

Barry Smith: A collaborative approach

By Laura Stephenson Carter

My father, who was a dentist, always used to say, 'If you want to be a dentist, you have to carve soap,'" says Barry Smith, M.D., chair of obstetrics and gynecology at DMS. But, Smith admits, "I used to break the soap." He laughs and shakes his head. "I was never very good at building model airplanes either. So I figured I'd never be a dentist . . . or a surgeon. I always thought I'd be one of these thinking, internal-medicine-type doctors."

Smith was partly right. He's certainly a "thinker," who has helped build up the ob-gyn department and its regional residency program; has facilitated collaboration among New Hampshire and Vermont hospitals in bringing down cesarean section rates; and has improved the quality of ob-gyn care using patient-focused research. Considered a national expert, he's lectured throughout the country, has organized national and international conferences, and is consulted by other providers, administrators, and health-care policy-makers.

But even though he couldn't pass his father's soap-carving test as a kid, Smith is today an ob-gyn surgeon. In the early 1970s he was even the first doctor in New Hampshire to perform laparoscopic surgery (which involves threading a thin scope into the abdomen through the patient's navel).

In those days, most surgeons were suspicious of laparoscopy. "The general surgeons at that time, in most places, were totally resistant to it," Smith explains. While he considers himself fortunate to have trained at Cornell, one of just three U.S. medical centers then doing laparoscopy (the other two were Michigan and Chicago), even there the procedure was not used by everyone. "In fact, at New York Hospital, if the general surgery residents wanted one of their patients to have laparoscopy, they had to sneak them into the gynecology service, because their chairman wouldn't let them use it." He chuckles. "Now, of course, the surgeons think they invented it and everything is done laparoscopically."

So how did someone who expected to be an internist wind up in a surgical specialty? "I loved my ob-gyn rotations at Cornell," Smith says. "The ob-gyn program was exceptional. Really good faculty got the students involved. And at that time, the field was beginning to expand so much that you could see yourself in ob-gyn. Among the clinical subspecialties, [it] is probably the one that has dramatically changed the most in the last 30 years: first with ultrasound, then laparoscopy, then all of the new treatments for infertility [and] tremendous advances in treatment of gynecologic cancers."

Smith graduated from the Dartmouth College-DMS three-two program in 1960, completed his M.D. at Cornell in 1962, did a year-long rotating internship at Mary Hitchcock and an ob-gyn residency at Cornell, and then was chief resident at Cornell in 1967-68. In 1970,

after a two-year stint in the Navy, Smith joined the clinical staff at Hitchcock as one of just four physicians in the ob-gyn section (back then, ob-gyn was not a department but a section within the Department of Maternal and Child Health). "We began to introduce some of the newer concepts in high-risk obstetrics, Rh disease, and some of the new infertility [drugs] like clomid," he says of his early years on the medical staff.

In the early 1970s, DMS was reintroducing an M.D.-granting program and asked Smith to develop an ob-gyn clerkship. His administrative responsibilities continued to expand. In 1976 he was appointed section chief, and in 1980 he was elected to the Hitchcock Clinic Board of Directors. In 1992, when his section became a department, he was named acting chair; he then served as vice chair from 1995 to 1997, and in 1997 he was tapped as chair. He also became active in the American College of Obstetricians and Gynecologists (ACOG) and has held various leadership positions in the New Hampshire chapter as well as in the New England district.

All during this time, while technological advances were improving ob-gyn care, a disturbing trend had begun. The cesarean section (c-section) rate was skyrocketing and no one could understand why.

Cesarean sections (the delivery of a baby through a surgical incision in the abdomen and uterus rather than vaginally) have been per-

formed since ancient times—historically to retrieve an infant from a dead or dying mother. It wasn't until the 19th century that there was any hope of a mother surviving the procedure, but by the 20th century c-sections were considered a fairly safe alternative to vaginal births. Even so the cesarean rate in the United States in 1970 was only 5%. But by 1988 it had jumped to 24% nationally—and 25% in New Hampshire.

"This dramatic change became a medical issue and a financial issue, because it added a lot of expense without an improvement in outcomes," says Smith. "There's no question that in the late '80s, the most common reason an obstetrician got sued was for not doing a cesarean section. And the second most common was for not doing one soon enough. So obstetricians were running very frightened of the medicolegal aspects. Any bad outcome was pictured as malpractice."

But there had to be other reasons behind the increase, too, and Smith was as anxious as anyone to discover them. He got his chance in the early 1990s, when the New Hampshire Hospital Association and the New Hampshire Medical Society asked him to help them explore how to bring down c-section rates.

"We tried to figure out what had happened," Smith says. "We sent a survey out to all the obstetricians, to all the hospitals, to try to figure out what they were doing cesarean sections for; the types of physi-

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cians they had on their staffs—whether it was obstetricians, family physicians, midwives; whether they could detect reasons why suddenly the patterns had changed; whether it was because of anesthesia issues in their hospital, nursing issues in their hospital, the fact that all their physicians who had lower cesarean section rates had retired and younger ones who were afraid of different things or didn't have training in certain things, were taking over . . . big things and little things."

Smith was not surprised by the survey's findings: Physicians were doing c-sections for labors that didn't seem to be progressing, when, in fact, many patients weren't truly in labor. Also, forceps deliveries, common in the 1970s, had gone way down, partly because doctors weren't being trained to use them. And VBACs (vaginal births after cesarean) weren't being done very often because it was assumed that once a woman had delivered a child by c-section, any future births had to be handled the same way.

Since the survey, c-section rates have dropped noticeably. "Just doing that survey alone—for reasons that we aren't sure of, but at least showing people we were looking—seemed to lower the rates some," Smith says. In addition, hospitals began to standardize how they reviewed c-sections. Collaborative education efforts got underway. ACOG developed better guidelines for defining labor, so providers wouldn't be in such a hurry to perform a cesarean. ACOG also issued standards for administering adequate doses of oxytocin, a drug that stimulates uterine contractions. VBACs have become more popular, too; in fact, it's the increase in VBACs that is largely responsible for bringing down the overall c-section rate.

Smith also has worked with Vermont, at their invitation, to reduce the c-section rate there and is on a birth project steering committee for the Vermont Program for Quality in Health Care. Vermont used a modified version of New Hampshire's survey and, later, developed educational programs that Granite State providers are invited to attend.

Now the cesarean section rates in both states are significantly below the national average of 21%. The rate in New Hampshire is between 18 and 19%, and the Vermont rate, which was lower than New Hampshire's to begin with, is between 16 and 17%.

Collaborative educational programs for providers in New Hampshire, Vermont, and, most recently, Maine are ongoing and include regional and national experts making presentations on such topics as the guidelines for true labor, better management of pain in labor, the use

of oxytocin to stimulate labor, forceps deliveries, and other such topics. "I think it's unique that we have this . . . competitive collaboration," says Smith. "We really do collaborate for better outcomes at the same time that we are competing for business."

Another of Smith's interests is the Foundation for Healthy Communities, an offshoot of the New Hampshire Hospital Association. He was one of its founders and is still a board member. The foundation concentrates on patient-focused research and quality improvement. Two years ago, it kicked off its own c-section collaborative—with Smith as chair—to collect data, provide feedback to New Hampshire hospitals, and offer education. In addition, Smith has been busy with other statewide initiatives, including a program called the Maternal and Newborn Assessment Project, which won a national award from ACOG; a perinatal addiction task force; and a number of other activities.

"He is so dedicated and so passionate about improving care for pregnant women," says Rachel Rowe, executive vice president of the Foundation for Healthy Communities. "His influence goes far beyond the fact that he's an obstetrician."

Smith has also been building up the regional Dartmouth-Hitchcock ob-gyn residency program, now in its third year, which he hopes "can positively affect outcomes in ob-gyn care" in the state. "More than half the obstetricians in the state are connected to us, either working for the Clinic or [as] faculty," explains Smith.

"[It's] probably up around 60% now."

Smith is glad to have grown up with the system he has helped to shape. From a four-physician section in the 1970s, ob-gyn has become a full-fledged department with 19 staff physicians, seven nurse practitioners, and eight nurse-midwives, plus other providers. "We've got probably the best model of a collaborative physician-midwife practice going," he says proudly. "We are as good a collaborative practice as anyplace in the country. [It's] a real plus for our residents to be able to learn that."

And on top of everything else he does, Smith still sees patients and performs surgery two days a week—on Mondays at Mt. Ascutney Hospital in Windsor, Vt., and on Tuesdays at DHMC.

Reflecting on what retirement might bring, he says, "I'll probably be able to continue doing [quality improvement activities] even when I retire from this job and from clinical medicine." Almost apologetically he adds, "I tried to learn how to do fly-fishing, but I don't think I passed it." He laughs. "I'm not patient enough." ■



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Smith spends most of his time on administrative work, but still operates two days a week.