Learning Objectives:

- Introduction to NCH’s Preventable Harm Index
- Patient Safety Program
  - Low risk behaviors in a high risk environment
- The organizational benefit of ‘branding’ your patient safety program
- Describe several methods to create awareness and build momentum for a patient safety program
## Background – Nationwide Children’s:

- Located in Columbus, OH
- 359 licensed beds
  - 110 leased off-site NICU/NSCU beds
- 18,000 annual Inpatient Admissions
- 19,000 annual Surgical Procedures
- 84,000 annual Emergency Department visits
- 120,000 annual Urgent Care visits
- Over 400,000 Primary Care and Specialty Clinic visits

Background on NCH.
Picture of where NCH sits in relation to the city of Columbus.
New replacement hospital being built with two floors opening in 2011 and the entire hospital opening in 2012.
### Awards – Nationwide Children’s:

- Magnet re-designation (2009)
- *Parents* magazine's "10 Best Children's Hospitals"
- 2008 Best Places to Work in central Ohio by *Columbus Business First.*

NCH has many things to be proud of and as an organization, we strive on improving ourselves.
The Vision and Aim came from our Chief Medical Officer, Dr. Rich Brilli.

We care for almost 700,000 patients each year and during that time miracles occur and lives are saved by our caring and hard working staff members, but in the mix of things, patients are unintentionally harmed- does it come with the territory of being human, working in a high risk environment with high risk situations- just part of our job, right?
Children Harmed at NCH:

- Total Number of Patients Harmed in 2007 (Preventable)
- Total Number of Patients Harmed in 2008 (Preventable)

Mostly minor events, some severe, but ALL preventable.

This slide represents how we were doing keeping our patients free from harm.
New CMO joined Nationwide Children’s Hospital and the focus was not only on quality, but included patient safety. A goal was made; by 2013, there will be Zero Preventable Harm at NCH. Is Zero Possible? Do families and patients want to hear reduce harm or eliminate harm?
Zero is IMPOSSIBLE?

- Maybe ....Probably... no one has ever tried
- Is REDUCE what our families expect ?
- Is it OK to say to our families that a few preventable harm events or a few preventable deaths are acceptable, especially because it is hard to do
- By the very definition we are using, these events are preventable
What is “Preventable Harm”?  

- **Practical Definition:**
  - Harm or Injury to a patient that could have been prevented by properly administering evidence based practices

- **NCH Legal Definition**
  
  Nationwide Children’s Hospital’s Preventable Harm Index is a classification system designed to track similar occurrences with the goal to eliminate each class of occurrence. We have chosen to classify these occurrences as “harm” and “preventable” as a call to action for Children’s healthcare community. It is designed to change the thinking that these occurrences are expected complications and, to instead, see them as a challenge that we need to work to reduce and to ultimately eliminate. Designation of “Preventable Harm” does not mean the occurrence in question was necessarily preventable at the time, which is often impossible to determine. We, instead, focus on the opportunity to improve patient care and, therefore, define harm as “preventable” in order to create the opportunity to eliminate classes of “harm” and get to ZERO.
Preventable Harm (PHI):

- Why the need for the legal definition?
  - The word PREVENTABLE!!
  - Potentially public information
  - Need to protect institution from inadvertent
    “admission of causation” that could be used in a
    litigation
  - Reference to a “class of occurrences” which can
    potentially be eliminated
  - We still struggle with these barriers to full
    transparency
Preventable Harm Index (PHI):

- PHI is designed to aggregate the total number of harm events
- Unlike rates, the PHI solely focuses on the numerator
- The PHI can be added up to a total number - unlike a rate
  - A number gives more meaning and makes it more personable - a child (daughter, son, grandson, niece, etc.)
  - Great motivator
This is NCH’s Preventable Harm Index (PHI) that was developed by Dr. Richard Brilli.

<table>
<thead>
<tr>
<th>Preventable Harm Index</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Q1 2010</th>
<th>Q2 2010</th>
<th>Q3 2010</th>
<th>Q4 2010</th>
<th>Jan 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Acquired Infections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication Errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Severity 4-9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-ICU ACT Preventable Cardiac Arrests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. Complications After Surgery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious Falls: Inpatient/Outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious Safety Events (SSE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Acquired Pressure Ulcers (stage 2 or higher)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventable Harm not reported elsewhere</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Patients w/ Preventable Harm</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
<td>sum</td>
</tr>
</tbody>
</table>

This is NCH’s Preventable Harm Index (PHI) that was developed by Dr. Richard Brilli.
At each board meeting, we update the board on how we are doing on reaching our goal of Zero by 2013.

The colors indicate how we are doing from quarter to quarter in that particular category:
Red= worsening;
Yellow= No Significant Change;
Green= Improving
If we keep doing the same thing over and over then we can expect the same results over and over.
NCH’s Journey to Creating a Patient Safety Culture:

- Partnered with a consulting Firm - HPI
- Conducted a diagnostic review on our data
- Determined the Individual and System failure modes associated with the events
  - Collectively selected low risk behavior tools - Zero Hero Essentials
- Created our Patient Safety Program - Zero Hero
Zero Hero is our Patient Safety brand. Zero= Zero Preventable Harm by 2013. Hero= It will take an heroic effort by everyone, not just one person.
Achieving “Zero” Preventable Harm:

- Will be a heroic effort
- Is going to take EVERYONE
- Each of us must do our part to make EVERY DAY a SAFE DAY in our hospital
- We need to personalize this effort to Nationwide Children’s Hospital
Zero Hero Training:

- **All NCH employees attend training**
  - Clinical and Non-Clinical
  - To date: 7,028 out of 7,200 have been trained
- **Leaders in the organization attended 2 sets of training:**
  - 1) **Zero Hero: Basic Training**
    - Made the case and taught the low risk behaviors and tools (Zero Hero Essentials)
  - 2) **Zero Hero: Leadership Methods Training**
    - Introduced ways to keep reinforcing the use of the Zero Hero Essentials - Rounding to Influence and 5:1 feedback

---

Zero Hero
Create a Safe Day Every Day

Nationwide Children's Hospital ZD
Safety Expectations and Error Prevention

This is the toolkit of patient safety behaviors adopted for the staff by a group of our peers. Recall that this toolkit was developed as the result of a study of human errors experienced by care providers, including physicians, at Nationwide Children’s Hospital. Each expected safety behavior has one or more simple error prevention techniques that can be used to meet the expectation and reduce the likelihood of human errors. The behaviors are aligned with the organization’s Mission: We Do the Right Thing – We Are One Team – We Get Results.

<table>
<thead>
<tr>
<th>EXPECTATIONS</th>
<th>TECHNIQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What are Behavior-Based Expectations (BBEs)?</strong></td>
<td><strong>What are Error Prevention Techniques?</strong></td>
</tr>
<tr>
<td>Behavior-based or behavioral expectations are the manner of conducting oneself that are considered to be reasonable, necessary, bound in duty or obligated. We are expected to meet certain defined standards and conduct our work in a specific manner. For example, a nurse and physician should be expected to communicate clearly and maintain a cooperative culture in the care of a patient.</td>
<td>An error prevention technique is a specific action or method an individual completes or uses to accomplish or satisfy a desired behavior-based expectation. For example, if an organization establishes a behavioral expectation regarding “clear communication”, techniques such as “repeat-back communications”, “asking clarifying questions, or using “phonetic alphabet” there is a higher probability that individuals will meet an expectation of “clear communication.”</td>
</tr>
</tbody>
</table>
ARCC:
The technique is intended to start with an earnest question and progressively increase in assertiveness until the condition prompting the question is resolved to the satisfaction of all. The idea behind the technique is to avoid coming on too strong when a simple question would have sufficed.

Whenever any team member thinks that the apparent plan of action is not the best for the situation, anyone present should ask the question. This is called hint and hope. If we hint, then maybe others will recognize the problem and resolve the problem without any further effort on our part.

If you hint and they do not recognize the problem or continue on the present plan, then be more direct by advocating for a change to the plan and quickly explaining why.

If they still do not recognize the problem or continue on the present plan, then become even more direct by asserting the safe plan of action. When voicing a concern, use the official “safe word” for Nationwide Children’s is “concern.” State “I have a concern” or “I am concerned with…”

Hearing the safe word, we should all stop and resolve the concern, unless an emergency situation requires us to order them to proceed. If we do not resolve the concern by changing our plan of action or educating the others on the efficacy of our plan, the person voicing the concern will likely contact medical and/or administrative chain of command.
Safety Coaches:

- Frontline staff
  - Gives Patient Safety ownership to the frontline staff
- Reinforces the use of the Zero Hero Essentials
  - Observes a staff member using a tool and provides positive feedback
  - Coaches a staff member on using one of the tools when witnessed a situation where the tool would have been very effective and helpful

Safety Coaches were introduced for a couple of reasons: 1) to give ownership of the Patient Safety Program to our frontline staff and 2) To help reinforce the use of the Zero Hero Essentials.
One of the most important things for you to take away from this presentation is that our safety initiative does not end with this training session! Remember that our initiative is all about practicing new behaviors that will help prevent us from making errors – AND making those behaviors become our habits. Errors and harmful events will continue to happen if we do not make this initiative stick.

This graph shows the stages of an effective error prevention program:

• **Awareness** – That’s what our training session is all about; we’re educating you on our behavior expectations and tools for error prevention. But as you can see on the graph, awareness will drop our event rate only a small amount.

• **Skill Acquisition** – When we leave this training session, we’ll begin to practice our behaviors and use our error prevention tools. We won’t have it down perfectly – sometimes we’ll forget, and we may apply a technique incorrectly every once in a while. During this phase we’ll be counting on leaders and team members to reinforce our behavior expectations and help build our accountability for practicing them.

• **Habit Formation** – “Practice makes…habits!” At first, we’ll have to consciously remember to practice our expected safety behaviors and error prevention techniques. But over time, they will indeed become our work habits. Most likely, you’ll find yourself practicing them at home, too, and you’ll see a reduction in the errors that you make outside of work. Our goal is to make these best practices become our common practices.

• **Performance** – As our expected safety behaviors become our common practice, we will begin to see a reduction in the number of errors we make as individuals and in the number of events that occur at our hospital.

**EVERYONE CAN BE A ZERO HERO!**
In 2008 monitoring was taking place, but it was more retrospectively. Moving into 2009, monitoring and data increased with new methods put in place. However, in the 4th quarter of 2009 Zero Hero began and improved detections were put in place along with awareness. Employee reporting increased once Zero Hero training began, employees realized the importance of reporting near misses (errors that were made, but didn’t reach the patient). Before Zero Hero, the Employee Reporting System received, on average, 300 reports month by employees, it reached its all time high in 2010 with an average of 600 each month.
The Serious Safety Event Rate is the number of events classified as “serious” calculated as a rolling 12-month average expressed per 10,000 adjusted patient days (see red trend line).

This trend line has had dips and increases – factors that may have influenced this include:

• Increased transparency and reporting (increases)
• Targeted performance improvement activities (e.g., Insulin Taskforce, others)

However, the PHI was rising while the SSER was falling. This is due to increased reporting and better data collection by staff members.
What is a Zero Hero — It is you and me!!
Benefits of a Galvanizing Brand:

- Creates positive energy around the program
- Supports consistency in messages and appearance
- Enhances staff awareness and recognition of safety information
- Gets’ the staff’s attention!
The ‘Buzz’ of the Brand:

- “It’s a heroic effort”
- “be a zero hero”
- “that’s a zero hero moment!”
- “It takes all of us to be a zero hero to get to zero!”
- “I get it...zero hero talking”
<table>
<thead>
<tr>
<th>Communication- Images:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Training Material</td>
</tr>
<tr>
<td>– Zero Hero- Trainers</td>
</tr>
<tr>
<td>– Basic Zero Hero Training-Leaders &amp; Staff</td>
</tr>
<tr>
<td>– Zero Hero Training-Leadership Methods</td>
</tr>
<tr>
<td>– Safety Coach Training</td>
</tr>
<tr>
<td>– Zero Hero Essentials-Reference Cards</td>
</tr>
<tr>
<td>• Messaging</td>
</tr>
<tr>
<td>– Communication Templates</td>
</tr>
<tr>
<td>• Memorabilia</td>
</tr>
<tr>
<td>– Buttons</td>
</tr>
<tr>
<td>– T-shirts</td>
</tr>
<tr>
<td>– Lapel pins</td>
</tr>
<tr>
<td>• Distraction Free Zone</td>
</tr>
</tbody>
</table>
Reinforcement:

- Safety Focus Guides
- Zero Hero Videos
- Badge Buddies
- Senior Leader Walking Rounds
- Manager’s- Rounding to Influence
- Safety Coaches
  - Lanyard
  - Badge Reel

This is a list of reinforcements we put into place at NCH.
To help drive home the message to the staff members, we created several videos. The first one that we show during training is a message from our CEO and CMO illustrating the importance of this training. The other videos are of the tools we ask our employees to practice to reduce the chance of making an error in a high risk environment. Each tool has a clinical and non-clinical version.
**Electronic Support:**

- Internal Patient Safety Website- Zero Hero
  - Preventable Harm Index
  - Unit Specific Quality and Safety Data
  - Tools and Resources
Zero Hero

Days since last Serious Safety Event

- 1,076 days since last Serious Safety Event. I take a look at what we have accomplished in the past year.

- 812 staff members have been trained and as an organization, there are roughly 7,500 employees.
- When training started, on average Nationwide Children’s Hospital was experiencing a Serious Safety Event every 28 days. We are now at an average of every 48 days.
- The Employee Reporting System (ERS) increased from 460 incidents reported each month to over 600 each month.
- Distraction-Free Zones have been implemented.
- There are now 230 Safety Champions!

It has been a busy year! Thank you for doing your part in Creating a Safe Day, Every Day.

Three Specific High Risk Situations at NCH for Medication Errors

As part of NCH quality processes and with some of our more complex medication errors, a team of our experts very rapidly huddle with the involved staff and unit leadership to review the event in detail while it is fresh in everyone’s mind. While the numbers of analyses are still small, some themes are emerging, suggesting that there are these situations where staff should be EXTRA CAUTIOUS:

- Click here to keep reading.

<table>
<thead>
<tr>
<th>Safety Lessons</th>
<th>Safety Focus Guides</th>
<th>Good Catch Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>A patient in a busy patient care area needed fresh frozen plasma urgently and</td>
<td>The PPP is Nationwide Children’s Hospital’s standardized handoff tool for the oncology team to see additional information about the patient</td>
<td>From our Safety Coaches:</td>
</tr>
</tbody>
</table>

- Coached a physician on...
Electronic Support (cont’d):

- Electronic Documentation Site
  - Safety Coaches
    - Safety Coach Engagements
    - Good Catch Stories
  - Managers
    - Rounding To Influence
  - Activity Reports - all employees can pull
### Zero Hero Documentation Site

**Full Aggregate Report**

Start: 08/01/2010  
End: 08/30/2010

**Area: Safety Coach Engagements [Overall]**

<table>
<thead>
<tr>
<th>Question</th>
<th>Observed</th>
<th>Coached</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch Video</td>
<td>36%</td>
<td>65%</td>
<td>91%</td>
</tr>
<tr>
<td>STAR</td>
<td>54%</td>
<td>45%</td>
<td>99%</td>
</tr>
<tr>
<td>SKAR</td>
<td>50%</td>
<td>45%</td>
<td>95%</td>
</tr>
<tr>
<td>Recap Back</td>
<td>89%</td>
<td>46%</td>
<td>135%</td>
</tr>
<tr>
<td>Read Back</td>
<td>89%</td>
<td>46%</td>
<td>135%</td>
</tr>
<tr>
<td>Clarifying Questions</td>
<td>92%</td>
<td>31%</td>
<td>123%</td>
</tr>
<tr>
<td>NPS’s Standardized Handoff-SPs</td>
<td>64%</td>
<td>45%</td>
<td>109%</td>
</tr>
<tr>
<td>Step and Resolve</td>
<td>84%</td>
<td>40%</td>
<td>124%</td>
</tr>
<tr>
<td>Other</td>
<td>65%</td>
<td>45%</td>
<td>110%</td>
</tr>
<tr>
<td>Overall</td>
<td>77%</td>
<td>23%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Department: 3AE**

<table>
<thead>
<tr>
<th>Question</th>
<th>Observed</th>
<th>Coached</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Game</td>
<td>87%</td>
<td>44%</td>
<td>131%</td>
</tr>
<tr>
<td>ASGC</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Team Member Checking</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>STAR</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>SKAR</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Recap Back</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Read Back</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Clarifying Questions</td>
<td>92%</td>
<td>60%</td>
<td>152%</td>
</tr>
<tr>
<td>NPS’s Standardized Handoff-SPs</td>
<td>64%</td>
<td>40%</td>
<td>104%</td>
</tr>
<tr>
<td>Step and Resolve</td>
<td>84%</td>
<td>40%</td>
<td>124%</td>
</tr>
<tr>
<td>Other</td>
<td>65%</td>
<td>40%</td>
<td>105%</td>
</tr>
<tr>
<td>Overall</td>
<td>90%</td>
<td>60%</td>
<td>150%</td>
</tr>
</tbody>
</table>

**Department: 4AE**

<table>
<thead>
<tr>
<th>Question</th>
<th>Observed</th>
<th>Coached</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Game</td>
<td>87%</td>
<td>44%</td>
<td>131%</td>
</tr>
<tr>
<td>ASGC</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Team Member Checking</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>STAR</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>SKAR</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Recap Back</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Read Back</td>
<td>100%</td>
<td>60%</td>
<td>160%</td>
</tr>
<tr>
<td>Clarifying Questions</td>
<td>92%</td>
<td>60%</td>
<td>152%</td>
</tr>
<tr>
<td>NPS’s Standardized Handoff-SPs</td>
<td>64%</td>
<td>40%</td>
<td>104%</td>
</tr>
<tr>
<td>Step and Resolve</td>
<td>84%</td>
<td>40%</td>
<td>124%</td>
</tr>
<tr>
<td>Other</td>
<td>65%</td>
<td>40%</td>
<td>105%</td>
</tr>
<tr>
<td>Overall</td>
<td>90%</td>
<td>60%</td>
<td>150%</td>
</tr>
</tbody>
</table>
Critical Success Factors:

- Can add PHI numbers of various hospitals together to create a regional PHI
- No need for common definitions if:
  - Definitions are internally consistent over time
  - Target is zero
- Create a Patient Safety Program and have Leadership Support
- Select a logo and by-line that support your organization’s vision, is simple to remember, and energizes staff
  - Consistently apply the logo and by-line to all information on the safety program
- Use humor and heart-string stories/videos where you can!
Preventable Harm Definition

Nationwide Children's Hospital's Preventable Harm Index is a classification system designed to track similar occurrences with the goal to eliminate each class of occurrence. We have chosen to classify these occurrences as "harm" and "preventable" as a call to action for Children's healthcare community. It is designed to change the thinking that these occurrences are expected complications and, to instead, see them as a challenge that we need to work to reduce and to ultimately eliminate. Designation of "Preventable Harm" does not mean the occurrence in question was necessarily preventable at the time, which is often impossible to determine. We, instead, focus on the opportunity to improve patient care and, therefore, define harm as "preventable" in order to create the opportunity to eliminate classes of "harm" and get to ZERO.

Serious Safety Event

The designation of a Serious Safety Event (SSE) is not an analysis, a determination, an admission, or even a suggestion, that any healthcare provider was negligent or deviated from the applicable "standard of care" as that term is defined under Ohio law governing medical claims, or that the healthcare provider's conduct in any way caused or contributed to legally cognizable damages. Rather, designation of a particular event/condition as an SSE means that the Hospital has determined that the event/condition is one that may be amenable to reduction and/or elimination through the implementation of additional interventions, actions, and/or related quality improvement initiatives. The qualification of an event as a "serious safety event" is based upon a retrospective review of the event and its potential to be instructive in improving the quality of healthcare services provided at the Hospital with the aspiration that steps may be taken to prevent the same or similar events in the future.