Introduction to the Patient Safety Collaborative
Sacramento and Central Valley Collaborative

February 10, 2011
What is a Collaborative and Why
Would My Hospital Want to Participate?
How Do You Implement Evidence Based Practices Faster Than Standard Diffusion?
Evidence

Implementation
Answer: Peer to Peer Learning
COMPETE OR COLLABORATE
PATIENT SAFETY FIRST.....
A CALIFORNIA INITIATIVE
Why Data?
Sepsis Mortality Reduction  CLBSI Rate Reduction
CAUTI Rate Reduction  VAP Rate Reduction
Perinatal Birth Trauma Reduction
Elective Deliveries Earlier Than 39 Week Gestation Reduction
Patients who will be included in this data collection will be identified by discharge ICD-9 codes. The goal being measured is mortality related to sepsis.

**Sepsis Mortality Rate Calculation**

\[
\text{# of patients with sepsis who expired} \div \text{# of sepsis patients} \times 100
\]
### Defining Sepsis

#### Population Inclusion Criteria

<table>
<thead>
<tr>
<th>POPULATION INCLUSION CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Per discharge data, all Patients 18 years of age or older</td>
</tr>
<tr>
<td>AND</td>
</tr>
<tr>
<td>➢ At least one of the ICD-9 codes from Table 1 coded at discharge (Any patient with one of these ICD-9 codes.)</td>
</tr>
<tr>
<td>AND/OR</td>
</tr>
<tr>
<td>➢ At least one ICD-9 code from Table 2</td>
</tr>
<tr>
<td>PLUS</td>
</tr>
<tr>
<td>➢ At least one ICD-9 code from Table 3 coded at discharge. (Any patient with these combinations of ICD-9 codes.)</td>
</tr>
</tbody>
</table>

#### Mortality Definition

<table>
<thead>
<tr>
<th>MORTALITY DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Actual Mortality</td>
</tr>
<tr>
<td>o Number of patients identified in population expiring within 30 days of admission for this hospitalization</td>
</tr>
<tr>
<td>➢ Mortality Rate</td>
</tr>
<tr>
<td>o Percentage of patients in population expiring within 30 days of admission for this hospitalization</td>
</tr>
</tbody>
</table>
**Definition:** Percentage of elective deliveries at <39 weeks gestational age

**Source:** Data may reside in various places including sources such as: Hospital information system, Birth log, Medical Record

**Baseline:** 2009 results data by quarter

**Goal:** Reduce elective deliveries prior to 39 weeks gestational age to 5% or less within 3 years.

**Perinatal Gestational Age Delivery Rate Calculation**

\[
\text{Rate} = \frac{\text{# of elective deliveries at <39 weeks gestational age}}{\text{# of elective singleton live births meeting criteria}}
\]
The number of elective singleton live births meeting the following criteria:

- Gestational Age by best clinical estimate (usually US confirming LMP): documented at 37+0 to 38+6 weeks inclusive (37-44 weeks)

  *"Elective" = scheduled birth either CS or induction. Induction includes all forms of induction:
  - Oxytocin, prostaglandin, Foley, and AROM when not in labor.
  - Elective CS also means that the woman is not in labor. Many repeat CS are done in early labor but will not have an ICD9 code for labor as that does not exist. (See attachment for codes.)

Exclusions: Indications for delivery that make it not elective are the ACOG list or a woman with spontaneous labor on admission.
Definition: Birth trauma rate per 1,000 live births

Source: Hospital information system- administrative data, code based.

Baseline: 2009 results data by quarter

Goal: Reduce associated birth trauma by 25% within 3 years.

Perinatal Birth Trauma Rate Calculation

# of neonates discharged with an ICD-9CM code for birth trauma

# of all live newborns x 1000
Perinatal Birth Trauma
Population Inclusion Criteria

POPULATION INCLUSION CRITERIA

- Birth trauma diagnosis codes (see attached)
  - Excludes infants with subdural or vertebral hemorrhage and diagnosis of pre-term infant <2,500 gram and <37 weeks or ≤34 weeks. Excludes infants with injury to skeleton and any diagnosis of osteogenesis imperfecta.

- AHRQ – PSI 17

CAUTI Basics for Outcome Measures

**Definition:** Catheter Associated Urinary Tract Infection Rate, hospital acquired

**Source:** Hospital infection Preventionist captured from the medical record. A collection of positive blood cultures. NOTE: Routine information submitted to NHSN.

**Baseline:** 2009 results data by quarter

**Goal:** Zero catheter associated UTI’s within 3 years

**CAUTI Rate Calculation**

\[
\frac{\text{# of CAUTI}}{\text{# of patient days} \times 1,000}
\]

**Source:** Collection of cases via the infection Preventionist. NOTE: Routine information submitted to NHSN.

**Baseline:** 2009 results data by quarter

**Goal:** Zero infections within 3 years

**CLBSI Rate Calculation**

\[
\text{CLBSI Rate Calculation} = \frac{\text{# of CLBSI cases in the hospital}}{\text{# of central line days hospital wide}}
\]
**Definition:** VAP rate per 1,000 ventilator days.

**Source:** Collection of cases via the Infection Preventionist. **NOTE:** Routine information submitted to NHSN.

**Baseline:** 2009 results data by quarter

**Goal:** Zero infections within 3 years

---

**CLBSI Rate Calculation**

\[
\text{# of VAP cases in the hospital} / \text{# of ventilator days}
\]
Data Security
DATABASE DEMONSTRATION

www.nhfca.org/PatientSafetyFirst/
Contact: Kim Werkmeister, RN, BA, CPHQ Improvement Advisor, BEACON Sacramento and Central Valley Collaborative
kwerk@cox.net