Models of Organizational Structure of Midwifery Practices Located in Institutions With Residency Programs

Cathy Collins-Fulea, CNM, MSN

Four models of organizational structure for midwifery practices that are located in academic institutions with residency programs are described: parallel models, coexistence models, fully integrated models, and blended models. Examples of each of these models are presented along with advantages and disadvantages and overall effect on resident education. J Midwifery Womens Health 2009;54:287–293 © 2009 by the American College of Nurse-Midwives.

keywords: collaborative practice, midwifery practice, models of practice, residency program, organizational structure

INTRODUCTION

In 2001, the Institutes of Medicine (IOM) Committee on Quality of Health Care in America produced a report detailing the problems with the current health care system and outlined a vision for transforming the system, which has important implications for health professionals. In a subsequent publication, the IOM recommended that all institutions that engage in clinical education implement a core set of competencies that include evidence-based care practices and working as part of interdisciplinary teams.2

In 2008, the Commonwealth Fund also recognized the need for change and stressed fragmentation of care as a fundamental contributor to the poor overall performance of the US health care system. This report cited as contributing factors poor communication and the lack of clear accountability for a patient cared for by multiple providers, leading to errors, waste, and duplication of effort.3 The report further indicated that the current educational programs do not adequately prepare physicians to practice in a team-based environment and recommended that curricula in clinical education be expanded to include such training.

The Milbank Report4 supports the use of evidence-based practices to facilitate optimal outcomes for mothers and infants. The report quotes a large body of evidence demonstrating that this can be accomplished by supporting physiologic childbirth. Barriers to this care include reliance on a specialist to provide care to a predominantly healthy low-risk population and the lack of core childbearing knowledge and skills among health care professionals. These reports and other publications support the need for educating physicians in an interdisciplinary fashion, with emphasis on evidence-based practices.1–5 For the majority of pregnant women, this means supporting physiologic processes during childbearing. Midwives are more likely to have skills that support physiologic processes in healthy women and allow these processes to occur without interference.4 Physicians who work with midwives would likely have increased exposure to the midwifery skills or the midwifery model of care that support physiologic childbirth; thus midwives should be a critical component in the education of physicians who will be involved with childbearing women.

Midwives have been involved in medical education for decades.6–12 Some midwives have allowed medical students and residents to participate in the care of the women who are receiving midwifery care to facilitate learning about the midwifery model of care. Other midwives have been employed as faculty to supervise resident clinics and to oversee low-risk hospital care. Still others have been hired as hospitalists to replace residents as the hours a resident is allowed to provide service has decreased. Many practice organizational structure models have evolved over the years to accommodate the roles midwives play in various academic settings. Practices such as those at the University of Rochester and the University of New Mexico have been described in the literature, and it has been shown how this team concept of care can improve educational outcomes for nonmidwifery learners.8,9 However, little attention has been given to how the academic midwifery practices themselves are organized. The purpose of this paper is to describe different organizational structures of midwifery practices located in institutions with residency programs, note the strengths and weaknesses of each model, and comment on the effects they have on overall resident education and on midwifery practice.

METHODS

An informal call for participation was placed on the American College of Nurse-Midwives’ list serve database of midwives participating in medical education. Representatives from 28 practices in all areas of the country (except the Southeast) responded, which is 22% of the approximately 128 members in the list serve database.13 A series of questions developed by the author was posed by e-mail to each participant to solicit information on the role of the midwifery practice in relation to the residency
program in each institution (Table 1). Participants were asked to identify advantages and disadvantages of the role of the midwife in each setting, the organizational structure of the practice, and the structure of the interaction between the midwives and the residency program. Some participants were contacted a second time to clarify information that was provided in the initial response to the questions.

RESULTS

Results were analyzed to identify characteristics of each practice. Specific attention was paid to the role of the midwives in relation to the residents and the amount of interaction between midwives and residents. The author then categorized the practices into four groups or models, based on roles and interaction between midwives and the residents. Information on advantages and disadvantages of the organizational structures of the practices in each group was summarized. These were found to be consistent within each model.

The responding practices have been in existence from 2 to 33 years (mean 16 years). Based on organizational structure, the midwifery practices fell into one of the following groups: 1) parallel models where the midwifery practice exists in the same institution as a residency program, but little interaction exists between the midwives and the residents, 2) coexistence models where the midwifery practice exists in the same institution as a residency program, and the midwives may help cover while they maintain a midwifery private practice when the residents are not available, 3) fully integrated models where the midwives are part of the residency program faculty and do not have a midwifery private practice, and 4) blended models where the same midwives fulfill all the functions of the other models.

Parallel Models

In the parallel model, the midwives function in a private practice setting in the same institution as a residency program, and there is no real interaction with the residency program. Usually these are private practices that are not owned or supported by the institution. The midwives can generally practice the art of midwifery (labor sit with the pregnant woman and have time to practice supportive care with watchful waiting, keeping interventions to a minimum unless medically indicated) with few competing responsibilities. The midwives consult directly with their attending physician consultants. If a woman being cared for by the midwife becomes high risk or requires an operative delivery, the residents assist the consultant physician as they would any patient.

An example of a parallel model is Coastal Women’s Healthcare in Scarborough, Maine. This is a physician-owned private practice delivering at the Maine Medical Center. Midwives are on call from home for private midwifery patients and have no professional interaction with the residents while in the hospital providing care. When a patient develops a serious complication requiring physician management, care is transferred directly to the collaborating physician from the private practice. Operative deliveries are performed by the collaborating physician with the assistance of a resident.

A variation of this is seen with Women's Care Midwifery Service of Providence, Rhode Island. This is a group of seven midwives and eight physicians who deliver their private patients at Women’s & Infants Hospital, Brown University. Midwives are on call from home for laboring women. If a midwifery patient arrives in triage at a time when the midwife is not in house, then the resident will triage that patient. Residents have no other involvement with the midwife patients unless there is an operative delivery. This institution also has a midwifery practice that is fully integrated with the residency program and is described later in this paper.

The biggest advantage of a parallel model is the ability of the midwives to practice the art of midwifery with no distractions from other responsibilities. The residents may also develop some skills in the art of consultation with the midwives through observation of the attending

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**Table 1. Questionnaire for Midwives Involved in Resident Education**

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>1. Describe your delivery institution, including size, number of staff, and volume of deliveries.</td>
</tr>
<tr>
<td>2. How many midwives are in your practice?</td>
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<tr>
<td>3. How long has this practice been in existence?</td>
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<tr>
<td>4. Do you supervise your midwifery patients?</td>
</tr>
<tr>
<td>5. Are you on call for your deliveries or are you in house 24/7?</td>
</tr>
<tr>
<td>6. Do you practice your own patients in triage?</td>
</tr>
<tr>
<td>7. Do you practice in the clinic setting or just in the delivery setting?</td>
</tr>
<tr>
<td>8. What is your placement in the department structure?</td>
</tr>
<tr>
<td>9. Describe your residency program, including years in existence, number of residents, and how they cover the hospital and clinics</td>
</tr>
<tr>
<td>10. When did the midwives begin formal interaction/supervision of the residents and how did this evolve?</td>
</tr>
<tr>
<td>11. When do you supervise the residents?</td>
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<tr>
<td>12. Do you supervise the residents in triage?</td>
</tr>
<tr>
<td>13. Do you supervise the residents in clinic?</td>
</tr>
<tr>
<td>14. Do you give formal lectures to the residents?</td>
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<tr>
<td>15. What are the advantages/what is working well with your model of practice for the midwives, the residents, the patients, and the institution?</td>
</tr>
<tr>
<td>16. What are the disadvantages/opportunities for improvement of your model of practice for the midwives, the residents, the patients, and the institution?</td>
</tr>
<tr>
<td>17. Do you have any recommendations or further comments?</td>
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</tbody>
</table>

*aReported by practice directors or practice members. Only one person reported on an individual practice.*

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physician consultant. For the midwifery patient, there is a clear philosophy of care when all care decisions are made by the midwife, without resident input. The disadvantage of such minimal interaction with the residents is that midwifery care practices are not integrated into the resident’s world, resulting in misconceptions regarding the extent of the midwife role and its implications for the care of the patient.

Coexistence Models

In a coexistence model, the midwives function in a private practice model parallel to the physician model, but with some interaction with the residency program. The most common similarities in these models are using residents as first-line consultants and requesting the midwives to cover for intrapartum care of all patients when the residents are not available. In most cases, the residents who are consulted by the midwives are senior obstetric residents.

The San Francisco General Hospital midwifery practice at the University of California is a good example of this model. The midwives provide care to an identified group of midwifery patients in outpatient clinics at the hospital as well as in the community. Medical students and nurse-midwifery students follow the midwives caring for these women. The midwives provide didactic teaching to the medical students on topics related to normal obstetrics and gynecology. In the intrapartum setting, the senior residents are the first level of consultation for the midwives should a complication arise with the labor or birth the midwife is managing. The midwives therefore introduce the residents to the consultant role and work with them as collaborators in the care of high-risk patients. When an attending physician is not available, the midwives also supervise the resident deliveries. The midwifery practice director believes that the midwifery presence has also preserved a culture of normal birth that helps to keep the epidural rate, cesarean delivery rate, and episiotomy rate low.

At the University of Washington Medical Center in Seattle, Washington, the midwives provide care to identified midwifery patients and perform resident functions when the residents are unavailable due to other educational commitments. Formal interaction with the residents includes direct supervision of the first-year obstetric resident one day per week for the first 6 months. Midwives also lecture to the obstetric residents on normal labor and normal prenatal care. Less formal interactions occur when residents request consults from the midwives for difficult labors or when coping with challenging patient personalities.

The University of New Mexico Health Sciences Center midwifery practice in Albuquerque also shares this organizational structure. The midwives provide full-scope prenatal, postpartum, and gynecologic care to their own midwifery patients in a variety of clinical settings. Third-year residents serve as consultants to the midwife in the intrapartum setting, working closely with patients requiring consultation, co-management, or transfer. If attending physicians are unavailable, the midwives will supervise the residents in normal deliveries and provide some coverage of labor and delivery while the residents have protected educational time. Additionally, a midwife spends the first month with the new obstetric residents working one on one, caring for women in triage and intrapartum, orienting the residents to the unit, sharing the residents’ first births, and providing support. During this orientation, midwives provide lectures on normal labor and delivery.

Advantages of a coexistence model include 1) physicians and midwives have enhanced communication, 2) midwives are not usually pulled to cover the residents while caring for their own patients, 3) residents are exposed to some aspects of the midwifery model of care and the evidence that supports this model, and 4) residents develop skills in the art of consultation with midwives. The disadvantage of this model is that the midwife may not be clearly established as the expert in low-risk birth in the view of the residents. Also, the resident does not have much opportunity to learn the evidence supporting the midwifery model of care.

Fully Integrated Models

In a fully integrated model, the midwives specifically act as a member of the resident team without a private practice option. They may fill the provision of care role of a resident or the role of a hospitalist and supervisor of the resident.

The Obstetric Team program at Baystate Medical Center in Springfield, Massachusetts, is an example of a fully integrated model where the midwife provides care that otherwise would be provided by a resident. The Obstetric Team is one of three programs in the Division of Midwifery and Community Health that was recently described in the literature. Developed in 2003 in response to resident duty-hour limits that decreased the hours a resident could work, the team consists of two full-time midwives that cover weekdays (6 AM to 7 PM) in labor and delivery, a first-year obstetric resident, a first-year emergency medicine resident, and a third-year medical student. The team cares for pregnant women seen in the resident-staffed clinic, as well as private obstetrician and midwife patients whose provider may not be in the labor and delivery unit at all times. The team midwives teach the residents and medical students about all aspects of low-risk labor, from hand skills to labor management to documentation. In addition, the midwives teach the residents seminars on topics related to normal labor and delivery and provide orientation seminars to the emergency medicine residents and the medical students.

Boston Medical Center Midwifery Service is an example of a practice that joins the functions of providing direct care and supervision of residents. Prenatally, women receive care in the clinic from the provider service that the
woman chooses. In the intrapartum setting, care is set up into three teams. Two of the teams, one led by the midwife on call and the other led by the family medicine physician on call, manage all low-risk women. The third team, led by the chief obstetric resident on call, manages the high-risk care. All teams also include a junior resident and medical students. When low-risk patients are admitted, they are either assigned to the midwife team or to the family medicine team. This structure has led to increased clinical experiences for family medicine attending doctors. Prior to the development of the team structure, the family medicine department managed only those women who received prenatal care from a family medicine physician, which was less than 15% of deliveries on the unit. Under the team structure, the deliveries attended by family medicine physicians have more than doubled. The increased presence of the family medicine physicians on the unit as team leaders gives the obstetric providers the benefit of their expertise in general medicine and family health. The postpartum rounds are also divided into teams. Assignment to each team is made based on the site where the woman received prenatal care.

The midwifery practice at Warren Alpert Medical School of Brown University, Women and Infants’ Hospital, Providence, Rhode Island, also uses this approach to care, which has midwives and residents providing joint care for low-risk obstetric women in labor. Midwives have no private patients, thus establishing a noncompetitive model.10 Midwives are assigned to labor and delivery, obstetric triage, and the operating room, where they first assist in cesarean deliveries. The midwives do not provide outpatient care other than a weekly gestational diabetic clinic. There is no call and no weekend coverage for the midwives. A team of four residents is assigned to the low-risk obstetric service. This group, along with the midwives, evaluate women in the triage unit and manage the care on the labor and delivery unit. The midwives play a large role in resident education, including first-year resident orientation class and basic obstetric skills workshops. Additionally, each new resident is assigned a midwife preceptor for the year who also assists the residents with educational presentations.

Other examples of fully integrated models can be found at The University of California, San Francisco Medical Center, Clarian Methodist Hospital in Indianapolis, Indiana, and Vanderbilt University School of Medicine in Nashville, Tennessee.

One of the main advantages of this model is that it establishes the midwife as the expert in low-risk birth since the midwife usually leads the team providing care to low-risk women. This model increases the number of women exposed to the midwifery model of care above the limited number that could be seen in a midwifery private practice. It also demonstrates a model for collaborative practice that enhances communication between physicians and midwives. Physicians are coached in nonmedical model of care, broadening dissemination of alternative techniques. Practice directors report that residents integrate some of the midwifery evidence into their practice and are more willing to defend it. Finally, this model allows the physician staff and senior residents to focus on caring for women with high-risk problems, whereas the midwives provide care to low-risk women with the junior residents. This provides a less stressful learning environment for the junior resident, whereas facilitating incorporation of mandated competency-based learning. In many situations, the midwives have taken on the role of “midwifing” first-year residents as they move on toward their new professional role.

Disadvantages of this model include a sense of loss by the midwives because they frequently do not conduct a birth alone without a resident and some difficulty recruiting midwives to work in this model without a traditional private practice option. Also, there may be no independent source of income to support the midwifery practice. If the midwives provide nonbillable services when they are acting in the capacity of a resident, they risk becoming financially invisible. Additionally, there is the potential for midwives in this model to lose some of the focus on a midwifery model of care when they are constantly working within the medical model.

Blended Models

In a blended model, the midwives maintain a private practice as well as fill the role of attending faculty for residents, and may substitute for the resident as well. The key is that the same midwives participate in all these functions instead of having separate groups of midwives that only function in one role.

The Division of Midwifery at the Henry Ford Health System in Detroit is an example of a model that blends the components of private practice with a service component to the residency program and the institution at large. A midwifery practice initially existed parallel to the residency program. There was social interaction with the residents but rarely any clinical interaction. This evolved into the residents requesting participation with the midwifery patients to learn new techniques, as well as to increase their delivery numbers. With the decision of the Residency Review Committee to limit the available resident hours, the need for the physician staff to cover surgeries and consultations off the labor unit increased. This led to a gap in resident supervision, and midwifery faculty came forward to fill the vacancies in patient care.

The midwifery function in three roles: private practice for women seeking midwifery care, resident supervision for low-risk obstetrics, and replacement of residents. These three roles have been blended so that all midwives in the practice share all roles. One midwife is on the labor and delivery unit at all times and is responsible for the midwifery private practice as well as other low-risk women. During the day, a second midwife is responsible for initial
triage evaluation of all women as well as rounding on midwifery patients on the postpartum unit. During the times when the residents leave for didactic sessions and continuity clinics, the midwives provide all care that a resident would have provided, including care of high-risk pregnant women, which is co-managed with the attending physicians. The hospital funds a portion of the midwifery salaries to support the times when the midwives replace the residents. The first-year residents follow a midwife in the clinic setting to learn normal obstetric routines. In addition, first-year residents are all partnered with a midwife for 2 weeks during their first labor rotation. During these 2 weeks, the midwife has no other responsibilities and teaches the resident basic obstetric care such as vaginal or speculum examinations, labor management, vaginal deliveries and repair, and institutional protocols.

The University of Rochester, Division of Midwifery practice has been in existence for over 33 years and has been described in the literature. The midwifery group provides outpatient care to private patients at four different sites. Additionally, the midwives are on call in the hospital, during which time they precept medical students and obstetric, family medicine, and emergency medicine residents. This includes teaching obstetric triage, labor management, conducting a normal birth, and circumcision. Midwives are also assigned to cover all labor and delivery activity at two hospitals once a week during the resident protected teaching time. This coverage includes triage, obstetric in-house problems, postoperative rounds, and emergency department calls. The hospital supports a small portion of a midwifery salary yearly as reimbursement for this effort. Additionally, the midwives give formal lectures to residents and precept third-year medical students in performing pelvic examinations on volunteer models.

Blended midwifery practices at the California Hospital Medical Center in Los Angeles, California, Oklahoma University Medical Center in Oklahoma City, Oklahoma, Duke University Medical Center in Durham, North Carolina, University of Nebraska in Lincoln, Nebraska, and Southern Illinois University School of Medicine in Springfield, Illinois also provide care to their own private caseload, supervise resident care, and assist with care for all women when the residents are not available.

The blended practice model seems to offer the best of all models, with fewer of the disadvantages. As with the previous model, the blended model increases the number of women who are exposed to the midwifery model of care beyond the midwifery private patients; demonstrates a model for collaborative practice that enhances communication between physicians and midwives; coaches physicians in nonmedical model of care, broadening dissemination of alternative techniques; allows residents to integrate midwifery evidence into their practice, making them more willing to defend midwifery; allows the physician staff to focus on high risk; and provides a less stressed learning environment for the resident while facilitating incorporation of mandated competency-based learning. In addition, many of the midwifery practice directors expressed the belief that this model establishes collaborative practice as the norm for the residents, increasing the pool of willing consultants for midwives after resident graduation. The co-management of the higher risk situations during times of resident absence also broadens the knowledge base of the midwives.

Disadvantages of this model are that midwives may have decreased time to spend with private patients due to increased responsibilities, and midwives may begin to be seen as the answer to all the coverage problems.

**DISCUSSION**

These four models categorize the various organizational structures reported by midwifery practices that are involved in resident education. Table 2 summarizes some of the similarities and differences of the models. The different practice models that have evolved over time to fit the specific needs of the obstetric department seem to be based on the number of midwives available and willing to participate, as well as the value the department places on the knowledge the midwife can contribute. Much of the involvement of midwives in residency education has been precipitated by the decreased availability of residents. In 2003, the Residency Review Committee of the Accreditation Council for Graduate Medical Education, which oversees all residency programs, mandated a number of phased changes to improve the educational environment for residents. One of these mandates was that residents work no more than 80 hours per week. This significantly decreased the available work force of obstetric providers, producing a need for someone to replace residents during specific times. It also produced a need for someone to replace the supervising physicians who were less available because they were replacing residents in surgeries and with high-risk pregnant women. Midwives have filled these gaps in a number of institutions.

As midwives become more involved with resident education, a blending of the different philosophies of practice is seen. The midwifery and medical models for the care of pregnant women are based on different perspectives of pregnancy and birth. The approaches resulting from these perspectives are complementary. As a result of midwives and physicians working together, more physicians are exposed to the evidence supporting the midwifery model of care, thus becoming more accepting of the midwifery approach, which in turn leads to further learning about the evidence for physiologic childbearing in low-risk women. This allows the delivery of optimal care to low-risk women by removing some of the barriers described in the Milbank Report, such as reliance on specialists for care of low-risk populations and loss of core childbearing knowledge and skills. In a number of academic institutions, midwives are increasingly recognized
as experts in normal pregnancy and birth care, and their participation in resident education may help to ensure that future obstetric care providers will be grounded in normal obstetrics.

When midwives work closely with residents, it can improve communications between midwives and physicians. This in turn improves consulting relationships and facilitates a seamless co-management or transfer of care should complications develop. This addresses some of the concerns raised by the IOM and Commonwealth Fund Report related to poor communications and lack of a team-based approach to care.1–3 The midwife is recognized as a member of the team and the midwife is clearly identified as a preceptor with authority for clinical decision making. This team approach is a new care paradigm that the residents can take with them into practice after graduation. This may increase job opportunities for midwives to work in collaborative practices. Also, when there is good communication, trusting relationships are built that may allow more opportunities for midwife co-management of higher risk patients rather than mandatory transfer of care.

As with any practice change, there are pitfalls to increased involvement with residency education. In the quest to be accepted as “part of the team,” midwives may let go of some of the midwifery model of care that is time intensive. Involvement with multiple patients at the same time decreases the time for one-on-one support of women. With increased involvement with high-risk situations, the midwife focus may have the tendency to shift from a view of normalcy of low-risk birth to the view that birth has a higher potential for complications.

There is also a concern about a tendency to view midwives as the answer to all the coverage problems that result from the changes in the residency programs. Due to midwives’ willingness to be more available, overextension of midwifery services can lead to burnout and dissatisfaction. Lack of clarity about the different roles and the multiple different shoes the midwife is trying to fill may lead to confusion and frustration on the part of the midwife as well as the resident. This is addressed in some institutions by having a specific individual identified as the liaison between the residency program and the midwifery program. This confusion can be prevented by clear, formal recognition of the multiple facets of the role of the midwife and clear delineation of responsibilities and expectations of all the team members when there is different coverage.

Finally, there are issues related to reimbursement. The Residency Review Committee recognizes nonphysician faculty with appropriate qualifications in their field, allowing midwives to act as faculty for both obstetric and family medicine residents.14,15 However, there is some question about the ability of the midwives to bill for supervision of resident care in some cases. This can be a very limiting factor for some programs and should be addressed as a barrier to full interdisciplinary education of residents.

CONCLUSION

Keys to successful collaborative models include clear identification of the midwife as a preceptor with authority for clinical decision making with residents, frequent and ongoing interaction between the midwifery leadership and the residency program leadership, clear expectations of the role of the midwife when they are replacing a resident, and balance of the job satisfaction needs of the midwives with the service needs of the department. These models have created greater opportunities for midwives as well as more collaboration between physicians and midwives. In the end, it is the women who benefit from this collaborative care. Perhaps most importantly, such models allow for the dissemination of the midwifery philosophy of care, which will ultimately benefit childbearing.

I thank the midwifery leaders from the midwifery practice examples used in this article for providing information on the organizational structure of their practice.

Table 2. Characteristics of Four Organizational Models*

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<thead>
<tr>
<th>Characteristic</th>
<th>Parallel Model</th>
<th>Coexistence Model</th>
<th>Fully Integrated Model</th>
<th>Blended Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction with residents</td>
<td>Little or none</td>
<td>Some</td>
<td>Full member of the</td>
<td>Large</td>
</tr>
<tr>
<td>Private midwives patients</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Enhanced communication between CNM and residents</td>
<td>Unlikely</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Consulting physician arrangement</td>
<td>Attending</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Supervision of residents by CNM</td>
<td>No</td>
<td>Some</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Residents involved with midwife patients</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Midwife viewed as expert in normal childbearing</td>
<td>Unlikely</td>
<td>Maybe</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Develops high-quality future midwifery consultants</td>
<td>Unlikely</td>
<td>Maybe</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Decreases one-on-one time with patients</td>
<td>No</td>
<td>Maybe</td>
<td>Yes</td>
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</tr>
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</table>

*Models describe midwifery programs located in institutions with residency programs.
REFERENCES


