



Health Care Quality Performance (HCQP) Program

**HOSPITAL SUBCOMMITTEE**

8-9:30am, September 4, 2009

Quality Partners of Rhode Island

**Goals/Objectives**

- Provide each hospital with its hospital-validated incident pressure ulcer number (numerator)
- Recommend a pressure ulcer incidence public reporting format
- Discuss progress to date on incorporating the present on admission (POA) indicator into the Hospital Discharge Data Set (HDDS)

**Attendees**

- |                    |                      |                                       |
|--------------------|----------------------|---------------------------------------|
| ✓ Rosa Baier       | ✓ Stefan Gravenstein | ✓ Debra Panizza                       |
| ✓ Dolores Cohen    | ✓ John Keimig        | ✓ Joan Polsky                         |
| ✓ Elaine Desmarais | ✓ Linda Kissik       | ✓ Gina Rocha                          |
| ✓ Pam DiMascio     | ✓ Carol Lamoureux    | ✓ Barbara Stewart                     |
| ✓ Jeanne Ehmann    | ✓ Maureen Marsella   | ✓ Judy Van Tilburg                    |
| ✓ Nancy Fogarty    | ✓ Jeff Newell        | ✓ Samara Viner-Brown ( <i>Chair</i> ) |

**Time**

**Topic/Notes**

8:00am **Welcome & Meeting Objective**  
*Samara Viner-Brown, MS (Chair)*  
*Rosa Baier, MPH*

- Sam opened the meeting at 8:05 and also thanked attendees for their feedback on the 60-day preview reports, recognizing the significant effort involved in data-checking. Hospitals’ input has improved the analytic coding, simplifying the next round of reporting; and the switch to the Present on Admission (POA) indicator will further streamline the process.
- Rosa discussed today’s meeting objectives (above), and indicated that she would provide hospitals with their numerators, if requested, at the end of the meeting. The denominators are being double-checked by HEALTH and will be included in the populated report distributed prior to publication next week.
- She also updated the group on HEALTH’s work with HARI to include the POA in the HDDS, indicating that conversations are ongoing with Gina and Mike Souza. Mike expects to learn more about the expected time frame from the vendor next week. Importantly, HEALTH plans to endorse or require the changes in a way that they are applied at no cost to the hospitals.

Time	Topic/Notes
8:10 am	<p data-bbox="358 163 862 191"><b>Pressure Ulcer Incidence Preview Reports</b></p> <p data-bbox="358 201 558 228"><i>Rosa Baier, MPH</i></p> <ul style="list-style-type: none"> <li data-bbox="358 254 1243 281">– At previous meetings, the Subcommittee recommended the following: <ul style="list-style-type: none"> <li data-bbox="407 306 964 333">• Use of POA indicator to calculate incidence</li> <li data-bbox="407 344 761 371">• Until the POA is available: <ul style="list-style-type: none"> <li data-bbox="451 396 1190 424">▪ Reporting quarterly based on AHRQ measure specifications</li> <li data-bbox="451 434 1073 462">▪ A 60-day preview period to verify incidence cases</li> </ul> </li> </ul> </li> <li data-bbox="358 487 1422 583">– Sam and Rosa researched public report formats for incidence measures, which will inform this reporting effort and also the Hospital-Acquired Infections Subcommittee’s work reporting CLABSI rates. The research results were as follows: <ul style="list-style-type: none"> <li data-bbox="407 609 1422 705">• Reporting incidence (vs. prevalence) requires different statistical methods, and Standardized Incidence Ratios (SIRs) are the ‘gold standard’ recommended by the CDC and commonly used for cancer reporting.</li> <li data-bbox="407 737 1422 873">• SIRs involve comparing a hospital’s observed cases (hospital-validated numerator) to the number of expected cases, based on the average population rate and the hospital’s patient population (denominator). SIRs &lt;1.0 indicate rates lower (better) than expected; SIRs &gt;1.0 indicate rates higher (worse) than expected.</li> <li data-bbox="407 905 1382 963">• Confidence Intervals (CIs) are used in conjunction with SIRs, to determine how meaningfully different hospitals’ SIRs are from 1.0.</li> <li data-bbox="407 995 1422 1092">• In terms of report formats, there is very little available for pressure ulcers specifically; but Colorado reports comparative data using symbols for worse than, about the same as, and better than average.</li> </ul> </li> <li data-bbox="358 1117 1422 1173">– <b>Recommendations:</b> Meeting participants discussed the methods, draft 1-page report format, and Technical Page, and provided the following recommendations for each: <ul style="list-style-type: none"> <li data-bbox="407 1205 570 1232">• <u>Methods:</u> <ul style="list-style-type: none"> <li data-bbox="451 1257 969 1285">▪ Use 90% CIs to calculate diamond scores</li> <li data-bbox="451 1295 1414 1323">▪ Automatically assign three diamonds (highest rating) to hospitals with 0 ulcers</li> </ul> </li> <li data-bbox="407 1354 634 1381">• <u>Report format:</u> <ul style="list-style-type: none"> <li data-bbox="451 1407 1256 1434">▪ Incorporate “bed sore” in parentheses and link to Technical Page</li> <li data-bbox="451 1444 1406 1501">▪ Change first footnote to: “Advanced pressure ulcers, which are deep wounds, are included.”</li> </ul> </li> <li data-bbox="407 1533 639 1560">• <u>Technical Page:</u> <ul style="list-style-type: none"> <li data-bbox="451 1585 1078 1612">▪ Search and replace “nursing home” with hospital”</li> <li data-bbox="451 1623 1390 1680">▪ Change references to “incidence rate” to “SIR” (as appropriate) and indicate that SIRs (not incidence rates) lower than 1.0 are better than expected.</li> <li data-bbox="451 1690 1422 1747">▪ Under Measure Calculation, change “severe” to “advanced” and include “Stage III, Stage IV, or their clinical equivalent among unstageable ulcers”</li> <li data-bbox="451 1757 1208 1785">▪ Under Measure Exclusions, eliminate “to” in 2<sup>nd</sup> to last bullet</li> <li data-bbox="451 1795 1390 1852">▪ Under Diamond Calculation, change “observed rate” and “expected rate” to “observed cases” and “expected cases”</li> <li data-bbox="451 1862 1268 1890">▪ Under Measure Information, delete word “rate” under “Measure”</li> <li data-bbox="451 1900 1208 1927">▪ Add definitions for Stage III, Stage IV, and unstageable ulcers</li> </ul> </li> </ul> </li> </ul>

– **Action items:**

- Incorporate the group's edits into the report format and Technical Page (Rosa)
- Complete the data-check for the hospital scores (Sam and Kathy)
- Distribute the populated data report to the Subcommittee and Steering Committee for 24-hour preview prior to publication (Rosa)
- Notify the Subcommittee of the report's publication (Rosa)

9:15am

**Action Items & Next Steps**

*Rosa Baier, MPH*

- See above action items.
- Rosa reviewed the estimated reporting schedule, but highlighted the fact that this schedule is tentative and based on the timing of HEALTH's receipt of the data and completion of any necessary follow-up with the hospitals. Therefore, the date on which data are shared with the hospitals may vary from the estimated dates below, and the preview period will begin accordingly.

Quarter	Estimated Preview Period		Public Report <sup>†</sup>
	Data Shared w/ Hospitals*	Responses Due to HEALTH <sup>†</sup>	
Q4 2008	7/1/09	9/1/09	9/8/09
Q1 2009	10/1/09	12/1/09	12/8/09
Q2 2009	1/1/10	3/1/10	3/8/10
Q3 2009	4/1/10	6/1/10	6/8/10
Q4 2009	7/1/10	9/1/10	9/8/10

\* No later than this date. Subsequent dates are dependent upon the date data are shared.

† Dates dependent upon hospitals' date of receipt of the data, with responses due 60 days after data are shared and ~1 week after responses received.

– Notes:

- Preview period will be eliminated when HDDS include the POA
- Length of preview period may be periodically revisited, based on feedback

– **Next meeting:** None currently scheduled



Health Care Quality Performance (HCQP) Program  
**HOSPITAL-ACQUIRED PRESSURE ULCERS**

Data Report  
 October-December 2008

Hospital-acquired [pressure ulcers](#) (sometimes called pressure sores or bed sores) are [reported on the Department of Health's \(HEALTH's\) Web site](#) as part of the HCQP Program's hospital reporting work. You can learn more about the measures—including their data source, how the rates and diamonds are calculated, and why this information is important—by reading the [Technical Page](#). With questions about a hospital's performance, please contact the hospital directly by clicking on each hospital's name.

The diamonds show you how hospitals compare to one another

Hospital (Alphabetical)	Hospital-Acquired Pressure Ulcers*	Patients	Standardized Incidence Ratio (SIR) <sup>†</sup>	Diamonds <sup>§</sup>
<a href="#">Kent County Memorial Hospital</a>				
<a href="#">Landmark Medical Center</a>				
<a href="#">Memorial Hospital</a>				
<a href="#">Miriam Hospital</a>				
<a href="#">Newport Hospital</a>				
<a href="#">Rhode Island Hospital</a>				
<a href="#">Roger Williams Medical Center</a>				
<a href="#">South County Hospital</a>				
<a href="#">St. Joseph's Hospital</a>				
<a href="#">Westerly Hospital</a>				
<a href="#">Women and Infants Hospital</a>				

\* Advanced pressure ulcers, which are deep wounds, are included.

† Compares the number of hospital-acquired pressure ulcers to what is mathematically “expected.” Scores below 1.0 are less (better) than expected and scores above 1.0 are higher (worse) than expected.

§ Assigned based on how different each hospital's SIR is from 1.0, which is what is “expected”:

- ◆◆◆ Better than expected
- ◆◆ About the same as expected
- ◆ Worse than expected

The statistical methods are described in the [Technical Page](#).



## Health Care Quality Performance (HCQP) Program

### HOSPITAL-ACQUIRED PRESSURE ULCERS

#### Technical Page

Hospital-acquired, or incident, pressure ulcers (sometimes called pressure sores or bed sores) are [reported on the Department of Health's \(HEALTH's\) Web site](#) as part of the HCQP Program's hospital reporting work. The information on this page provides additional details about the information reported, including its data source, how scores and diamonds are calculated, and why it is important.

#### Data Source

Rhode Island hospitals submit patient-level information to the Department of Health as part of the Hospital Discharge Data Set (HDDS). The HDDS includes patient information, including patients' diagnoses, how long they were hospitalized, and what care the hospital provided. The Department of Health uses these data to report hospital-acquired pressure ulcers. For pressure ulcers, *lower* numbers are better.

#### Measure Calculation

The information in this section is for people who want details about the data calculations. For each hospital, two numbers are calculated: (1) pressure ulcer incidence, and (2) a Standardized Incidence Ratio (SIR). Only the SIR is included in the public report, but incidence is needed to calculate each hospital's SIR.

1. **Pressure ulcer incidence** is calculated as follows:

$$\text{Rate} = \frac{\text{(patients who develop a pressure ulcer)}}{\text{(number of patients aged 18 years and older who were hospitalized 5+ days)}} \times 1,000$$

The number of patients who develop an advanced pressure ulcer (Stage III, Stage IV, or their clinical equivalent among unstageable pressure ulcers) is the **numerator**. The number of patients aged 18 years and older who were hospitalized at least five days is the **denominator**. The denominator also excludes some patients; these details are on page 2. The **incidence rate** is the numerator divided by the denominator multiplied by 1,000. Each hospital's rate is compared to the rates of other hospitals in Rhode Island using SIRs (below and p. 2).

2. Incidence rates are used to calculate **SIRs**, which are:

$$\text{SIR} = \frac{\text{(observed cases)}}{\text{(expected cases)}}$$

The **observed cases** are the number of hospital-acquired pressure ulcers (incidence rate numerator) and the **expected cases** are the number we expect to see if the average Rhode Island pressure ulcer incidence rate is applied to each hospital's patient population (the incidence rate's denominator). *Lower* scores are better. A SIR score less than 1.0 means the incidence is better than expected.

Each hospital's SIR is included in the public report and helps to determine its diamond category (see p. 2).

## Measure Exclusions

The information in this section is for people, often clinicians, who want detailed information about which patients are excluded from the data. The incidence rate denominator excludes certain patients, such as those:

- Hospitalized fewer than five days
- Who already had a pressure ulcer when admitted to the hospital
- MDC 9 (Skin, Subcutaneous Tissue, and Breast)
- MDC 14 (pregnancy, childbirth, and puerperium)
- With any diagnosis of hemiplegia, paraplegia, or quadriplegia
- With ICD-9-CM code of spina bifida or anoxic brain damage
- With an ICD-9-CM procedure code for debridement or pedicle graft before or on the same day as the major operating room procedure (surgical cases only)
- Admitted from a long-term care facility (SID Admission Source=3)
- Transferred from an acute-care facility (SID Admission Source=2)

The number of patients who meet these criteria is listed on the public report.

## Diamond Categories

The diamond categories help you understand how each hospital's incidence (SIR score) compares to its expected incidence (which is determined based on the average performance of Rhode Island hospitals):

- ◆ Worse than expected
- ◆◆ About the same as expected
- ◆◆◆ Better than expected

These categories are determined mathematically to ensure that the differences are meaningful. In detailed terms, this means that hospitals with either one diamond (◆) or three diamonds (◆◆◆) have pressure ulcer incidence rates that are “statistically significantly different” from their expected rates.

## Diamond Calculation

The information in this section is for people who want statistical details about the diamond calculations. The diamond categories are determined based on hospitals' SIRs (see p. 1). A SIR less than 1.0 means the hospital's rate is lower (better) than expected; a SIR greater than 1.0 is higher (worse) than expected. The margin of error, or “90% confidence interval,” determines whether each SIR is meaningfully different from 1.0. Diamonds are assigned as follows:

- One diamond (◆): If the SIR falls above 1.0 (is worse than expected) AND its margin of error, or “90% confidence interval,” does not include 1.0, then the hospital has one diamond.
- Two diamonds (◆◆): If the 90% confidence interval for the score includes the Rhode Island average, then the hospital's score is not accurate enough to categorize it as better or worse than other hospitals. The hospital has two diamonds.
- Three diamonds (◆◆◆): If the SIR falls below 1.0 (is better than expected) AND its margin of error, or “90% confidence interval,” does not include 1.0, then the hospital has three diamonds. **Note:** The exception is when the hospital does not have any hospital-acquired pressure ulcers (where 0 is the best performance). When this occurs, a hospital is automatically given three diamonds.

**Measure Information (adapted from the Agency for Healthcare Research and Quality)**

Measure	Why is this information important?
<p>Pressure Ulcer Incidence and SIR score</p>	<p>This measures hospital-acquired, or incident, pressure ulcers in patients aged 18 and older who were hospitalized for five days or more. Pressure ulcers, sometimes called bed sores or pressure sores, are skin wounds that can be painful, take a long time to heal, and cause other complications, such as skin and bone infections.</p> <p>There are several things that hospitals can do to prevent pressure ulcers, such as frequently changing the patient’s position, ensuring proper nutrition, and using soft padding to reduce pressure on the skin. However, some patients may get pressure ulcers even when the hospital provides good preventive care.</p> <p>For the pressure ulcer SIR, which compares actual incidence to what is “expected,” <i>lower</i> scores are better. A SIR score less than 1.0 means the incidence is better than expected.</p>

**Definitions (adapted from the Pressure Ulcer Advisory Panel)**

Terminology	What does this mean?
<p>Pressure Ulcer</p>	<p>Pressure ulcers, sometimes called bed sores or pressure sores, are skin wounds that can be painful, take a long time to heal, and cause other complications, such as skin and bone infections. Pressure ulcers are “staged” I-IV according to their depth. Only Stage III, Stage IV, and unstageable pressure ulcers are included in the public report.</p> <p>There are several things that hospitals can do to prevent pressure ulcers, such as frequently changing the patient’s position, ensuring proper nutrition, and using soft padding to reduce pressure on the skin. However, some patients may get pressure ulcers even when the hospital provides good preventive care.</p>
<p>Stage III Pressure Ulcer</p>	<p>Stage III pressure ulcers are deep enough to go through the skin, and may expose the fat that is under the skin. However, bone, tendon, and muscle are not exposed.</p>
<p>Stage IV Pressure Ulcer</p>	<p>Stage IV pressure ulcers are deep enough to go through the skin <u>and</u> expose bone, tendon, or muscle.</p>
<p>Unstageable Pressure Ulcer</p>	<p>Unstageable pressure ulcers are deep enough to go through the skin, but are covered by debris so it is not possible to determine whether or not bone, tendon, or muscle are exposed.</p>