In contrast, many studies indicate that there has been an increase in maternal mortality in the U.S. over the same two decades. It is unclear if this increase is due to better ascertainment of maternal deaths or represents a true increase, but we can state with confidence that maternal mortality has not decreased in the U.S. for the last thirty years despite the advances of modern medicine. Due to the efforts of the CDC, we have information that there has also been a significant increase in maternal morbidity which now affects the lives of over 50,000 women annually. The long-term sequelae of these complications remain unknown.

Cardiovascular disease and cardiomyopathy represent an increasing cause of maternal death and reflect the increased cardiac risk profile of pregnant women. Obstetric patients are older and bigger than they have been over the last 2-3 decades, and have an increased risk of comorbidities such as hypertension and diabetes mellitus. We have all witnessed the national epidemic of obesity which is an independent risk factor for venous thromboembolism (VTE) and is associated with many other adverse perinatal outcomes. Additionally, because of enhanced medical and surgical care and the skill set of our REI colleagues, women with unusual and serious medical diseases can now become pregnant. It is clear that a national effort is essential to address the problem of maternal morbidity and mortality. There are approximately 3,200 hospitals who deliver babies in the U.S., 38% of which perform less than 500 deliveries per year and over half of which perform less than 1,000 deliveries annually. Furthermore, the majority of the maternal fetal medicine (MFM) physicians...
practice in the 5% of hospitals that do more than 4,000 deliveries annually. From a clinical perspective, it is clear there needs to be a two pronged approach. Patients who are identified to be at-risk need to be identified for care at a tertiary care institution. Currently, at a minimum, that would include patients with a suspected diagnosis of placenta accreta or with maternal cardiac disease. However, because most common causes of maternal mortality, including VTE, obstetric hemorrhage and hypertension - can occur in women with no risk factors, all hospitals and birthing centers need to be prepared to deal with these most common conditions.

Speaking with colleagues across the nation, all busy obstetrical services are witnessing an increased volume of substantial maternal risk. Against this background is the disappointing statistic that only 7 MFM physicians are double-boarded in critical care. A consensus group recommended significant changes to the MFM fellowships that began to take effect in July of this year to address these concerns. Specifically, fellows will now be required to spend a minimum of 2 months on L&D and 1 month in a medical or surgical ICU. It is clear that 3 months will not make an MFM fellow an expert in maternal medicine, but hopefully will provide the stimulus to spend additional elective time on the cardiology or ICU services to become true expert in maternal medical and surgical conditions. In my opinion, this represents a phenomenal career opportunity for fellows and junior faculty as I think it is unlikely that the significant risk profile of pregnant women will be solved in the near future.

In concert, we have the shameful fact that almost 50% of maternal deaths are preventable. Unlike many difficult areas we face in MFM, this particular issue does not require research. We know how to control hemorrhage, treat HTN, and prevent VTE, but we are not doing it consistently. As many MFM’s have become so expert in prenatal diagnosis, their role in the management of the complex medical and surgical obstetric patient is becoming less clear. I believe this role should not be given away to internists, hospitalists, and intensivists who do not have the background in the physiologic changes of pregnancy to be the primary caregiver to these complex obstetric patients. In my opinion, MFM’s need to take the lead in addressing these issues and ensuring safer care for pregnant women, not just in their hospitals but also in the referral area that they serve.

Our MFM subspecialty was created in the 70s to better address maternal and fetal complications of pregnancy. The impetus was an increased ability to evaluate (amniocentesis) and treat (intrauterine transfusions) fetal conditions such as erythroblastosis fetalis and to individually tailor the best timing for delivery in pregnancies complicated by diabetes or suspect IUGR or utero-placental insufficiency. In parallel there was increased interest in maternal transport of pregnancies complicated by preterm labor or medical and surgical complications of pregnancy to regional centers capable of offering an intensive care like environment. Over the years our subspecialty has come to emphasize the fetal component of our mission as a result of access to exploding technologic advances. Personally my career has evolved to a fetal medicine focus and not surprisingly our graduating fellows have pursued careers in consultative practices focused on prenatal screening and fetal diagnosis --- often at a distance from the hospital setting.

Together with many of my colleagues, I felt the need to restore the role of the MFM physician in caring for the medically complicated obstetric patient. Fortunately, much progress has been made in the last 2 years: Not only has ABOG changed the fellowship requirements, but ACOG and SMFM have collaborated in a National Partnership for Maternal Safety, SMFM has hosted a focus group on the ‘M in MFM’ at their annual meeting for 2 consecutive years, and Dr. Foley has taken the lead in creating an online course for critical care topics that will also be the subject of a meeting in Phoenix in November 2014. In order to ensure that progress continues to be made, I suggest that all MFM’s interested in maternal medicine get involved with their state and ACOG district and take a leadership role in driving the necessary efforts that we have neglected for too many years.
I recently asked the ob/gyn faculty and residents where I work to give me some of their favorite websites and apps, with criteria that nothing could be priced over $20, and ideally should be free. The last issue of the PQF Examiner listed some of the best resources for the busy clinician; below is a list of a few more apps and useful websites that come highly recommended. As before, I still do not have any personal financial stake in any of these apps. Enjoy!

For their working in helping with pap smear guidelines: Pap Guide is a free iPhone app which allows you to input the patient’s age or clinical situation and recent pap results and then provides the management recommended by the 2012 consensus guidelines.

For general women’s care health information: issvd.org includes a number of free patient handouts on common conditions of the vulva including yeast, herpes, and lichen sclerosis (both adult and child)… menopause.org has a large amount of information regarding common menopausal issues, and links to additional resources.

For health education of young people: youngwomenshealth.org, run by Boston Children’s, has lots of easy to understand, but not overly simplified, medical information on everything from eating well, to anger management, to environmentally friendly menstrual products.

For contraception and sex education: bedsider.org, run by the National Campaign to Prevent Teen and Unplanned Pregnancy, is specifically designed to appeal to teens and young people with edgy, interactive content dispelling myths regarding sex and contraception. More importantly, there is an interactive birth control area where patients can compare and contrast the different options, learn more about each, and find locations to get each in their area, including earmarking of those clinics that have reduced fees/costs for contraceptive access. Allied Reproductive health professionals - arhp.org/methodmatch - is also a great website for comparing methods, ranking them by effectiveness.

For helping patients remember their contraception: In addition to providing contraception information, bedsider.org also helps with contraceptive compliance, with the ability to sign up for free reminders by phone or email for pills, patches, shots or even just the next doctor’s appointment. For those that prefer an app for pill reminding, there are a large number, including MyPill, which is free for pill tracking and can be set for extended regimens as well.

For preventative medicine information: AHRQ ePPS is an app has all the latest and from the US preventative task force with printable handouts and calculators for BMI, breast cancer risk models, FRAXX fraction risk, etc.

For combating obesity: MyFitnessPal and LoseIt are both free iPhone/iPad apps that provide accountability and menu tracking for weight loss. MyFitnessPal has the ability to link with social media, and have weight loss friends that can see, and encourage progress. For patients who are pregnant, these apps – as well as WeightGain and SureBaby - guide antepartum weight gain as well.

For medication information: epocrates has an app that is free and widely used. In addition to the information on individual medications, there are as number of useful medical calculators, and very handy pill identifier tool. An expanded version is available for $160, but the basic free version is a great tool.
**For medications in pregnancy:** Reprotox.org is well loved for use of medications pregnancy and lactation, but expensive without an institutional license. Lactmed is a great, free site for information on drugs in lactation. Otispregnancy.com has information for many common medications, and Consumerlab.com is a great way to verify what the contents are in different brands of supplements.

And last, but not least, **for ultrasound quality monitoring:** perinatalquality.org. In addition to seeing the distribution of your own NT measurements, there are a variety of other helpful and interesting features including the ability to calculate pseudo-risk for high-order multiples, a new cervical length module (CLEAR.perinatalquality.org), and an area to review images of commonly seen anomalies in the first trimester.

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**THE IMPACT OF NEWER SCREENING TOOLS ON THE COMBINED TEST**

The Perinatal Quality Foundation NTQR program monitors the number of nuchal translucency and crown-rump length datasets reported by laboratories and participants. One assumption is that as the use of non-invasive perinatal testing (NIPT) increases, the use of the combined test for aneuploidy screening in the first trimester will decrease. NIPT was introduced in November of 2011; as you can see from the graph, there has been no appreciable decrease in the NT/CRL datasets reported to NTQR since that time. We continue to monitor this data and will publish it in the newsletter periodically.
The Perinatal Quality Foundation (PQF) and the American College of Medical Genetics and Genomics (ACMG) have created a task force that also includes representatives from the American College of Obstetricians and Gynecologists (ACOG), the Society of Maternal Fetal Medicine (SMFM) and the National Society of Genetic Counselors (NSGC). The task force intends to publish a joint statement to provide guidance on the implementation of expanded carrier screening in clinical practice.

Pan-ethnic, multi-gene carrier tests have been introduced as an alternative to single gene, ancestry-based carrier screening. Today’s genotyping and next generation sequencing technologies have created the capacity for efficient, simultaneous multi-gene testing. Commercial laboratories that offer expanded carrier screening panels include many additional disorders not currently recommended for screening. Professional guidance on the implementation of universal carrier screening in clinical practice is needed.

The Universal Carrier Screening Task Force will seek consensus among the professional societies as they develop criteria for inclusion of conditions on a carrier test panel. The committee also plans to explicate appropriate clinical criteria for offering expanded carrier testing, including direction on pre- and post-test education and counseling, the informed consent process, and guidance for follow-up of positive test results.

The projected outcome of the Universal Carrier Screening Task Force is a single, multi-organization guideline for effective implementation of expanded carrier screening in the preconception and prenatal care settings, expected in the next few months. Through this consensus process, the PQF, ACMG, ACOG, SMFM and NSGC hope to provide uniform guidance to clinicians and to industry, as the carrier screening paradigm shifts.

The Fetal Monitoring Credentialing Examination produced by the Perinatal Quality Foundation will be available January 1, 2014. For further information see The Case for an Electronic Fetal Heart Rate Monitoring Credentialing Examination by Richard Berkowitz, Mary D’Alton, James Goldberg, et al in the American Journal of Obstetrics and Gynecology (AJOG).
On October 3-4th, 2013, AMFMM held its yearly meeting in San Antonio on practice management with approximately 75 attendees. AMFMM was initially developed with a small grant via the SMFM, as there was a perceived need among society members that practice issues were becoming more complex. Additionally, there was a perception that a deficiency of practice management knowledge and experience existed among SMFM members. Moving forward, practices are coming to the realization that business savvy in the field of medicine directly affects their ability to provide excellent clinical care. In the current climate of rapid change within healthcare with shrinking reimbursements, increased regulation, and the transformations coming with the ACA, the practice managers and physician role in successful navigation of these changes is becoming more important.

At the meeting, there was discussion of issues that concern all practice models from academic to hospital based to private practices. Clearly however, with a drive to support income generation, all of these practice types are becoming more similar instead of more diverse. Some of the topics covered are included below with one key point from each:

**Utilization and coding of mid-level providers in MFM:**
The average best performing practices in women’s health have a 1:1 ratio of physician to midlevel provider.

**Negotiation:**
Contract negotiation should be over interests and not positions. Working for common ground to accomplish win-win situations improves relationships for the long-term gain of both groups.

**HIPAA and other healthcare law changes:**
The new definition of a breach of personal health information (PHI) is that unpermitted disclosure of information is presumed a breach unless there was a low risk the PHI was compromised. In the past the definition was that significant risk of harm was the definition of breach of PHI.

**Strategies for Revenue Enhancement and Billing:**
As of 1/1/14, all plans will need electronic funds transfer (EFT) and electronic remittance advices due to their effect on cost savings. Now only 32% of payments are via EFT. Set up your practice to use this quick means of payment and posting to accounts.

**Getting ready for upcoming maternal levels of care:**
Directorship and professional services agreements should be strongly considered to compensate MFM providers for the new responsibilities coming with maternal levels of care.

**Challenges of the employed physician:**
Success comes from operating as if you are in a private practice with service, quality, collaboration, and providing value based care.

**University practice update:**
Long-term success is dependent upon integrated, high value care. This is delivered via expanding access, improving clinical outcomes, lowering costs, and care coordination.
Differentiation of the MFM practice by customer service initiatives:
Basics require understanding what referring physicians want: and delivering, providing staff support to meet consumer expectations, and creating a transparent culture and sharing goals with staff.

The importance of patient benchmarking:
It is important to get a national MFM benchmark of patients, as our population is different from that of other medical fields due to age, gender, and general health. Hence their needs are dissimilar from other medical populations and require different actions.

Practices may join AMFMM at www.AMFMM.com to take advantage of message boards, business tips, newsletters, and discounted fees to our annual conference.

An audio / visual presentation on **INTERPRETING YOUR EPIDEMIOLOGIC REPORT** is available on the Nuchal Translucency Quality Review website (http://www.ntqr.org). The NTQR Epidemiologic reports are sent to participants 3-4 times per year. Participants who are “out-of-the expected range” on two consecutive reports are placed in Required Quality Maintenance. (RQM). The participant must complete the RQM module or bring their statistics back “into expected range” within 90 day of assignment to keep their NTQR ID# in good standing. A one-time extension of 90 days is available.

Please contact NTQRsupport@ntqr.org with additional questions.