**IMPROVING BIRTH OUTCOMES**

Hospital reduces neonatal fatalities by 50%

Infant mortality rate is often used as an indication of a nation’s health and social condition. When reviewing the data for different countries, it becomes obvious that for a wealthy, developed country, the United States has a high infant mortality rate. The good news is that healthcare providers are working to improve care and help reduce preventable injuries and deaths during childbirth. Obviously, access to prenatal care, overall health of the mother and other factors play a role in birth outcomes, but some relatively simple solutions have proven to dramatically increase birth outcomes.

"The CIA World Factbook ranked the U.S. infant mortality rate 56th among countries and territories in 2014, at 6.2 deaths per 1,000 births. That was nearly twice the rates of France, Italy and Spain (which each were at 3.3 per 1,000) and nearly three times the rate of Japan (2.1 per 1,000). Reducing the U.S. infant mortality rate to the levels of France, Italy and Spain would save more than 10,000 lives a year.”

-Solutions in Sight report by Public Citizen dated March 12, 2015

---

**Problem Analysis**

**Cause Mapping** is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

**Problem**

Problem(s)

US infant mortality rate is high compared to peer nations

**Cause**

Baby facilities throughout US (different, unusual, unique)

**Solutions**

1. Hospital reduces neonatal fatalities by 50%

**Basic Level Cause Map**

- **Patient Safety Goal Impacted**: Improved training
- **Reduction in injuries and fatalities during childbirth**: Improvements in training, focusing on improving communications, implementing “bundles” of best practices and working to reduce C-sections all helped reduce injuries and fatalities during childbirth.

**More Detailed Cause Map**

- **Patient Safety Goal Impacted**: Improved training
- **Economic Goal Impacted**: Potential reduction in litigation costs
- **Compliance Goal Impacted**: Potential reduction in lawsuits
- **Patient Safety Goal Impacted**: Reduction in injuries and fatalities during childbirth
- **Economic Goal Impacted**: Reduction in cost of care as a result of injury

**Solutions**

Ascension Health has reduced its neonatal fatality rate by 50% across its 43 hospitals by implementing relatively cheap, common-sense solutions. Ascension did a number of things to help improve birth outcomes such as working to improve training and communications. Drills were done to practice how staff should respond in a variety of emergency situations to help medical personnel identify and quickly respond to potentially dangerous scenarios. There was also focus on communication between personnel to help ensure there were no misunderstandings in high pressure situations and to encourage all staff member to speak up if they perceived a dangerous situation. Additionally, they worked to develop “bundles” of services which are packages of procedures that have been shown to produce the best results. Bundles are essentially guidelines for how staff should respond in a variety of situations. There was also an emphasis on reducing C-section deliveries that weren’t medically necessary because these types of births are associated with a higher rate of complications.

**Cause Map**

- **Step 1**: Problem
  - **What**: What’s the problem?
  - **When**: When
  - **Where**: Facilitated site Birth facilities throughout US

- **Step 2**: Analysis
  - **Why**: Why did it happen?

- **Step 3**: Solutions
  - **What will be done?**

**NOTE**: Read the Cause Map from left to right with the phrase "Was Caused By" in place of each arrow.

---

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

**ThinkReliability**

**Investigate Problems. Prevent Problems.**

Houston, Texas 281-412-7766 ThinkReliability.com

Copyright ThinkReliability 2015