NICU to compare its performance to those NICUs that have achieved this benchmark performance. The goal of quality improvement is to provide the tools and structure

Figure 2: Impacts of Race/Ethnicity on Breastmilk Feeding at Discharge Home<sup>3</sup>

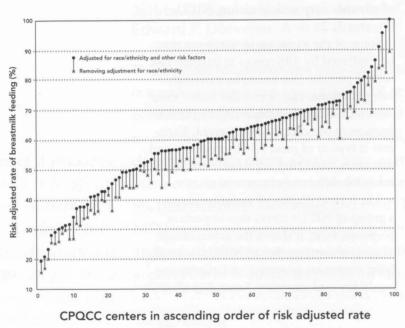
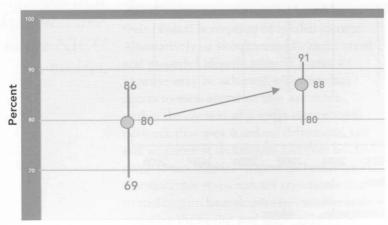


Figure 3: Move the Median and Narrow the Interquartile Range<sup>4</sup>



Pre Q.I. Post Q.I.
Q.I., Quality Improvement

for all NICUs to achieve or even exceed the outcomes reported by the top performers. When applied to a network of NICUs, effective quality improvement will increase the group's mean rate for a desired outcome and decrease the variability in processes and/or outcomes across the group. Figure 3 demonstrates these changes following an improvement project to increase the rate of antenatal steroids in mothers threatening preterm delivery.<sup>4</sup>

Because the quality of care delivered to NICU patients is ultimately improved by the busy frontline clinicians who provide that care, quality improvement efforts must become part of the routines of everyday care. Using proven improvement methods and respecting the time constraints placed on neonatologists, nurses, therapists and other members of the care team are essential to successful quality improvement.

**Examples of Successful Perinatal** Quality Improvement Initiatives A number of perinatal quality improvement initiatives are achieving positive results. In a collaborative supported by the California Perinatal Quality Care Collaborative (CPQCC), 13 regional NICUs reduced central line-associated blood stream infections by 25 percent within a 10-month period.5 Similarly, from 1998 to 2006, a Vermont Oxford Network quality improvement collaborative of eight NICUs caring for 4,065 very low-birthweight infants experienced a statistically significant reduction in health care-associated infections, from 18 percent to 15 percent.6

Key Practical Concepts in Perinatal Quality Improvement Several practical concepts are central to perinatal improvement efforts: timely feedback, transparency, evidence-based decisionmaking and reliability.

## Timely feedback

Setting measurable, time-bounded goals and benchmarks is an irreplaceable component of successful quality improvement efforts.