The University of Missouri Rural Obstetric Network: Creating Rural Obstetric Training Sites for a University-based Residency Program

John E. Delzell, Jr, MD, MSPH; Erika N. Ringdahl, MD

This paper describes a rural obstetric experience that was developed for a university-based family practice residency program and designed to increase the number of deliveries per resident, the number of graduates practicing in rural areas, and the number of graduates doing obstetrics. Rural hospitals can be a source of deliveries for residency training programs. This rural obstetric experience also offers more training months in a rural setting and more months training with family physicians.

(Fam Med 2003;35(4):243-5.)

Statement of the Problem

There is a need for more rural family physicians, particularly those who provide maternity care. Many rural areas lack obstetrical services if their local family physician does not do obstetrics. Only 30% of family physicians practice obstetrics, and the number has declined significantly over the past 20 years.1 There is evidence that the use of rural training sites for obstetrics during residency encourages rural and obstetrical practice after graduation.2,3 Specifically, the more exposure and time spent in rural areas, the more likely a residency graduate is to go into rural practice.4 While not specifically stated in the Program Requirements for Family Practice, the Residency Review Committee for Family Practice (RRC) generally expects each family practice residency graduate to have performed a minimum of 40 deliveries. Many family practice residency programs struggle to find the obstetric training opportunities to meet the minimum standards set forth by the RRC.5,6 This problem can be acute in areas of the country where family physicians are not typically providers of maternity care, such as in the Northeast and in hospitals where there is a competing obstetrics residency.7 This paper describes a rural obstetrics experience designed to increase the number of deliveries per resident, increase the number of graduates practicing obstetrics, and increase the number of graduates practicing in a rural area.

Background

Since 1973, the University of Missouri-Columbia Family Practice Residency Program has used multiple training sites for obstetrics to provide an appropriate experi-
ence for our residents. In 1995, we began to develop a network of rural obstetrics training sites in an attempt to increase deliveries for residents, increase the number of graduates practicing obstetrics, and increase the number of graduates practicing in rural sites.

Methods
We developed criteria (Table 1) to select new training sites. Two sites initially met our criteria, and interested residents participated in pilot rotations at those sites. Most preceptors were graduates of our program and had previously precepted for medical students; therefore, no formal faculty development was done prior to beginning the rotation. Federal residency training grant dollars were used to reimburse resident mileage to the rural site and to provide housing and computers in each site. Each site was given $3,000 per year to help offset the costs of on-site coordination of the rotation.

Both pilots were successful, and at the present time, our residents have the option of a 1-month rural obstetrics rotation in either Washington or Houston, Mo. Washington is a town of 12,282 that is 96 miles from Columbia. Residents work with eight family physicians and five obstetricians. Houston is a town of 2,023 that is 160 miles from Columbia. There, residents work with three family physicians. In both sites, the residents’ primary responsibility is to staff the labor and delivery suite. However, if there are no obstetrics patients, residents participate in prenatal clinic visits, emergency room visits, or practice management activities with their preceptors.

Program Evaluation
At the end of each rotation, preceptors evaluate the residents, and the residents evaluate the experience and the teachers at their site. In addition, each resident documents all deliveries and procedures and submits these for entry into the residency program database. Practice locations for graduating residents are recorded. In addition, graduates are surveyed every 3 years to update their practice demographics.

Results
The Rural Obstetrics Network was implemented in 1995. Two groups of residents were compared—those graduating from 1988 to 1994 and those graduating from 1995 to 2001. There were 79 graduates between 1988 and 1994 and 81 graduates between 1995 and 2001. The percentage practicing in rural areas was 38% in both groups, but the percentage that included obstetrics in their practice increased from 30% to 41% (Table 2). Additional benefits of the program include an increased number of months training in rural sites and an increased number of months that residents learn obstetrics from family physicians.

Discussion
A rural obstetrics rotation can enhance a residency program’s obstetrics training and at the same time provide a valuable experience for residents who are interested in rural practice. According to data from the American Academy of Family Physicians (AAFP) in 2001, 30% of family physicians were performing routine vaginal deliveries. At the same time, 34.6% of family physicians under the age of 36 (an age that is comparable to new graduates) were practicing obstetrics. By using rural obstetrics training sites, we have increased the number of graduates who have included obstetrics in their practice after graduation. It is also important to note that the use of these rural sites increased the time spent learning obstetrics from family physicians and increased the number of months of training in a rural setting. At the University of Missouri-Columbia, the Rural Obstetrics Network has improved our obstetrics training and at the same time complements our rural mission.

Table 1
Criteria Used to Select Rural Obstetrics Training Sites
- Within 200 miles of residency program base
- More than 30 deliveries per month
- Interested and effective family physician preceptors

Table 2
Outcomes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Available months learning obstetrics from family physicians</td>
<td>5.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Available rural training months</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td># of graduates practicing rural areas</td>
<td>30/79 (38%)</td>
<td>31/81 (38%)</td>
</tr>
<tr>
<td># of graduates practicing obstetrics</td>
<td>24/79 (30%)</td>
<td>33/81 (41%)</td>
</tr>
</tbody>
</table>

Corresponding Author: Address correspondence to Dr Delzell, University of Tennessee, Department of Family Medicine, Saint Francis Family Practice Residency Program, 1301 Primacy Parkway, Memphis, TN 38119. 901-761-2997. Fax: 901-763-3649. jdelzell@utmem.edu.
REFERENCES


