Pittsburgh Regional Healthcare Initiative

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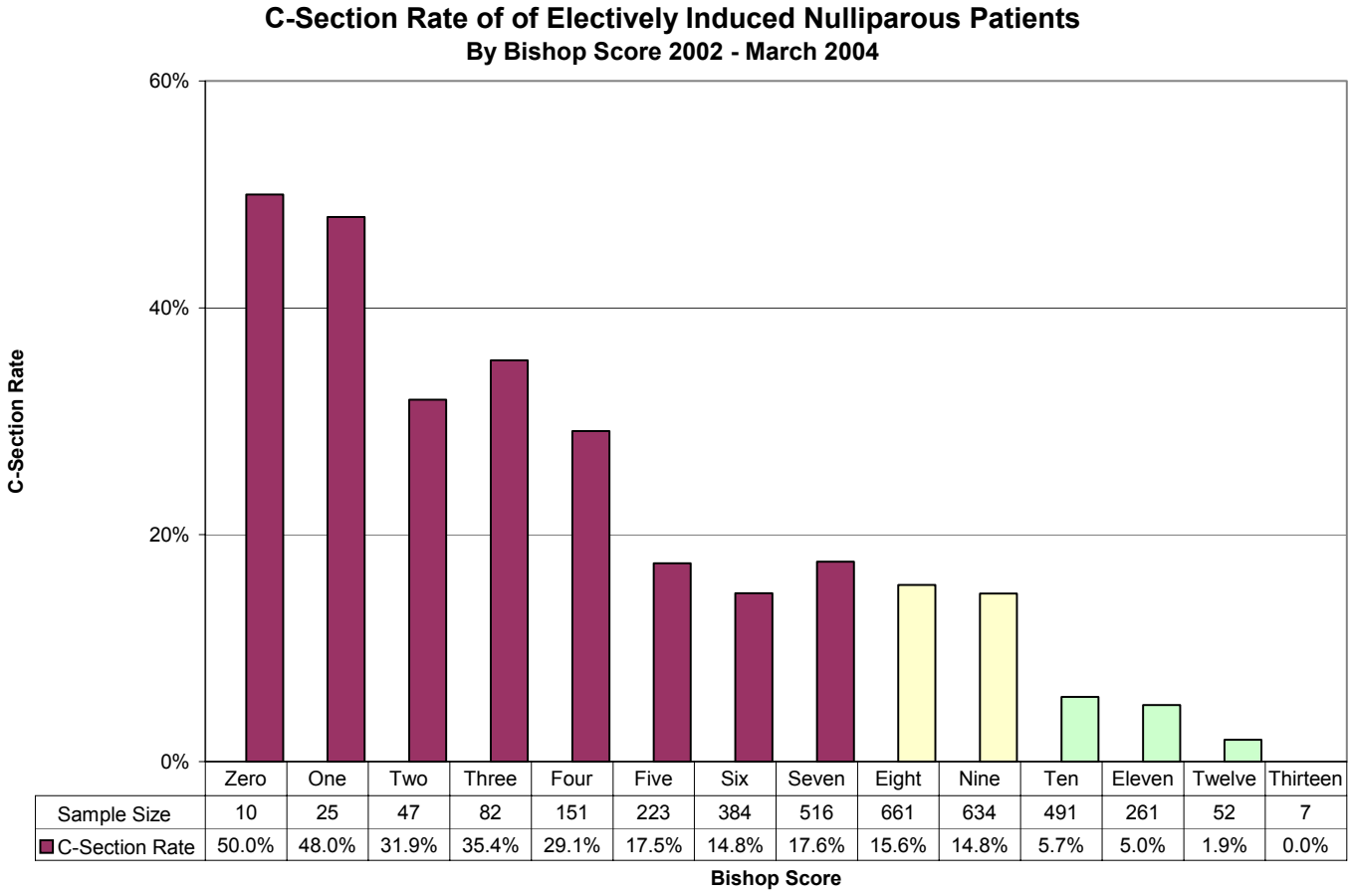
Sharing learning with physicians in Salt Lake City

OB partnership looks into early elective inductions

PRHI partners have discovered the power of sharing clinical learning and adapting it to our own region. For example, PRHI's Cardiac Registry was modeled after a similar registry conceived by the Northern New England Cardiovascular Study Group (NNE). The registry tracks processes of care during coronary artery bypass graft surgery and the outcome they produce in patients. Pittsburgh's version has already produced learning in key areas of cardiac care across the region.

Now, the PRHI Obstetrical Working Group has turned to Intermountain Healthcare System (IHC), of Salt Lake City to improve practices around the elective induction of labor before the 39th week of pregnancy.

Here is the problem: In communities across the country, elective induction of labor without clear medical indications before 39th week of pregnancy has become increasingly common. Yet when chosen electively, early inductions run contrary to known obstetrical guidelines and can result in problems for mother and baby. For the mother, induction before the 39th week can increase the duration of labor, the risk of infection and cesarean. For babies, early induction raises



	Zero	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten	Eleven	Twelve	Thirteen
Sample Size	10	25	47	82	151	223	384	516	661	634	491	261	52	7
C-Section Rate	50.0%	48.0%	31.9%	35.4%	29.1%	17.5%	14.8%	17.6%	15.6%	14.8%	5.7%	5.0%	1.9%	0.0%

Chart courtesy of IHC shows decline in cesarean rates among electively induced patients system wide following initiation of regional guidelines. Could the Pittsburgh region learn from the Salt Lake City experience?

IHC Treatment Guidelines

- Consider induction only after 39 weeks' gestation.
- Counsel patients about indications for appropriate induction.
- Assess fetal maturity.
- Assess cervical ripeness, (Bishop's Score).
- Understand contraindications and precautions for inducing labor.
- Have prenatal records on the patient's chart, personnel familiar with induction agents, and a physician ready to perform a cesarean, should one become necessary.

risks of premature delivery, respiratory distress syndrome and admission to a neonatal intensive care unit (NICU).

In addition to the human toll, every complication for mother and baby drastically raises the cost of care.

Utah is a good place to look for answers. With over 50,000 births per year, the state leads the nation per capita in live births. Believing there may be cause for concern, IHC surveyed nine labor and delivery units across Utah to determine the rate of early elective inductions. They discovered that rate for women at less than 39 weeks stood at 28%.

Using guidelines established by the American College of Obstetrics and Gynecology (ACOG), and adding some criteria of their own, IHC implemented a program to reduce inappropriate early inductions. (One criterion, the Bishop's Score, assesses the cervical readiness of the mother for delivery.)

At first, some physicians balked at the new guidelines. But according to Bryan Oshiro, M.D, System Medical Director for IHC Women and Newborn Clinical Integration Program and Assistant Professor at the University of Utah, with education, feedback and discussion, "the opposition gradually melted away."

IHC's results were impressive. By reducing the early elective induction rate from 28% to between 5-6%, average time to delivery has been reduced and cesarean rates are down among electively induced patients.

Another pleasant side effect has been lower cost. IHC estimates that limiting elective early inductions has saved the system about $1 million in variable costs over the last three years, mainly due to decreases in length of stay and complications for mothers. (Cost savings for the care of babies, although harder to quantify, are also believed to be substantial.)

Could Pittsburgh learn from the IHC experience? PRHI is beginning in much the same way that the Utah group did: working group members have begun to look the number of early elective inductions in this region. They are surveying Pittsburgh's four major delivery services with neonatal intensive care units, (Magee, Allegheny General, Mercy, and West Penn), and are finding opportunities to improve. Together, obstetricians and neonatologists on the PRHI working group are taking ACOG and IHC guidelines to each obstetrical department for review.

These references will be compiled into a binder, which will be used for sharing with physicians in the Level 1 and Level 2 centers, and will ultimately result in a learning module, which will be posted on the PRHI website.

At the September meeting of the OB Working Group, members will tackle guideline consensus, review forms for standardization, and begin work on a patient brochure for regional use. The October meeting will center on standardizing data for collection and regional learning. Area obstetricians and neonatologists are welcome.

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