

# Obstetric Residencies Ranked by Grads' Skills

BY MARY ANN MOON

Obstetric residency programs can be ranked according to the complication rates among patients delivered by the programs' graduates, according to a report in JAMA.

Moreover, the difference in maternal complication rates between graduates of the highest-ranked residency programs and graduates of the lowest-ranked programs was deemed relatively large. "A woman choosing an obstetrician who trained at a program in the top tier would face a 10.3%

risk of a major complication, compared with 13.6% if she chose an obstetrician trained at a program from the bottom tier," said Dr. David A. Asch of the Leonard Davis Institute of Health Economics at the University of Pennsylvania, Philadelphia, and his associates.

"These findings provide the first empirical support for widely held intuitions about the clinical implications of variation in medical education," they added.

The investigators evaluated risk-adjusted rates of maternal complications in 4,906,169 births in New York and Florida between 1992 and 2007 "as measures to judge the quality of care" delivered by 4,124 graduates of 107 U.S. residency programs who attended these births. These residency programs were distributed among 22 states and represented 43% of the 249 currently accredited obstetric residency programs in the United States.

Six categories of complications were assessed individually and in three composites, for a total of nine measures. For vaginal births, lacerations, hemorrhage, and all other maternal complications such as infections and thrombotic events were assessed; for cesarean deliveries, hemorrhage, infection, and all other complications such as operative and thrombotic events were assessed.

The rate of each outcome for each residency program was estimated after the data were adjusted to account for numerous patient, hospital, and physician characteristics.

The complication rates of physicians trained in residency programs in the top quintile were substantially lower (absolute difference, 3.3%) than those of physicians trained in residency programs in the bottom quintile. "In general, the bottom-quintile programs had complication rates approximately one-third higher than those of the top-quintile programs," Dr. Asch and his colleagues wrote (JAMA 2009;302:1277-83).

The rankings remained consistent when the data were broken down by the nine individual complication measures, suggesting that "these rates may reflect good measures of overall quality" in residency programs, they added.

A separate analysis was performed to examine "whether the estimated program rankings result from differences in a residency program's ability to attract

talented residents," as opposed to its ability to improve residents' skills.

Medical licensure test scores were available for a subset of 74% of the obstetricians in this study. Analysis showed that the caliber of medical students feeding into the residency programs had little effect on outcomes, suggesting that "skills developed during residency training are more important for producing good maternal outcomes than skills developed during medical school, and residency programs differ in skill development," the investigators said.

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"Recently, there has been significant interest within the graduate medical education community to assess the quality of residency training programs based on the academic (board pass rates, research productivity, etc.) and patient care outcomes of program graduates," said Dr. Diane M. Hartmann, chair of the Council on Resident Education in Obstetrics and Gynecology.

"The academic indicators are relatively easy to compile. Clinical outcomes of program graduates are very difficult to obtain and virtually unavailable to training programs at this time. This study does raise an interesting question about the importance of facilitating a training program's ability to obtain this information and thus assess its own educational quality," she said in an interview.

"Clinical outcomes of this type could potentially be used to highlight and replicate the components of excellent training environments. Ob.gyn. residency program directors across the country are committed to producing high-quality physicians. I believe that accurate information about the clinical performance of graduates would be a welcome addition to the information they use daily to alter and improve the obstetrical and gynecological training experience," said Dr. Hartmann, also senior associate dean for graduate medical education and professor of obstetrics and gynecology at the University of Rochester (N.Y.).

This study was limited in that it examined deliveries in only two states, which likely do not represent all residency programs. It also assessed only maternal complications and did not include birth outcomes.

Additionally, this sample included obstetricians who completed residency at many different times. "A hospital's residency program in the 1960s might differ from its program in the 1990s because of different faculty, the evolution of new clinical techniques ... , or trends in attracting different trainees," Dr. Asch and his associates noted.

"Separate from these methodological limitations, stakeholders might object to the interpretation and use of the results," they wrote.

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## POLICY & PRACTICE



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### Women's Health Is Up for Debate

Women's issues made their way to the forefront of the health reform debate in Washington. House Speaker Nancy Pelosi (D-Calif.) asserted last month that women have the most to gain under health reform. On her Web site, the speaker said, for instance, that women are charged up to 48% more than are men for individual health insurance. The version of health care reform that Rep. Pelosi favors would forbid insurance companies from using "gender rating" to charge women more for the same coverage. It also would make maternity care an essential service required in all insurance plans that participate in the health insurance exchanges that are proposed in some bills in Congress. Currently, only 14 states require maternity coverage in policies available on the individual market, and most policies available to individuals do not include it, according to the speaker. Rep. Pelosi's report did not mention abortion, but that issue loomed large in the reform debate. Abortion opponents slammed health reform bills for not explicitly banning public funding for abortions. They also decried inadequate discrimination protection for health care providers who refuse to perform abortions because of moral objections.

### Economy Affects Family Planning

Nearly half of women aged 18-34 years said they planned to delay having children or have fewer children because of the economic downturn. The Guttmacher Institute's national, Internet-based survey of 947 women, conducted this summer, found respondents concerned that they wouldn't have the financial means to raise their children if they got pregnant. All the women surveyed were in families with incomes less than \$75,000, and 44% said they were cutting back their plans for having children. Financial worries also made some women more careful about getting pregnant. About 29% of respondents said they are more careful to use birth control every time they have sex. Forty-six percent, saying they didn't want more children, reported that they've considered sterilization because of the economy. But the surveyors also discovered that the economy is causing some women to use birth control inconsistently. For example, 4% of women who use oral contraceptives reported skipping pills, 12% said they had delayed getting a prescription filled, 11% had gone off the pill for at least a month, and 8% said they were getting fewer pill packs at a time.

### Routine Deliveries Declining

The number of routine, uncomplicated births is dropping, according to

data released by the Agency for Healthcare Research and Quality. Although the number of hospital stays for childbirth climbed 16% in the decade ending in 2007, the number of stays for women with "normal" or "uncomplicated" births dropped by 43%, from 544,000 stays in 1997 to 312,000 in 2007. In contrast, hospital stays increased 107% for births by women with previous cesarean sections (to 562,000), 28% by women with high blood pressure that complicated their pregnancies or childbirths (to 235,000), and 22% by women with increases in perineal trauma during childbirth (to 868,000). However, some complications declined. Hospital stays for women who had umbilical cord complications dropped 15%, from 259,000 in 1997 to 219,000 a decade later. The data come from the 2007 Nationwide Inpatient Sample, part of the agency's Healthcare Cost and Utilization Project.

### Sister Study Enrolls 50,000th

The National Institutes of Health has enrolled 50,884 women to participate in its study of those with sisters who had breast cancer. The Sister Study was launched in 2004, and this year reached a milestone when it enrolled more than 50,000 women. The 10-year study of environmental and genetic factors that influence breast cancer risk examines why some women who appear to be at increased risk don't develop the disease. Participants are asked to complete brief yearly updates on their health and to share more detailed information on changes in health, jobs, and lifestyle every 2 or 3 years. Approximately 900 participants have reported being diagnosed with breast cancer since 2004. For those women, the researchers are collecting additional information about diagnoses and treatments. For more information, visit the Web site [www.sisterstudy.org](http://www.sisterstudy.org).

### State Bans Insurance Gender Bias

It will soon be illegal for health insurance companies in California to charge higher premiums to women based solely on their gender, thanks to a new law signed by California Gov. Arnold Schwarzenegger (R) last month. The law closes a loophole that allowed insurers to charge women more if the companies could point to specific actuarial data. The law eliminates the exception for all insurance contracts issued, amended, or renewed on or after Jan. 1, 2011. Only 10 other states ban this practice, called gender rating, in the individual insurance market, and two states limit it, according to the National Women's Law Center.

—Mary Ellen Schneider