



Family Medicine Maternity Care Call to Action: Moving Toward National Standards for Training and Competency Assessment

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BACKGROUND: Maternity care is an integral part of family medicine, and the quality and cost-effectiveness of maternity care provided by family physicians is well documented. Considering the population health perspective, increasing the number of family physicians competent to provide maternity care is imperative, as is working to overcome the barriers discouraging maternity care practice. A standard that clearly defines maternity care competency and a systematic set of tools to assess competency levels could help overcome these barriers. National discussions between 2012 and 2014 revealed that tools for competency assessment varied widely. These discussions resulted in the formation of a workgroup, culminating in a Family Medicine Maternity Care Summit in October 2014. This summit allowed for expert consensus to describe three scopes of maternity practice, draft procedural and competency assessment tools for each scope, and then revise the tools, guided by the Family Medicine and OB/GYN Milestones documents from the respective residency review committees. The summit group proposed that achievement of a specified number of procedures completed should not determine competency; instead, a standardized competency assessment should take place after a minimum number is performed. The traditionally held required numbers for core procedures were reassessed at the summit, and the resulting consensus opinion is proposed here. Several ways in which these evaluation tools can be disseminated and refined through the creation of a learning collaborative across residency programs is described. The summit group believed that standardization in training will more clearly define the competencies of family medicine maternity care providers and begin to reduce one of the barriers that may discourage family physicians from providing maternity care.

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Maternity care is an integral part of the comprehensive practice of family medicine.¹ This is one of the aspects of care that most distinguishes family physicians and contributes to the

unique skill set that allows family physicians to care for communities in both a family-centered and patient-centered way. In the United States, family physicians provide maternity care in a wide range

of clinical and geographic settings, from areas where there are no other maternity care providers to urban areas where family physicians offer this care in collaborative settings with obstetrician/gynecologists (OB/GYNs) and nurse midwives.²⁻⁴ The quality and cost effectiveness of family physician maternity care is well documented.^{3,5} Further, since family physicians often care for pregnant women in underserved settings, adequate maternity care training in family medicine residency is essential in addressing maternal health disparities. Nearly half of US counties lack an obstetrician, with rural counties most affected.⁶ Given that family medicine has a far greater number of accredited residency positions nationally as compared to OB/GYN (3,195 family medicine positions filled versus 1,255 positions in OB/GYN), encouraging more family medicine graduates to participate in maternity care could have a lasting national impact.⁷

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Recent workforce advocacy efforts by OB/GYN and midwifery organizations have been consistently silent on the role of family physicians.^{8,9} All are in agreement that the pipeline for OB/GYN physicians providing maternity care continues to dwindle and that action is warranted.¹⁰ Nurse midwives and advanced practice nurses are filling a vital role in the maternity care workforce, though with a unique scope of practice that does not include essential services such as operative intervention or medically complex perinatal care.¹¹ Considering a population health perspective, increasing the number of family physicians who are competent to provide maternity care is imperative, as is working to overcome the systemic barriers discouraging so many from practice.¹²⁻¹⁶

The decreasing maternity care workforce and persistent disparities in maternal and child health outcomes are major public health issues that can be addressed in part by increasing the numbers of family physicians who provide maternity care. Family physicians uniquely provide care for both mother and child, ideally in a comprehensive scope and longitudinal context. However, a growing number of newly graduated family physicians decide not to incorporate maternity care into their practice. Despite a clear need for more obstetrical providers nationally, the percentage of family physicians providing maternity care services continues to decline, from 29% of providers in 1988¹⁷ to 10% in 2010.¹⁸ Reasons cited for this decrease include barriers to hospital privileging, lifestyle issues, and malpractice coverage costs.¹⁹⁻²¹ Family medicine residents are more likely to provide obstetrical care after graduation if they were trained by family doctors for the majority of maternity-related clinical encounters, delivered over 80 babies in residency, or trained on the West Coast or in the Midwest.²² Lack of training is not usually cited as a barrier; however, one study did show that restructuring and refocusing the maternity care training within

a residency can increase the number of graduates who provide maternity care.²³ Further, for those graduates committed to providing operative and high-risk obstetrics, they may choose further training through fellowships to broaden their scope of maternity care practice. Over the last 25 years, 47 successful maternal and child health/obstetrics fellowship programs were founded in the United States to train residents desiring more experience in obstetrics before entering the workforce.^{4,19,20}

With the declining numbers of family physicians practicing maternity care, despite the opportunities for training and the public health need for maternity care providers, it is challenging for family medicine residency directors to make decisions about how much to emphasize maternity care in their curriculum. While all family physicians graduate with some maternity care experience, it is currently difficult for anyone, including the graduates themselves, to determine which graduates are competent to provide this care independently. For these reasons, a system that defines levels of competency within maternity care practice and a set of tools to assess competency are needed. Defining and measuring maternity care competencies should increase graduates' confidence in practicing maternity care as well as increase hospital privileging committees' ability to assess family physicians' skills in maternity care. In the long term, having clearly defined maternity care competencies and precise ways of measuring them may allow for lower malpractice premiums, as all providers will be trained to a more uniform standard. We are hopeful that this will also lead to more family physician graduates feeling confident in their skills and choosing to practice maternity care and, ultimately, to better access to care for all women.

Procedural competency is often assumed after completing a specified number of procedures/patient visits. Educators generally agree, however, that learners achieve competency at

varying levels of clinical or procedural exposure, with some demonstrating competency well before reaching a specific number, while others may require significantly more hands-on experience.²⁴ Allowing learners to demonstrate competency according to nationally accepted standards for performance rather than an arbitrarily high number of procedures can address the variable nature of skill development while avoiding what may be, in some settings, an unattainable requirement for procedural volume. In this model, competency assessment can begin for proficient learners after performing the number of procedures/ patient encounters at which some learners may reach competency and continue with additional training for others until competency is achieved for all. This will focus more attention on the learners requiring more experience to gain competency and allow learners who reach competency faster to demonstrate this. The family medicine maternity care training categories recommended here are based on this individualized approach. Trainees would be required to complete a minimum number of experiences/procedures before they could be formally assessed for competency, with the understanding that additional training will often be necessary to achieve competency. This will help family physicians, obstetricians, and hospital administrators determine the level of competency of providers applying for hospital privileges for maternity care procedures.

Family Medicine Maternity Care (FMMC) Summit

Since 2012, family medicine educators have been conducting formal national discussions regarding maternity care training in residency at the STFM Annual Spring Conference. Many programs had difficulty meeting the previous Accreditation Council for Graduate Medical Education (ACGME) Family Medicine Review Committee (RC-FM) standards in maternity care; according to RC-FM Chair Peter Carek,

MD, maternity care requirements were among the top five most common program citations prior to 2014 (personal communication, December 13, 2015). On the other hand, many family medicine maternity care educators argued that those standards did not define maternity care competencies with sufficient rigor. In order to address both of these concerns, the RC-FM enacted new standards for maternity care training effective July 2014. During the 2013 period of public comment prior to implementation, the Council of Academic Family Medicine (CAFM) and American Academy of Family Physicians' Commission on Education (COE) gathered input from a broad group of stakeholders and submitted it to the RC-FM for their consideration, resulting in the current language that family medicine graduates "must demonstrate competence in their ability to provide maternity care, including:

- Distinguishing abnormal and normal pregnancies
- Caring for common medical problems arising from pregnancy or coexisting with pregnancy
- Performing a spontaneous vaginal delivery
- Demonstrating basic skills in managing obstetrical emergencies." (Lines IV.A.5.a).(1).(c).)

The document also states that every accredited family medicine residency "must employ at least one family medicine faculty member who is actively engaged in maternity care, both in the outpatient and inpatient settings" (Line II.B.7). However, the previous specific number requirements for vaginal deliveries (40) and continuity deliveries (10) were omitted from the new 2014 program requirements.²⁵

In April of 2014, interested members of STFM again convened at the STFM Annual Spring Conference to discuss scope of practice and competency assessment for maternity care within family medicine, in light of the new RC-FM requirements. Discussions at two consecutive breakfast roundtable discussions included

representatives from all regions of the country and from both academic and community-based training programs. At these meetings, the vast differences in the volume of perinatal care conducted, volume of procedures performed, and curricula offered in residency programs nationwide became apparent. Discussants widely agreed that numbers of procedures do not necessarily correlate with competency and that assessment tools are needed to demonstrate resident competency at graduation. However, the discussion revealed that competency assessment tools vary widely in those programs that use them. The group concluded that, although it is expected that programs will have varied experiences and methods by which curriculum is taught, a universal set of assessment tools is needed.

At the conclusion of the 2014 STFM Annual Spring Conference, a workgroup was formed to develop standardized training requirements and assessment tools. Another group convened by CAFM for procedural competency assessment in family medicine residencies had been working on creating procedural competency assessment tools (PCATs), and the maternity care group decided to develop similar forms for maternity care to be consistent across the discipline.²⁶⁻²⁹ Seven conference calls (with the main purposes of: (1) defining multi-tiered training for maternity care within family medicine and (2) developing first drafts of assessment tools) took place between April 2014 and October 2014, culminating in a meeting in October of 2014, in Chicago, to which all members of the STFM Group on Family Centered Maternity Care, as well as ALSO and AAFP leadership were invited via email. Seventeen family physician educators attended (See Appendix A at <https://www.stfm.org/Portals/49/Documents/FMAppendix/AppendixAMagee.pdf> for a list of participants). This Family Medicine Maternity Care (FMMC) Summit sought to assess the current state of maternity care training in family

medicine with the goal of establishing national standards for training and competency and evaluation tools. The discussions were built on previously published work regarding maternity care competency assessment^{30,31} and proposed requirements for numbers of procedures recommended for procedural privileging.^{32,33}

Three scopes of maternity care practice for family physicians are proposed from the discussions, encompassing the range of maternity care that family doctors may provide. These describe types of practices of individual physicians, not training programs. Training programs may need to adapt and individualize opportunities available to their trainees in order for them to attain competency in the appropriate scope of maternity care needed for their desired practice setting. All of these scopes of practice meet the minimal competencies set forth by the Family Medicine RRC.

The three scopes of maternity care practice proposed from the FMMC Summit are:

(1) *Basic Maternity Care*: Individuals are competent to provide routine prenatal, postpartum, preconception, and inter-conception care. These physicians are also competent to attend a spontaneous vaginal delivery for a low-risk woman but are not expected to independently manage labor in a typical hospital or birth center setting.

By the end of training, these physicians will demonstrate an understanding of the principles of prenatal care for healthy women and be able to distinguish normal and abnormal (or high-risk) pregnancies. They will have cared for common medical problems arising from pregnancy or coexisting with pregnancy, demonstrated basic skills in obstetrical emergencies (such as those taught in the ALSO course), and attended spontaneous vaginal deliveries.

Physicians training toward this scope of practice do not plan to attend pregnant women for delivery without further training; however,

knowledge of the basics of intrapartum maternity care is an important skill for all family medicine graduates and creates the knowledge base for family physicians offering basic maternity care, an essential component of comprehensive primary care for women. Their experience must include sufficient volume to evaluate the competencies described above.

(2) *Comprehensive Maternity Care:* Individuals are competent to provide prenatal care, routine labor management, and attend vaginal deliveries for most women. Providers demonstrate understanding of the principles of labor management and perform various routine inpatient maternity procedures, including a normal vaginal delivery, perineal repair, limited obstetrical ultrasound, and management of common obstetrical emergencies.

Comprehensive maternity care providers will also be competent to care for common complications of pregnancy and labor management, such as diabetes in pregnancy, hypertensive disorders in pregnancy, preterm labor, or women with a history of a prior cesarean delivery using consultation when appropriate with either an OB/GYN or a family physician with advanced maternity care training. Family physicians offering comprehensive maternity care should also offer vacuum-assisted vaginal delivery; however, we appreciate that the volume of vacuum-assisted deliveries, given the national operative vaginal delivery rate of approximately 3%, may preclude some trainees from attaining a sufficient number to demonstrate competence.³⁴ Therefore, training and competency assessment may incorporate simulations and skills achieved through mandatory ALSO provider status attainment or equivalent.

(3) *Advanced Maternity Care:* Individuals are competent to provide prenatal care for higher-risk women, manage labor of complicated cases, perform operative obstetrical procedures, and offer obstetric consultation to nonsurgical maternity care providers, including nurse-midwives

and family physicians trained in comprehensive and basic maternity care. Providers will demonstrate competency in operative skills, including cesarean delivery, third/fourth degree perineal laceration repair, operative vaginal delivery, limited biometry ultrasound, and biophysical profile. (Tubal ligation and dilatation and curettage will be considered as recommended, but not required, surgical competency, given that for personal or institutional reasons some trainees may not train to competency in this area.)

These family physicians may independently manage high-risk patients, such as those with pre-existing diabetes, hypertensive disorders in pregnancy, multiple gestations, acute severe asthma, cardiovascular disorders such as new onset arrhythmia or cardiomyopathy, thromboembolic disease, neurologic disorders such as epilepsy or stroke, gastrointestinal disorders such as fatty liver, inflammatory bowel disease, and hepatitis, acute renal failure, and pregnancies with fetal anomalies, with consultation from perinatology and other medical specialties as appropriate.

We anticipate that the delineation of the three scopes of practice will facilitate collaborative care between family physicians and other maternity care clinicians. Family physicians with basic maternity care skills can offer prenatal care with delivery performed by family physicians with comprehensive training, OB/GYNs, or midwives. Family physicians with advanced training can provide surgical and consultative services for family physicians offering comprehensive care as well as for nurse midwives.

Demonstration of Competency

The proposed competency assessment comprised of minimum numbers of procedures in addition to competency assessment tools were the result of discussion and consensus agreement by representatives at the FMMC Summit. The American Board of Obstetrics and Gynecology requires that OB/GYN residents

document a minimum of 145 cesarean deliveries and 200 vaginal deliveries,³⁵ despite the fact that the little research on the topic has demonstrated that the learning curve for cesarean sections is fairly flat after less than 50 procedures, for example.³⁶ Further, several studies have shown comparable outcomes for family physicians who have performed procedural volumes significantly lower than these numbers.^{3,37} Additionally, this approach does not necessarily demonstrate that the trainee achieved competency in the procedure after completing this minimum number. The summit participants propose a learner-centered approach to assessment of competency, in which a required minimum number of performed encounters or procedures is followed by a standardized competency assessment. In this approach, we acknowledge that many trainees will not achieve competence upon performance of the minimum number. For those trainees, appropriate feedback should be given and a plan for re-evaluation should be made, after additional procedures are performed.

Table 1 shows the minimum numbers suggested prior to assessment of competency (as well as average number of procedures likely needed to achieve competency) that the group established for skills and procedures in maternity care. For vaginal and cesarean deliveries we have listed a range, which includes a minimum number to assess for competency and a higher number at which our consensus is that most trainees will have established competency. We list the range to assist training programs in estimating the number of deliveries that need to be available for most of their residents (or fellows) to have achieved competency.

Assessment tools (See Appendix B at <https://www.stfm.org/Portals/49/Documents/FMAppendix/AppendixBMagee.pdf>.) were drafted with consensus at the Summit meeting using material from the Family Medicine and OB/GYN Milestones documents,^{38,39} following the

Table 1: OB Training Guideline

Competency (minimum number before assessment)	Basic Maternity Care	Comprehensive Maternity Care	Advanced Maternity Care
	Basic Maternity Care and Spontaneous Delivery	Comprehensive Maternity Care Including Vaginal Delivery	Advanced Maternity Care With Cesarean Delivery
Required Curriculum Elements			
Prenatal care	Yes	Yes	Yes
Intrapartum care	Yes	Yes	Yes
Vaginal delivery	Yes	Yes	Yes
Newborn care	Yes	Yes	Yes
Postpartum care	Yes	Yes	Yes
ALSO course or equivalent	Yes	Yes	Yes
Medically complicated	Yes	Yes	Yes
Obstetrically complicated	No	Yes	Yes
Surgically complicated	No	No	Yes
OB ultrasound	No	Targeted	Yes
Cesarean assist	No	Yes	Yes
Cesarean primary surgeon	No	No	Yes
Skills and Procedures (minimum number for competency assessment)			
Prenatal encounters (includes PNV, continuity PNV, antepartum triage/evals, ED evals)	150	150	250 (including at least 100 high-risk encounters)
Outpatient Postpartum Care	10	10	10
Continuity cases	3 (delivery not required)	10 (pre/postnatal and delivery required)	10 (pre/postnatal and delivery required)
Intrapartum care	10	40	80
Vaginal deliveries	20-40**	40-80**	80
Perineal repairs	0	5	10
3rd /4th degree laceration repairs	0	0	5
Instrumented vaginal deliveries	0	5*	5
Cesarean assist	0	5	5
Cesarean primary surgeon	0	0	70-100**
Primary Cesarean	N/A	N/A	40-60**
Repeat Cesarean			30-40**
Intraoperative tubal ligation			3
Postpartum tubal ligation			10
Dilation and curettage (uterine evacuation)			10

* Family physicians offering comprehensive maternity care should be trained in vacuum-assisted vaginal delivery; however, we appreciate that the volume of deliveries and the national operative vaginal delivery rate of 3% may preclude some residents from attaining the desired number of vacuum deliveries. We encourage residencies to look at alternative training with simulation models.

** Where a range is provided, the lower number is the minimum number to evaluate for competency, and the upper number is the number at which we estimate most trainees will achieve competency.

Procedure Competency Assessment Tool (PCAT) format and further refined via follow-up efforts, including regular conference calls. While the assessment tools generally focus on procedural competency, we also recognize that competency in cognitive skills and decision-making are essential components of maternity care. Cognitive skills are among those included in the ACGME OB/GYN Milestones project. Similarly, the competency assessment tools we propose here include identifying conditions outside one's scope of practice and indications for referral, consultation, and transfer of patients as appropriate and in accordance with a local standard of care.

We anticipate variation among training programs regarding curricula and methods by which competency is achieved (ie, through simulation, through formal discussion of surgical complications, etc). Summit participants also recognize that, prior to widespread adoption of these recommendations, facilitated implementation (including support for overcoming systemic barriers and provision of faculty development for preceptors in using the assessment tools) is necessary.

Recommended Next Steps

The Summit group proposed the development of a longitudinal online Learning Collaborative through which competency assessment tools can be shared, evaluated, and honed in on-line forums (See Appendix C at <https://www.stfm.org/Portals/49/Documents/FMAppendix/AppendixC-Magee.pdf>) as well as at the national meetings of family medicine educators. Family medicine programs and assessment tools have changed dramatically and frequently in the last 15 years given myriad changes in program requirements, and we believe adoption of the maternity care assessment tools would be no more challenging than any of the other required changes programs have had to make in recent years.

Examples of the assessment tools for basic maternity care, normal spontaneous vaginal delivery, and cesarean delivery are available in Appendix D at <https://www.stfm.org/Portals/49/Documents/FMAppendix/AppendixDMagee.pdf>. The listed descriptions for each category are intended as illustrative examples of the respective skill and should not be interpreted as comprehensive determination of the achievement of a particular skill. A total of 13 assessment tools have been created thus far, and we invite residency educators to use the tools and submit constructive comments to the learning collaborative. These tools will be available on the AFMRD and STFM websites.

We propose that program directors include a statement of each graduate's competency in Basic, Comprehensive, or Advanced maternity care, based on the standardized competency assessments and definitions in their final summative assessment. Ideally, no further documentation should be needed for family physicians to obtain core clinical privileges to provide comprehensive maternity care.

To facilitate/standardize privileging for family physicians in advanced maternity care, the development of a Certificate of Advanced Qualification (CAQ) in advanced maternity care may be required. This certificate could assist those applying for cesarean delivery privileges as well as other surgical procedures nationwide. Joint ABFM/ABOG creation or ABOG endorsement of an ABFM-CAQ may be the optimal route. Similar to the attainment of other CAQs, a comprehensive formal competency assessment tool and a written board examination should be developed. Additionally, residencies and fellowship programs that train providers to competency in advanced maternity care should undergo formal assessment by the ACGME.

In the current environment, some trainees providing advanced maternity care services may choose the

support of the American Board of Physician Specialties Board Certification in Family Medicine Obstetrics (ABPS BCFMO) in the form of a separate board examination to prove competency at this level.⁴⁰ The consensus of the authors is that the CAQ development under the auspices of the ABFM is preferred, as this is the traditional route for certifying advanced training attained after family medicine residency in the United States.

Conclusions

Maternity care is an integral and vital part of family medicine training, yet the scope of maternity care within family medicine varies significantly. By clearly defining a roadmap for the three scopes of maternity care practice within family medicine (basic, comprehensive, and advanced maternity care provision), by defining minimum numbers of patient encounters and/or procedures required prior to competency assessment, and by standardizing the competency assessment themselves, the range of maternity care within family medicine will be clarified. The learning collaborative model, using skills and behaviorally based competency tools, will provide a platform for evidence-based competency assessment. This model could be the foundation for a competency framework across specialties, which is sorely needed. Given the fact that 49% of US counties are currently without an obstetrician,⁷ we must recognize, support, and strengthen the care of women that family physicians are providing in the United States. It is our duty and privilege as family medicine educators to support those in our specialty who desire to practice maternity care and who are called to answer this public health need. Collaboration with our OB/GYN and midwifery colleagues is essential; given the urgency of the mission, it is imperative that we move forward together in response to the reproductive health needs of women nationally.

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