving clinical outcomes.

Healthcare organizations with a positive safety culture are characterized by facile communication, mutual trust, shared belief of the importance of safety and by confidence in the efficacy of preventive measures. Improvements to care will be affected by implementing systemwide changes that focus on the safe delivery of appropriate clinical protocols on a daily basis for all patients and residents.

Methods
Each organization is expected to develop an aim statement that includes specific goals relating to preventing pressure ulcers. Organizations should begin by working initially within a specific nursing unit (pilot population) with the goal being to ultimately spread the improvements to other units throughout the organization. Organizations should select initial pilot populations based on areas with known clinical opportunities for improvement and the presence of local champions.

Both process and outcome measurement strategies will be used to assess organizational progress toward achieving collaborative goals. Organizations will learn an improvement strategy that includes breakthrough goals and a method to develop, test and implement changes to their systems. Organizations will be expected to collect well-defined data that relate to their aim at least monthly and plot them over time for the duration of the collaborative. Run charts will be used to assess the impact of changes.

NJHA and faculty will provide guidance to participating organizations in testing and implementing best practices. Participating organizations will capitalize on mastering process improvement from these focused projects by developing a method for disseminating the system redesign to other units in the organization. Such dissemination will require active involvement from the senior leaders of each organization.
Learning Sessions are the major integrative events of the collaborative. Through plenary sessions, small group discussions and team meetings, attendees have the opportunity to:

- Learn from faculty and colleagues
- Receive individual coaching from faculty members
- Gather new knowledge on the subject matter and process improvement
- Share experiences and build collaboration on improvement plans.

The time between Learning Sessions is called an **Action Period**. During Action Periods, collaborative participants work within their organizations toward major breakthrough improvement. Although participants focus on their own organizations, they remain in continuous contact with other collaborative participants and faculty. In addition, collaborative participants share the results of their improvement efforts in monthly reports. We encourage and expect the participation of your other team members in Action Period activities.

During the Action Periods, there will be monthly conference calls for teams from all participating organizations with faculty and co-directors of the collaborative. Site visits to participating organizations may also be utilized if needed to work with team members more closely and provide more education and support.

**Preparation for this Initiative**

We will expect each team to complete the following tasks as soon as possible:

1. **Identify Leadership and Assemble a Team**
   The Pressure Ulcer Collaborative requires change in an organization’s culture and infrastructure as well as specific changes in aspects of patient care. A number of different individuals are required to effectively adopt and implement these changes. The first step for each participant is to assemble a team committed to accomplishing the goals and objectives.

   Your own project team should include 5-6 individuals who can work together on this initiative. The team should have representation from administrative leadership, clinical/technical expertise and day-to-day unit leadership and staff. Team members should include nursing, pharmacy and nutrition.

   The **system leader** is someone with sufficient authority in the organization to institute change and to allocate the time and resources necessary to achieve the team’s goal. Significantly, the leader must have authority over all areas to be affected by the change. Examples of an appropriate leader in a hospital include a vice president for patient services, chief of medicine or service line director. In other settings it may be the administrator, director of nursing or director of quality improvement. This person is on the project team, but may also be part of senior management. Often the system leader is the senior leader who “adopts” this team.

   A **clinical technical expert** is one who knows the subject intimately and who understands the processes of care. It is beneficial to have at least one physician champion on the team, but this can also be a clinical nurse specialist or wound care nurse. This champion should have a good working relationship
with colleagues and with the day-to-day leader(s) and should be interested in driving change in the system.

A *day-to-day leader* is the key point person for the project, assuring compliance with necessary assessments, interventions and data collection. This person understands all the details of the process and the effects of change once made. This leader also needs to be able to work effectively with the clinical technical expert. The day-to-day person will be NJHA’s key contact at your organization for the purpose of this project and will be responsible for coordinating communications between and among the onsite and partner team and the collaborative staff. The responsibilities of the day-to-day leader also include:

- Telephonic communication and meeting facilitation
- Orchestration of team activities
- Overseeing preparation of reports and presentations
- Assuring timelines are met
- Acting as the official team data collector, recorder and ensuring correct and thorough project documentation
- Participates as a full fledge team member

**Get Started on Improvement: Defining an Aim**

You will be asked to set a goal for your team. An aim is an explicit statement summarizing what your organization hopes to achieve during the collaborative. For example, an aim might be to reduce your organization’s incidence of new Stage II pressure ulcers by 25 percent. The approach to improvement we will be using in the collaborative is based on three fundamental questions:

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 improvement?

In setting your aim(s), be sure to do the following:

- Involve senior leaders – leadership must align the aim with strategic goals of the organization.
- Base your aim on data – examine new Stage II pressure ulcer rates for the selected unit.
- State the aim clearly and use numerical goals – teams make better progress when they have unambiguous, specific aims. Setting numerical targets clarifies the aim, helps to create tension for change and directs measurement. For example, an aim to decrease new Stage II pressure ulcers by 25 percent will be more effective than the aim to “reduce the new pressure ulcer occurrence rate.”

**Example of Aim:** Aim: To redesign the care systems of your facility in order to reduce harm and improve outcomes for patients using the following goals:
2. Assess Your Organization

This collaborative is about improvement in care, not just measurement. But measurement will play a number of important roles throughout the collaborative. Assessment and measurement of the quality of care and patient safety is an important ongoing component of a healthcare organization serious about the care it provides its patients. Measurement is required to assure that all staff members stay aware of changes in level of care and safety.

Measurement will help you evaluate the impact of changes you make to improve care in your facility. Always remember that measurement should accelerate improvement, not slow it down. Your team needs just enough measurement to be convinced that the changes you are making are leading to improvement.

The most important measures required are those that directly relate to your aim. You will be able to monitor your team’s progress throughout the collaborative by graphing key measures provided by the Institute. Data points should be plotted over time on a run chart.

- **Do a Walk Through.** Your work in the collaborative will lead you to fundamental system change, but even with a strong aim, you may not know where to begin. One simple way to understand where major problems lie is to experience your system. We are strongly recommending that at least two members of your team do a walkthrough of your system prior to the First Learning Session.

- **Tips for Making the Walkthrough Most Productive.** Determine with your team where the starting and ending points of your walk through should be, taking into consideration issues of hand-offs, unclear communication, unclear roles, etc.

  Set aside a reasonable amount of time (at least two hours) to conduct the walk through. Make it real. Make a realistic paper trail of charts, lab reports, referrals, transfers, medications, etc. During the walk through, note both positive and negative experiences, as well as any surprises. Where was communication unclear? Where was the system so complex that the next step was difficult? When was needed information not available?

  If possible, meet with your team and debrief them on what you did and what you learned.
Collaborative Glossary

Aim
A written, measurable and time sensitive statement of the expected results of an improvement process.

Change Concept
A general idea for changing a process. Change concepts are usually at a high level of abstraction, but evoke multiple ideas for specific processes. Simplify, reduce handoffs and consider all parties as part of the same system are all examples of change concepts.

Collaborative
A time-limited effort (usually six to 12 months) of multiple organizations that come together with faculty to learn about and to create improved processes in a specific topic area. The expectation is that the teams share expertise and data with each other so that, everyone learns, everyone teaches.

Collaborative Team
Involves all participants in the improvement effort.

Cycle or PDSA Cycle
A structured trial of a process change. Drawn from the Shewhart cycle, this effort includes:

Plan - a specific planning phase;
Do - a time to try the change and observe what happens;
Study - an analysis of the results of the trial; and
Act - devising next steps based on the analysis.

This PDSA cycle will lead naturally to the Plan component of a subsequent cycle.

Incidence
The number of specified new events numerator place in a defined period of time in a given area or population. It is the numerator in the calculation of an incidence rate for the event in question. The denominator is the population at risk within the given time period.

Key Changes
The list of essential process changes that will help lead to breakthrough improvement, usually created by the Collaborative Chair and Faculty based on literature and their experiences.

Measure
An indicator of change. Key measures should be focused, clarify your team’s aim and be reportable. A measure is used to track the delivery of proven interventions to patients and to monitor progress over time.
Model for Improvement
An approach to process improvement, developed by Associates in Process Improvement, which helps teams accelerate the adoption of proven and effective changes.

PDSA
Another name for a cycle (structured trial) of a process change, which includes four phases: Plan, Do, Study and Act. (See the definition of "Cycle" above.) Sometimes known as Plan, Do, Check and Act (PDCA).

Prevalence
The number of events present in a given population at a given time. It is the numerator in the calculation of a prevalence rate for the event in question. The denominator is the population at risk at a given time.

Process Change
A specific change in a process in the organization. More focused and detailed than a change concept, a process change describes what specific changes should occur. “Institute a pain management protocol for patients with moderate to severe pain” is an example of a process change.

Run Chart
A graphic representation of data over time, also known as a time series graph or line graph. This type of data display is particularly effective for process improvement activities.

Sampling Plan
A specific description of the data to be collected, the interval of data collection and the subjects from whom the data will be collected. This is included on all Senior Leader reports. It emphasizes the importance of gathering samples of data and to obtain just enough information.

Team
The group of individuals, usually from multiple disciplines, that participates in and drives the improvement process. A core team attends the Learning Sessions, but a larger team of six to eight people participates in the improvement process in the organization.

Test
A small-scale trial of a new approach or a new process. A test is designed to learn if the change results in improvement and to fine-tune the change to fit the organization and patients. Tests are carried out using one or more PDSA cycles.