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Induced labor not more expensive to health care system than spontaneous labor

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Expectant parents wait 40 weeks for the arrival of their new baby, but what if labor was induced one week earlier? Conventional wisdom holds that inducing labor at 39 weeks would be cost-prohibitive to a health care system. However, the results of a joint study between University of Utah Health and Intermountain Healthcare show inducing labor one week early costs the same as waiting for spontaneous labor.

Brett Einerson, M.D., M.P.H, will present their research findings at the Annual Meeting of the American College of Obstetricians and Gynecologists on Saturday, May 4th at 8:50 a.m. Eastern.

"We found that the increase in cost from other parts of patient care cancel out those costs [from induction]," said Einerson, assistant professor in the division of Maternal-Fetal Medicine at U of U Health. "This a conclusion that is totally opposite of what we in obstetrics have assumed over the past 30 years."

The study aimed to measure the actual cost differences between inducing labor early and spontaneous, natural labor. Einerson and his colleagues used data obtained from the ARRIVE clinical trial, a landmark, multicenter study consisting of more than 6,000 low-risk, first-time mothers. The team randomized 1,230 women enrolled in the ARRIVE study—608 were induced at 39 weeks and 622 experienced spontaneous labor.

"We watched real patients as they went through the [health care] system

to evaluate the actual costs for randomized patients for clinical outcomes," Einerson said.

The results confirm that the increased cost accrued from women spending more time in the hospital after inducing labor is offset by cost saved from avoiding additional tests, visits and medications later in pregnancy, as well as serious health outcomes, like pre-eclampsia. In addition, the researchers found that inducing labor at 39 weeks reduced the rate of Cesarean section in new mothers.

"This a unique study that could only be accomplished in Utah," said Sean Esplin, M.D., maternal fetal medicine physician and Chair of the Women and Newborn Research Group at Intermountain Healthcare, who is a contributing author on the study. "These results demonstrate the importance of considering cost in the medical decisions that we make. Intermountain Healthcare and the University of Utah are interested in providing the highest quality of care at the lowest price possible, so we are constantly tracking costs, which makes a study like this possible."

While the study is focused on Utah hospitals, Einerson believes the results are applicable across the country. The hospitals in this study span a cross section of health care facilities, both academic and community hospitals, where most deliveries occur across the United States.

"This is a huge strength of our study," Einerson said. "Our results represent high and low volume hospitals, which were consistent across each institution and could be transferable to other hospitals across country."

Provided by University of Utah Health

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