

Care in the ICU: Teaming up to improve quality

**Sponsored by NCHC and IHI
Funded by AHRQ
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We Promised Patients that Care Would Be:

- Safe
- Effective
- Patient centered
- Efficient
- Timely
- Equitable

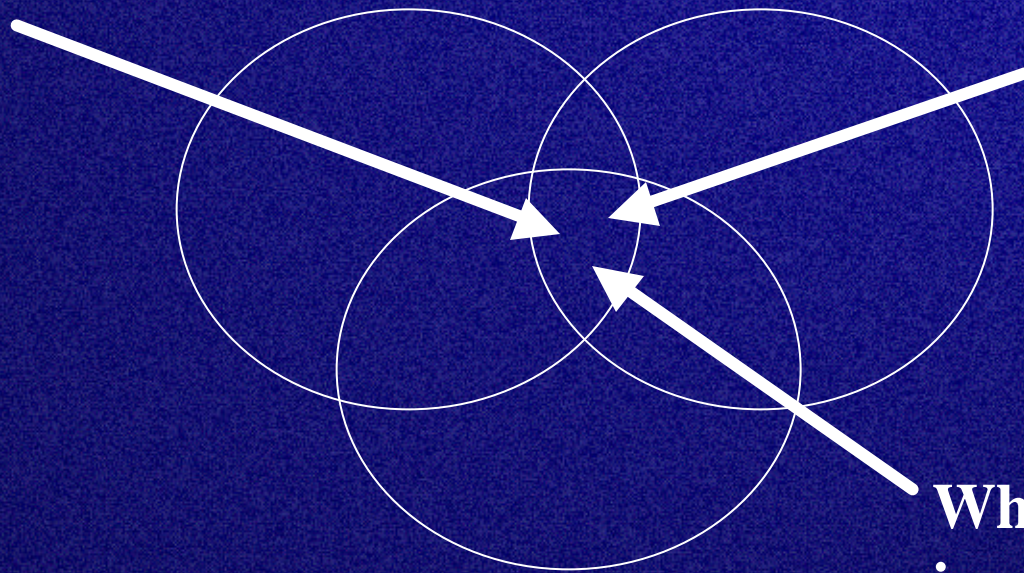


IOM report: Crossing the quality Chasm

Is Safety your Hedgehog Concept

**What can you
be great at**

**What are you
passionate
about**



**What is
important**

Jim Collins



ICU Care: The Opportunity is Great

- Nearly every patient admitted to an ICU suffers an adverse event
- 10% average mortality
- 5 million ICU admissions per year in U.S.
- ICUs account for 30% of hospital costs; \$180 Billion annually
- Priority for Leapfrog group and JCAHO

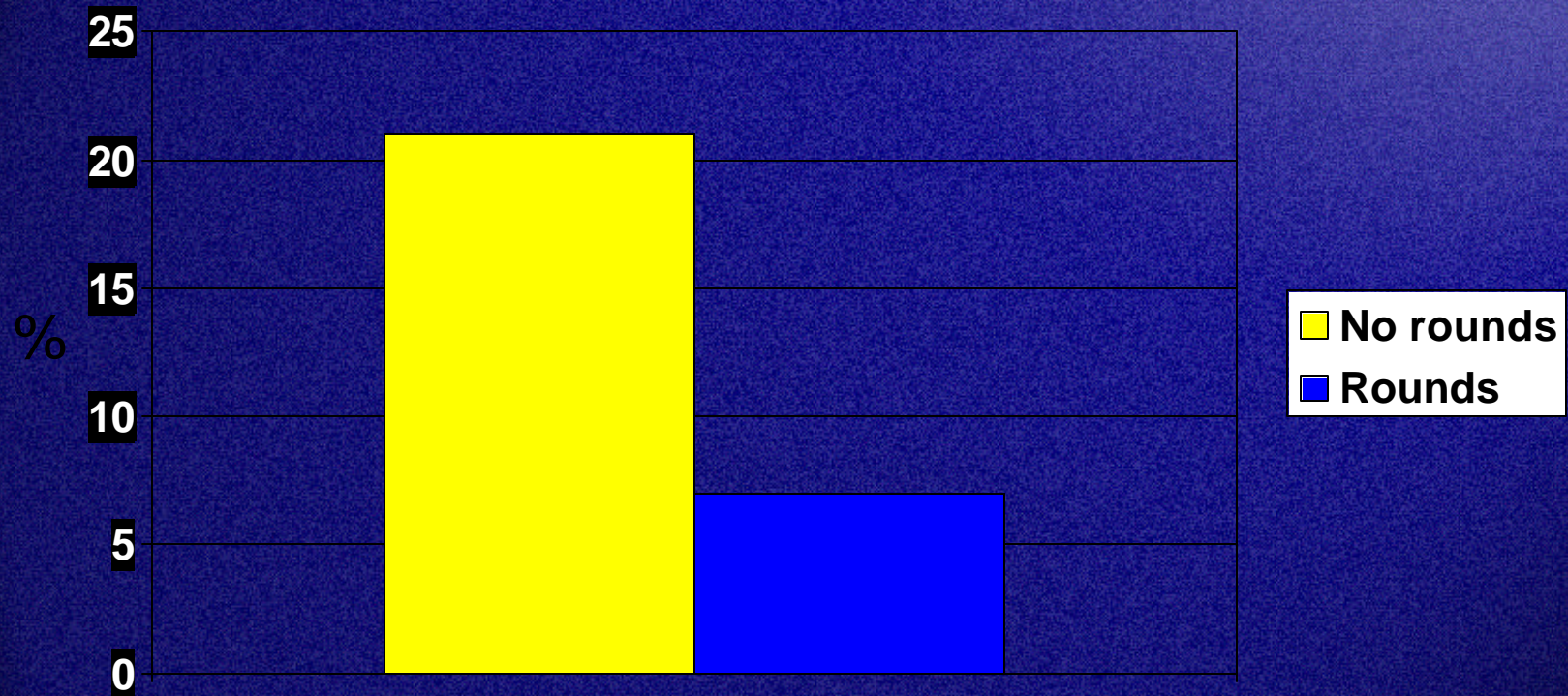


We Can be Great at ICU Care

- ICU Care team
- VHA and IHI collaborative
- Stories in this monograph



Intensivists Reduce Mortality



3x reduction in risk adjusted in-hospital mortality with daily rounds by an physician staffing

Pronovost JAMA 1999

Impact of ICU Nurse Staffing on Outcomes

- Fewer ICU nurses associated with increased LOS risk of pulmonary complications
 - Pulmonary insufficiency
 - Reintubation of trachea
 - Pneumonia

Pronovost ECP 2001



Impact of Pharmacist on Outcomes

- Pharmacist participation on daily rounds in the ICU associated with
 - 66% reduction in adverse drug events (ADEs)
 - ADEs reduced 10.4/ 1000 pt days to 3.5
 - Prevent one ADE every 143 patients



Johns Hopkins Patient Safety Program

1. **Evaluate culture of safety**
2. **Educate staff on science of safety**
3. **Identify staff's safety concerns**
4. **Analyze events**
5. **Prioritize improvement efforts**
6. **Implement improvements**
7. **Share stories and disseminate results**
8. **Evaluate culture**

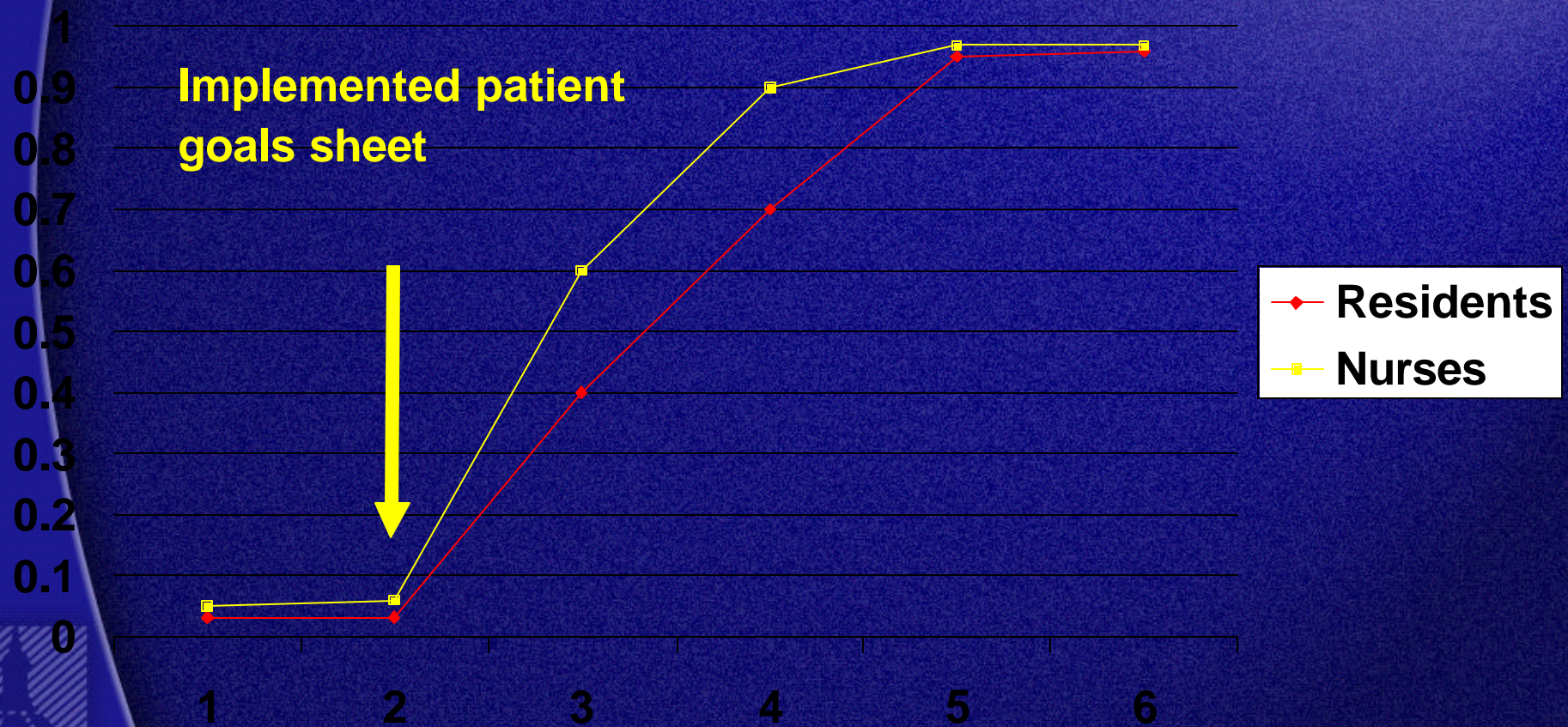


Principles for Safety Program

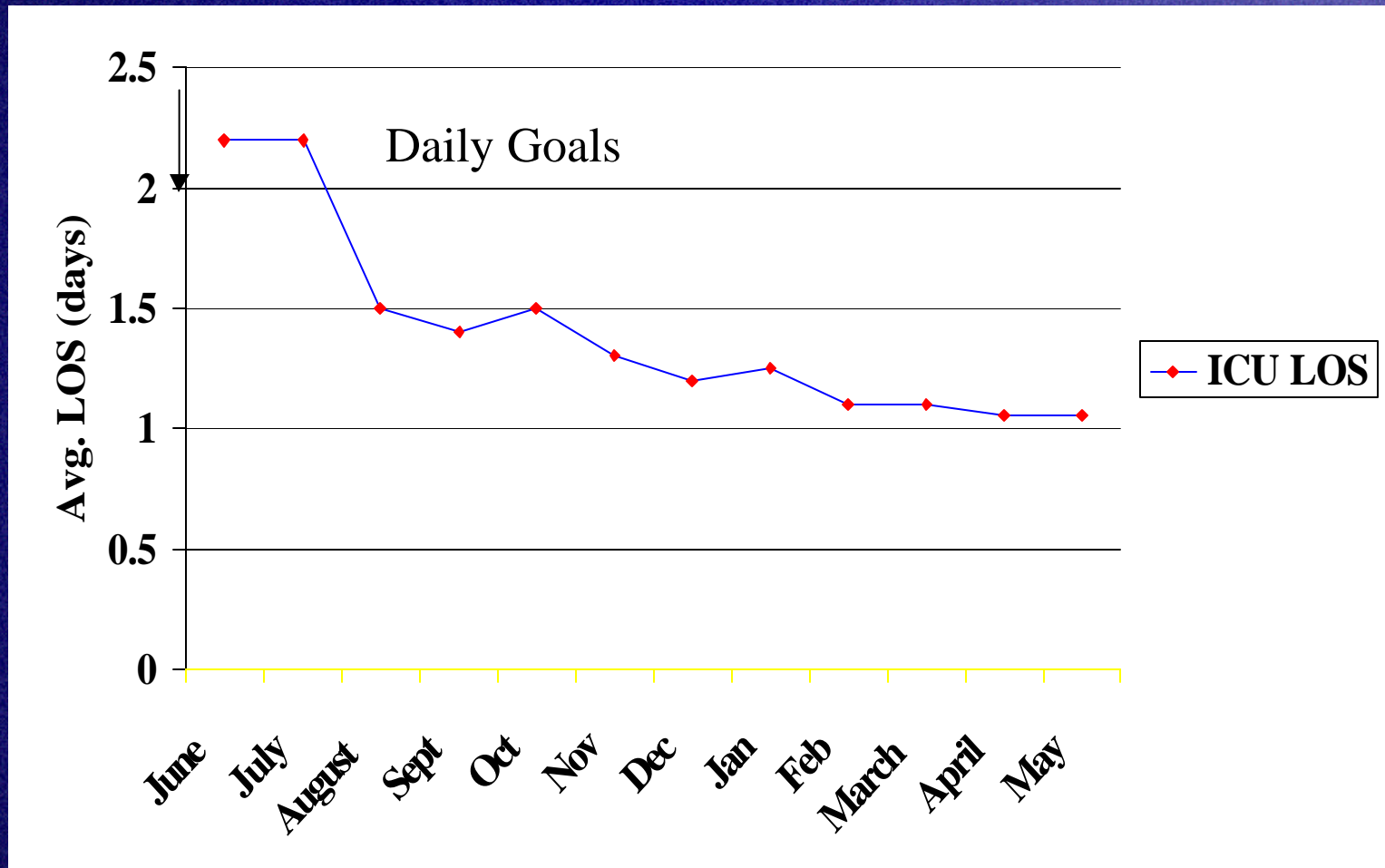
- Create culture of safety
 - Staff are accountable for systems within which they work
- Reduce complexity
- Create independent redundancies for key processes



Percent Understanding Patient Care Goals



Impact on ICU Length of Stay



654 New Admissions: 7 Million Additional Revenue

ICU catheter-related blood stream infections

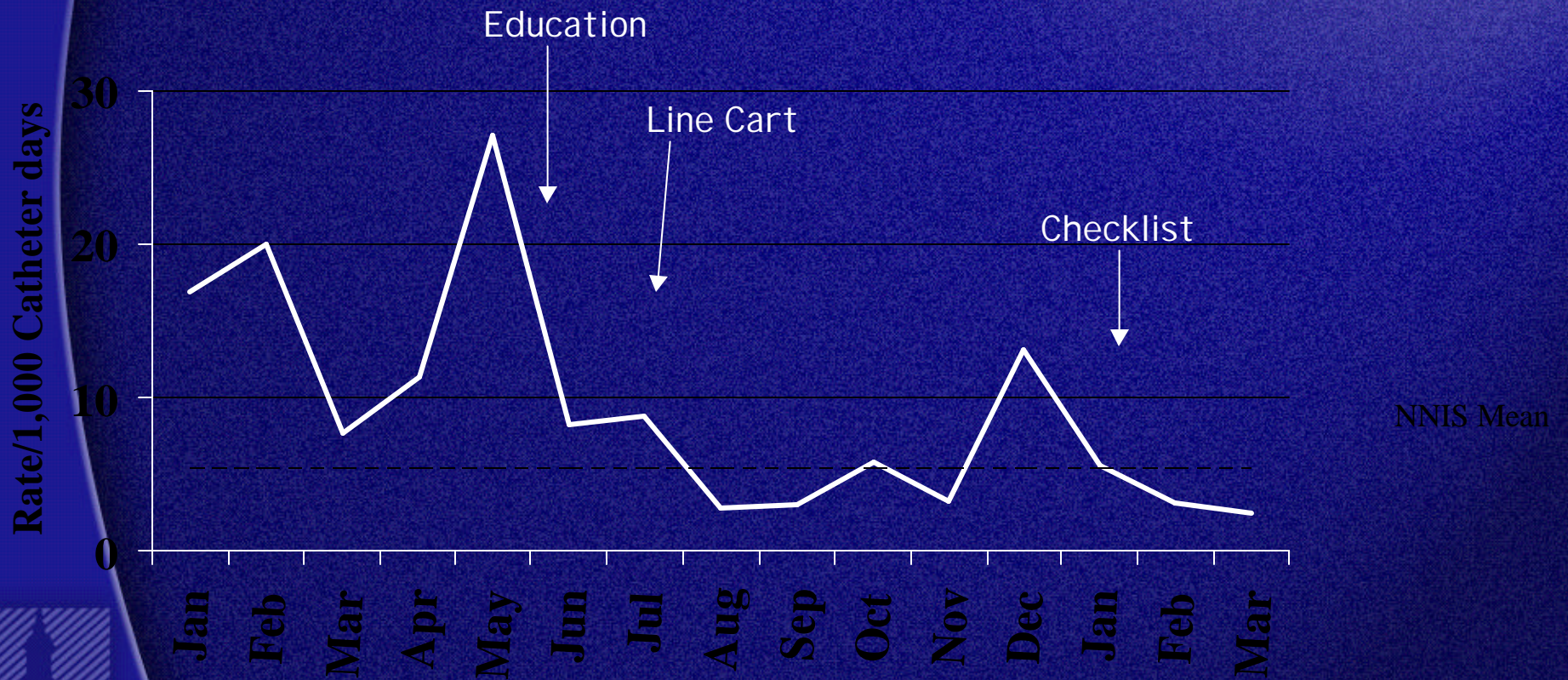
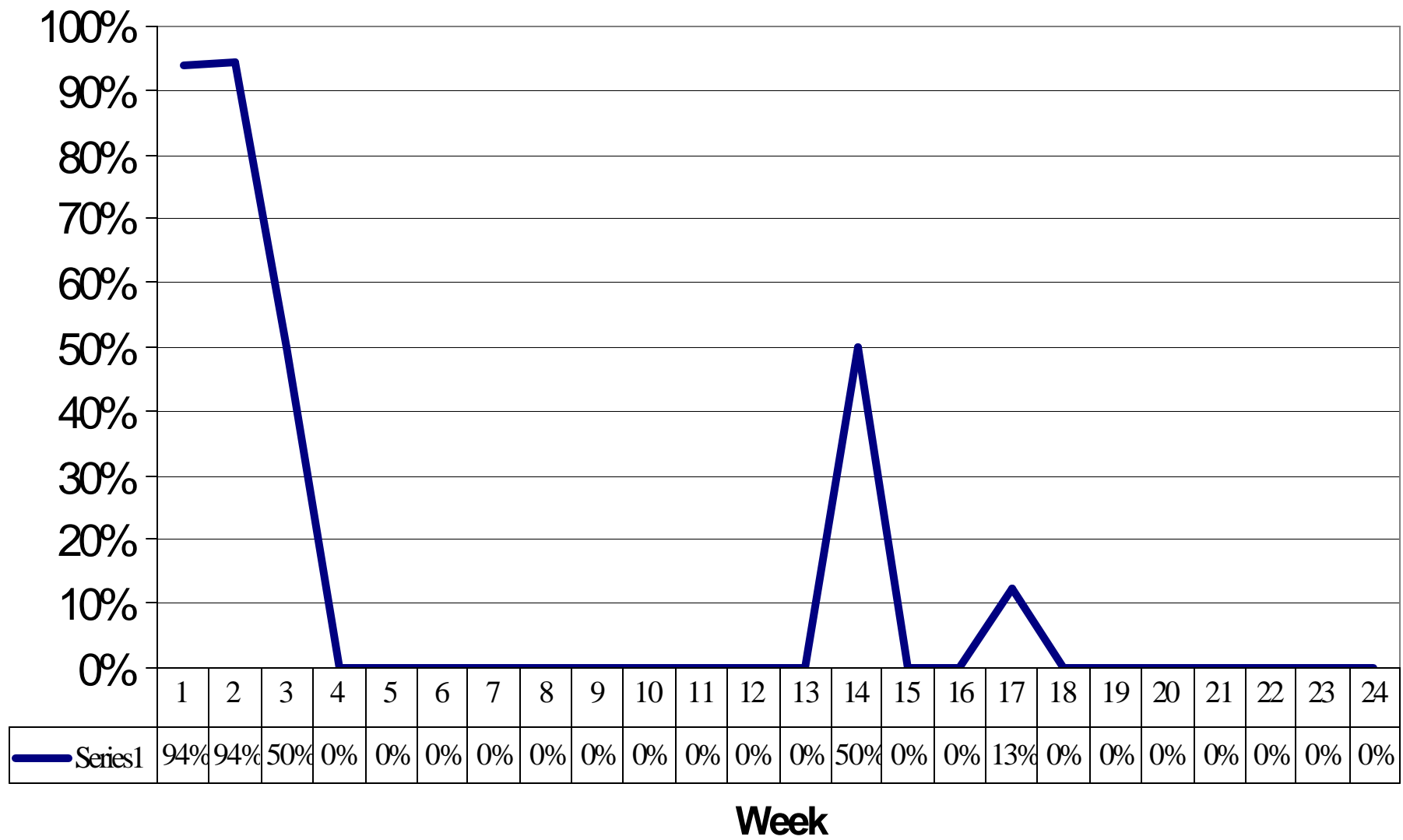
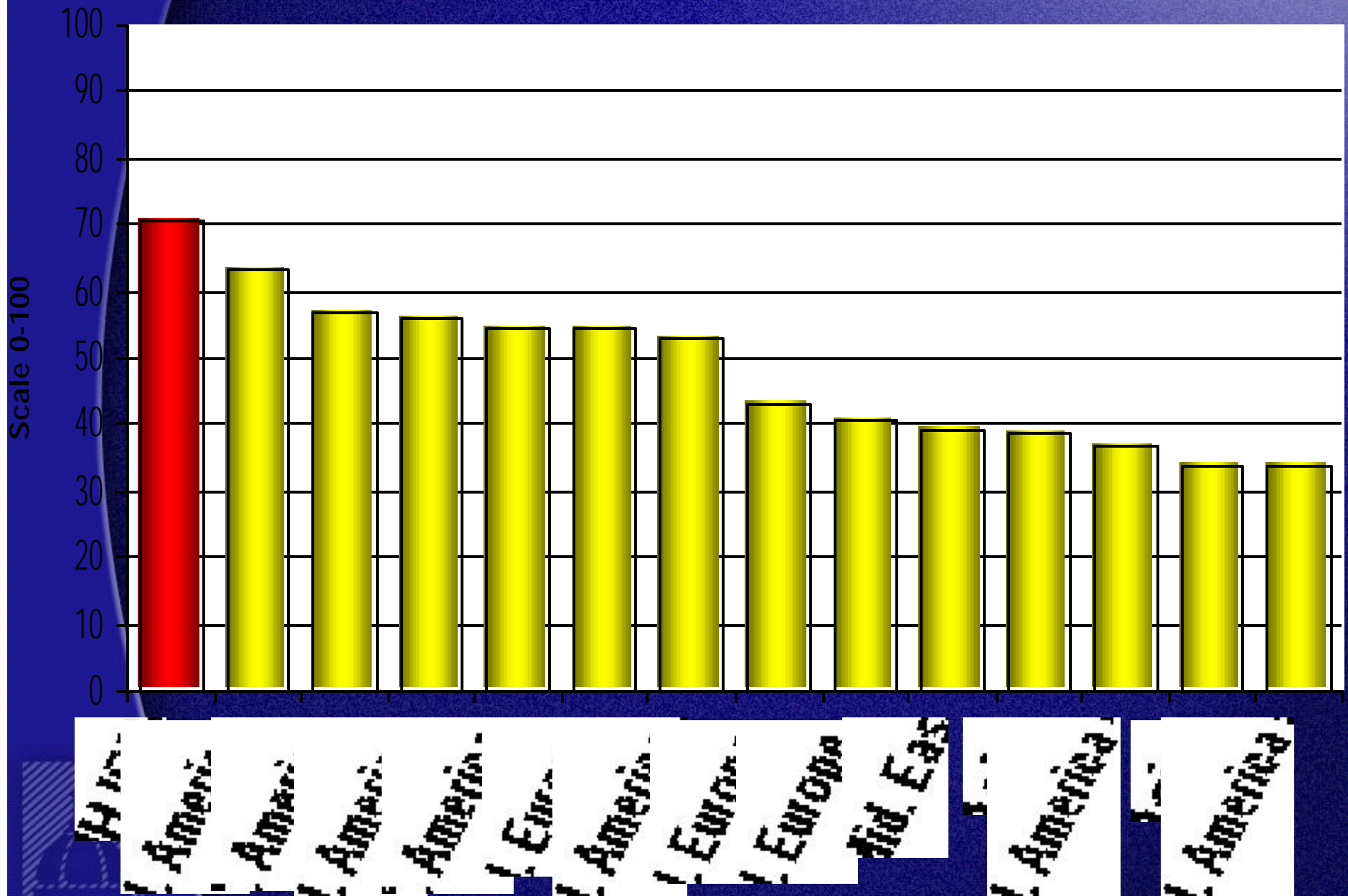


Figure 1: Percent of Charts with Medication Errors Identified per Week through Medication Reconciliation Process*



Safety Culture Across Airlines



Stories in this Monograph

- Improving Patient Safety
 - Johns Hopkins Hospital
- Decreasing costs and improving care
 - St Vincent's, Stamford, St John's
- Refining Art of Protocols
 - LDS
- Measuring outcomes beyond mortality
 - Lehigh Valley



Stories in this Monograph

- Caring and Care in the ICU
 - Rhode Island
- Restoring brain injured patients
 - Mission Hospital
- Building a kinder ICU
 - Memorial, Duke
- Imagining the ICU of the Future
 - Sentara



Common Themes

- Centered on patients
- Created systems to deliver care
- Collaborated
- Committed



Miles To Go Before We Sleep

Current performance in ventilator measures in an average ICU

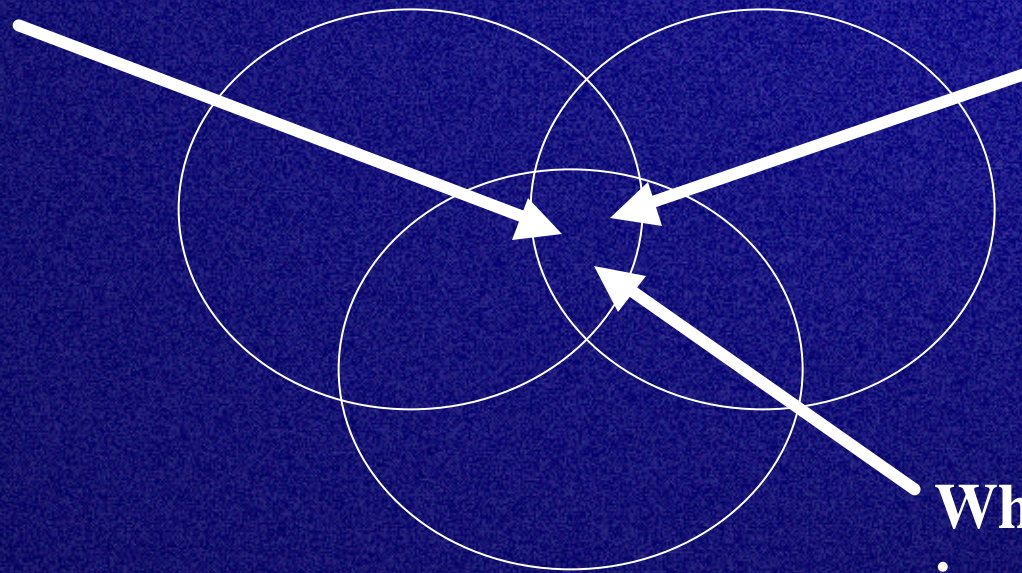
- 1 excess death per week
- 3 million in annual costs



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Who is willing to shave their
Head?

Who is willing to promise patients
that care will be safe, effective,
efficient, patient centered, timely,
and equitable?

