Editorials

Cesarean Section Competence, Maternity Care Training, And Community Need

As a specialty, family practice has always struggled to define its breadth and depth. Individual family physicians have chosen varied scopes of work, even within a given geographic area. The skills required by generalist physicians have varied by geography and over time, and the scope of family practice has followed suit. Such variations have always raised questions about the limits of family practice, questions often asked by other specialists and, not uncommonly, by those of us inside the discipline. We seem destined to define our specialty with useful but indistinct phrases, such as, "the doctor who specializes in you."

Maternity care, for example is a priority for some but not most family physicians, and access to maternity care is a problem in some but not most geographic areas. The performance of obstetric deliveries is required by family practice residencies, but only about one-third of residency-trained family physicians provide routine obstetric deliveries in their practices.[1 p 136] Ten percent of residency-trained family physicians deliver babies in the East South Central area of the United States, but 68 percent do so in the West North Central.[1 p 136] About 20 percent of urban family physicians provide obstetric care, but 38 percent of rural physicians do so.[1 p 139]

Within the context of maternity care, the performance of Cesarean sections by family physicians is both more uncommon and more controversial. Fewer than 5 percent of family physicians include this procedure as part of their practice.[1 p 136] Of paramount concern has been the competence of family physicians to perform this operative procedure. The study by Deutchman and colleagues reported in this issue of *JABFP* sheds more light on this subject.[2]

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From the Department of Family and Community Medicine, University of Missouri-Columbia. Address reprint requests to Harold A. Williamson, Jr., MD, Department of Family and Community Medicine, MA 303 Medical Sciences Building, University of Missouri-Columbia, Columbia, MO 65212.

In an effort to address the issue of competence, Deutchman, et al. studied the medical records of 710 women who experienced Cesarean sections in two adjacent rural hospitals during a period of a decade and one-half. They compared outcomes of Cesarean sections performed by family physicians with those performed by other physicians in the communities (general practitioners, general surgeons, and an obstetrician). Outcome standards gleaned from various sources were also compared with outcomes of the family physicians in the study. The family physicians met or surpassed the reference standards in all measures and compared favorably with other specialists in the community. These family physicians performed an average of 46 Cesarean sections during residency training (range 25 to 100); during their practice careers, they averaged nine Cesarean sections per year (range 1 to 22).

Some methodological problems somewhat limit the acceptance of the study conclusions. Most importantly, this study focused on a few dedicated family physicians who provided Cesarean section services in two adjacent rural communities; whether their competence is comparable with other family physicians is unknown. We also do not know to what extent patients from the area received Cesarean sections outside these two hospitals. Was there a referral bias that eliminated the highest risk patients and therefore the worst outcomes? In addition, although the scope of this study was relatively large and spanned a decade and one-half, the sampling technique and comparison groups do not allow calculation of statistical power, thus limiting the ability of the study to conclude "no difference" with high certainty.

This study and the issue of Cesarean sections performed by family physicians in general raise three important questions. First, are family physicians competent to perform Cesarean sections? Second, what is appropriate training for Cesarean sections, and should this training be offered routinely within residency programs? Third, what

is the need for family physicians who perform Cesarean sections?

Can family physicians be competent to perform Cesarean sections? There appear to be no generally agreed-upon standards for training and experience, much less for competence. Many reasons are cited for the lack of such standards, but their absence leaves family physicians perpetually in conflict with obstetrics as a specialty and obstetricians on hospital staffs in particular.

During the last 2 decades, a great deal of research has documented a relation between surgical volume and outcome.[3] Although physicians who perform and institutions that offer large volumes of complex procedures have better outcomes than those with small volumes, there also seems to be a relation between the complexity of the surgery and the influence of volume on surgical outcomes. For example, there is a strong relation between coronary artery bypass volume and outcome, but a weak or nonexistent one between cholecystectomy volume and outcome. Little information describes Cesarean section volume and outcome, but at least one study suggested no increase in adverse outcomes (wound infections) at small-volume institutions.[4]

Reasonable observers should view the study by Deutchman, et al. as further evidence that family physicians can perform Cesarean sections and have outcomes similar to those of obstetricians.

What training should be available for family physicians wishing to perform Cesarean sections? The absence of agreed-upon standards for Cesarean section competence hampers educational programs as well as practicing physicians. Most residency programs do not provide obstetric training with Cesarean section competence as a goal, but some do. Still other residency programs are ambiguous on this issue — asserting that the resident can become competent in Cesarean sections but having very few graduates who attain this capability.

Should all residency programs teach residents to perform Cesarean sections? I think not. Rather, it makes sense for some few residency programs to focus on the issue of advanced obstetrics and Cesarean sections, and for the 25 or so obstetric fellowships in family practice to continue to attract those who wish to receive advanced skills.[1 p 210] Residency programs should carefully consider their ability to provide training in these operative skills and the good judgment to use them appropriately. Residency directors also must consider which other family practice skills and knowledge will not be imparted as a resident performs 25 to 50 Cesarean sections.

What is the societal need for family physicians to perform Cesarean sections? Within the discipline privileges are usually discussed in terms of the family physician's right to perform a procedure if he or she has adequate training. In addition, we frequently say that our patients "need" us to perform these procedures.

The need to have Cesarean section capabilities within 30 minutes is an unproven standard, but one not widely disputed. Pregnant patients in communities with family physician-only practices in isolated rural areas should have access to this procedure. On the other hand, the majority of rural family physicians who provide maternity care do not also perform Cesarean sections, relying instead upon their surgical or obstetric colleagues to do so. Nearly 40 percent of rural family physicians perform routine obstetric deliveries, but only 12 percent perform Cesarean sections.[1 p 139] Indeed, in the communities in the Deutchman, et al. study, general surgeons and an obstetrician were available to perform Cesarean sections.

The new leadership of the American Academy of Family Physicians has resolved to define more closely a family physician's competence, including skills in maternity care.[5] A sharper definition of family physicians as providers of perinatal care would be welcome. Included in statements about competencies, though, must be some understanding about what constitutes "adequate training and experience." Research to define more clearly obstetric competence and the incremental benefit derived from family physicians who perform Cesarean sections would also be welcome. Such studies would be difficult in the United States and would need to be population based rather than practice based.

Until other data become available, the work of Deutchman and colleagues reminds us that there is a small but important group of family physicians who can demonstrate, within reasonable certainty, that they have the training and experience to perform Cesarean sections. We can only hope that representative and regulatory bodies within family practice and obstetrics can reach some consensus regarding the appropriateness of

training and experience in this procedure. In the meantime, as our discipline continues to redefine its limits, the boundaries should always be drawn based upon demonstrated benefits to our patients.

Harold A. Williamson, Jr., MD, MSPH
University of Missouri
Columbia, MO

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Obstetric Privileges In Family Practice

Recently it has been stated that the proportion of the family medicine literature devoted to obstetrics is inversely related to the percentage of family physicians who provide obstetric care.[1] Although this statement might not be completely true, family medicine literature has a disproportionate focus on obstetrics compared with other areas. What is it about obstetrics that causes so many of us to devote so much time to this area of study? In particular, why do we wait with such anticipation for national survey data regarding the percentage of family physicians still delivering babies? After all, other areas of care, such as surgical assisting or reading privileges for electrocardiograms, do not generate the intense interest that participation rates in obstetrics do. The answers to these questions are complex and must be addressed on several levels.

From a public health standpoint, these statistics are important when considering access to care for the rural and underserved populations for which family physicians serve as the primary providers. Our interest in obstetric participation, however, goes well beyond public health issues. I believe it reflects a feeling that this area of practice approaches the core of family medicine. The frequently quoted phrase "care from womb to tomb" denotes the importance of obstetrics in the continuity of care for families. Maternity care is a direct example of one of the precepts of family medicine, specifically, that care given to one family member must take into account other family members in the delivery of that care. Obviously, this tenet is encountered most dramatically and directly in prenatal care, where the physician must consider both the health of the mother and unborn baby, as well as the importance of the father and, possibly, siblings in the process.

Another reason childbirth can be so important to family physicians is that the event itself creates families. Maternity care is often the first major health care contact young couples have with their physicians. The birth of their child is among the most dramatic events a couple will experience, not only because of the witnessing of a new life coming into the world, but also because bonds develop and strengthen between family members during this event. Participating in this process is a privilege, particularly for the physician who will care for that family in the future. In most cases, these young persons are healthy and happy, and the birth event enhances their happiness. Should an adverse event occur, the opportunity to alleviate suffering can form an intensified bond between the physician and the family. Each year as we read of the declining numbers of family physicians who participate in obstetrics, many of us mourn to some degree those who no longer have the opportunity for this rewarding experience. We might also feel a degree of anxiety that delivering babies might soon disappear as part of the family medicine specialty.

Kahn and Schmittling report a slight decline in the percentage of family physicians with obstetric privileges between 1988 and 1993.[2] At first glance,

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From the Department of Family Medicine, University of California Medical Center, Davis, Sacramento. Address reprint requests to Thomas S. Nesbitt, MD, MPH, Department of Family Practice, U.C. Davis Medical Center, 2221 Stockton Boulevard, Sacramento, CA 95817.