I. Statement of Opinions and the Basis and Reasons for Them.

1. I have reviewed Wisconsin’s 2013 Act 37 (S.B. 206), hereinafter referred to as the “Act” which requires physicians performing abortions in Wisconsin to have admitting privileges within 30 miles of the location where the abortion is performed. I have also reviewed declarations by Ms. Huyck, and Drs. Christensen, Laube and Broekhuizen in support of Plaintiffs’ Motion for Preliminary Injunction. In my medical opinion, the Act’s requirement mandating admitting privileges for the termination of pregnancy (“TOP”) providers in Wisconsin is protective of women’s health and safety. The Act is a prudent and reasonable provision to
advance women’s reproductive health and increase the likelihood that those women who may experience serious TOP complications will receive optimal care.

2. The opinions I express herein are based upon my medical education, training and thirty years of clinical experience, as well as my familiarity with the medical literature. In addition, I am very familiar with the credentialing and privileging process, having served on the University of North Carolina Health System credential’s committee. As Division Director of UNC’s Women’s Primary Healthcare, which up until very recently included TOP and reproductive health services, I oversee and guide the credentialing process for 12 Obstetrician-Gynecologists, 3 Fellows, and 3 Advanced Practice Nurses. The opinions I express herein are my own and do not represent the institutions with which I am affiliated.

3. It is prudent to insist upon high quality TOP practitioners. A physician’s medical licensure is the only state regulation providing any quality control of these providers. Under Wisconsin law, it is my understanding that clinics where terminations of pregnancy are performed are not required to be licensed as ambulatory surgical centers, and are unregulated and unlicensed health facilities. Thus, women seeking TOPs are solely dependent upon the Wisconsin Medical Examining Board and physician licensure as the only safeguard that their provider is competent and the clinic is reputable and safe. Given the unique nature of an elective pregnancy termination and its likely underreported morbidity and mortality, it is appropriate and necessary to provide increased provider safeguards through hospital credentialing and privileging. In my medical opinion, this is consistent with generally accepted standards of care, particularly in obstetrics and gynecology.

**TOP Morbidity and Mortality & Comparisons to Childbirth**

4. Plaintiffs contest there is no medical need to impose the admitting privileges requirement on TOP providers because the morbidity and mortality of TOP are very low. Yet this is far from settled science, as I will address below. Plaintiffs’ expert, Dr. Laube does not contest that some women who terminate their pregnancies are at risk of serious, even life-threatening complications. It is for these women that this Act applies. The controversy centers on the extent of the risk in the subpopulation of interest, i.e., the number of women whose termination of pregnancy results in serious complications which is largely unknown, and the continuity of care for these women. In my opinion, these women need and deserve the highest standard of care, not substandard or discontinuity of care.

5. In medicine, prior to the acceptance of any new intervention or medication, rigorous assessment is made to determine efficacy and safety. In assessing the health risks of TOP, it is necessary to obtain complete statistics on the incidence and prevalence of TOP as well as its mortality and morbidity in the U.S. But there is no national reporting requirement and thus, only estimates are available. Furthermore, TOPs are also not linked to other sources of health data such as birth or death certificates, thereby making precise calculation of morbidity and mortality rates impossible.

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6. Dr. Laube asserts in ¶ 8 of his Declaration: “Legal abortion is one of the safest medical procedures in the United States.” Such an allegation is unfounded, and lacks scientific rigor and reality. As far back as 1998, long-time Guttmacher Institute researcher, Stanley Henshaw, concluded: “reporting of abortions is incomplete in most states.”2 Thus, if the data is incomplete, i.e., the incidence of the number of TOPs and their complications are not reliable, no credible statements about TOP safety can reasonably be made. Existing research on TOP morbidity and mortality is plagued by numerous known methodological deficiencies: (a) reliance on voluntary and incomplete state reporting of TOP; (b) data misclassification, i.e., deaths are reported by complication (e.g., infection or hemorrhage) and not from the procedure (e.g., TOP); (c) suicide deaths are rarely if ever linked back to TOP and are thus unreported; (d) failure to include TOP related deaths beyond the first trimester where TOP mortality risks equal and exceed childbirth; and (e) failure to account for evidence that childbirth is protective in the immediate and long-term against death from non-obstetrical causes including natural causes (e.g., breast cancer) and unnatural causes (e.g., suicide).3

7. Implicit in any discussion about TOP safety is the presumption that the data upon which this assertion rests are reliable and complete. This is not insignificant as there are only two primary sources of data for TOP: the Centers for Disease Control and Prevention4 (CDC) and the Guttmacher Institute (GI).5 The CDC does not provide surveillance data of non-fatal

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TOP complications, only mortality. The GI does not systematically gather this data either, but instead relies upon non-GI authored individual studies.\(^6\) Even so, GI acknowledges: “Additionally, much of what is known about women having abortions is incomplete or out of date.”\(^7\)

8. Up until recently, but throughout its history, GI has been affiliated with and/or funded by the largest TOP provider in the U.S., Planned Parenthood Federation of America. This conflict of interest has created a systematic information bias which should not be minimized. GI has a clear TOP advocacy agenda that is evident to any reasonable reader reviewing their website.\(^8\) On the other hand, the CDC relies upon state health department data which is subject to considerable underreporting by TOP providers due to the voluntary nature of the reporting and obvious conflict of interests. Likewise, GI’s TOP reporting is based upon periodic provider estimates and is also subject to provider conflict of interests. In the U.S., it is estimated that only one-third to one-half of TOP patients return to the clinic for their follow-up care.\(^9\) Accordingly, many complications, delayed or otherwise, are even unlikely to be known to the TOP provider.

9. It is my understanding that Wisconsin is one of the few states which requires TOP complication reporting, but has no penalties for not doing so.\(^10\) Combined with the fact that Wisconsin only requires reporting of complications known to the provider and that an estimated one-third to one-half of women do not return to the provider for follow-up care, TOP complications are likely undercounted and the official state reports are incomplete. Indeed, according to the Wisconsin Department of Health Services: “Assessing the incidence of

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\(^6\) For example, see Boonstra, H. et al. The Long-Term Safety of Abortion in Boonstra, Ch. 4 in Abortion in Women’s Lives, Guttmacher Institute, 2006. Available at: http://www.guttmacher.org/pubs/2006/05/04/AiWL.pdf.


\(^8\) “The Institute works to protect, expand and equalize universal access to information, services and rights that will enable women and men to exercise the right to choose safe, legal abortion . . .” and “The Institute also recognizes a responsibility to document, and address through policy advocacy, the disparities in sexual and reproductive health and rights between and within countries across the globe, and to support the efforts of colleagues advocating for enlightened policies in their own countries and internationally.” Mission of Guttmacher Institute, 2013. Available at: http://www.guttmacher.org/about/mission.html


complications is somewhat problematic.”11 In my opinion, it is false and misleading to conclude that TOP is safe in the absence of reliable and complete complication data.

10. One of the most recent examples of poor quality studies is the recent study by Planned Parenthood on medical TOP by Cleland and colleagues, 2013.12 This study claims to determine a “rate” of complications after medical TOP, yet what it really reports is the rate of complications “reported” to Planned Parenthood facilities. Not surprisingly, the number of complications reported to Planned Parenthood facilities is a vastly different number than has been reported for other studies which are based on recorded medical registries in countries where the medical records of all citizens can be queried and reported.

11. That TOP reporting as well as TOP complication reporting is underreported is well recognized among reproductive health researchers. For example, in the National Survey of Family Growth (NSFG) fewer than one half (47%) of TOPs performed in the U.S. between 1997-2001 were reported. Hispanic, black women, women in their 20’s, those with low income, and women having first-trimester TOPs were less likely to report their termination experience.13 This underreporting continues today. For example, in the National Comorbidity Survey-Repetition, only 44% of TOPs were reported in 2013.14

12. In other states, TOP complications are voluntarily reported or not reported at all. In these circumstances, significant underreporting is likely due to provider conflict of interests. Given the inherent weaknesses of TOP mortality and morbidity data, it is inconceivable to me how TOP safety can be alleged with any reasonable degree of epidemiological certainty.

13. Dr. Laube further opines that there is an increased risk of serious complications resulting from labor and delivery compared to TOP (Decl. ¶ 10). Existing research suggests the necessity of challenging TOP safety when compared to childbirth. Two Canadian articles produced population-based maternal mortality rates15 (MMR) from a developed country in “healthy women.” Though neither controlled for age, their findings are illustrative here. One focused on excess risk associated with elective abdominal delivery and found an MMR of

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15 The maternal mortality rate (MMR) is the annual number of female deaths per 100,000 live births for a specified geographical area from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). The MMR includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, for a specified year, and for a specified geographical area.
1.2/100,000. The other focused on vaginal birth after caesarean section which is a higher risk condition due to uterine scarring and found a risk of 1.6/100,000. One can safely speculate that this number would be lower in women with an unscarred uterus. Both of these MMRs are well within the 1-2/100,000 quoted for TOP in the US with all its limitations. In my epidemiological opinion, it is false and misleading to assert that TOP is safer than pregnancy in low risk, healthy women. An additional factor that should be considered is age and maternal mortality. Younger women between the ages of 20 - 39 are generally healthier than older women and thus less likely to die from uncomplicated pregnancy and childbirth, which is a normal and natural process. In developing countries when direct obstetric deaths which are largely preventable are excluded, a “healthy pregnant woman effect” has been reported in which women currently or recently pregnant were up to five times less likely to die than women who had not been recently pregnant.

14. Given the poor ascertainment and reporting of deaths after TOP in the US due to insufficient administrative oversight and subsequent inability to link TOP occurrence to death certificates, it is imprecise at best to compare TOP-related to pregnancy-related deaths and claim one is safer than the other. Pregnancy-related deaths are systematically sought and investigated by state government sponsored commissions and the majority of states formally link birth certificates to death certificates. These efforts, which cannot currently be done for TOP, double the number of pregnancy related deaths discovered. Moreover, deaths after pregnancy cover an interval from conception to 42 days after delivery while TOP covers a much shorter window. An analogy would be comparing a full length film to a snapshot. For these reasons, comparing death rates and their derivative, safety claims, are inaccurate and imprecise. Such claims are not supported by adequate epidemiological methods and at this time, any comparative differences in the U.S. cannot be quantified with precision.

15. The U.S. has no federal TOP reporting law or mechanism mandated to collect incidence and morbidity and mortality data. Nor does the U.S. does have a national health registry identifying and linking all individual healthcare interventions (including TOP), diagnoses, hospitalizations, births, deaths and other vital statistics, unlike Scandinavian countries. Accordingly, epidemiological studies using these national data sets from abroad are methodologically superior to U.S. data. In a recently published study of 463,473 women using Danish linked birth and death registry records for an epoch of 25 years, when compared to women who delivered, women with TOP < 12 weeks gestation had higher cumulative mortality

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rates from 180 days to 10 years later. In a second study using the same national registries, the researchers again found increased risks of death for women electing TOP compared to childbirth. Record linkage studies of the population of Finland and of low income women in California have also reported higher death rates associated with TOP than childbirth.

In short, there are numerous and complex methodological factors that make a valid scientific assessment of TOP mortality and morbidity impossible: incomplete reporting, definitional incompatibilities of measures, voluntary data collection, investigator bias, reliance upon estimations, inaccurate and/or incomplete death certificate completion, incomparability with maternal mortality statistics, and failing to include other causes of death such as suicides.

Plaintiffs argue that TOP is safe despite the lack of valid scientific evidence. Whatever the true incidence of serious complications from TOP may be, and it is largely unknown at this time, the Act narrowly focuses on the safety and continuity of care for these vulnerable women whose complications place them at greatest risk to their health and well-being.

Numerous other methodological issues abound in TOP epidemiology. Further discussion of this is presented in my 2012 article in Scientifica entitled: Public Health Impact of Legal Termination of Pregnancy in the US: 40 Years Later.

Dr. Laube opines in his Declaration at ¶ 36: “It is extraordinarily important for women to have meaningful access to legal abortion.” He goes on to state: “Women of childbearing age who do not have access to the procedure face significantly increased risks of death and poor health outcomes.” Yet absolutely no evidence is presented to corroborate this extreme position. After reading Dr. Laube’s opinions comparing the relative safety of childbirth to TOP, one could reasonably draw the conclusion that human pregnancy and delivery is a disease state that is unsafe and should be managed by the safer choice of pregnancy termination, notwithstanding common sense and conventional medical science. Indeed, such a jaundiced view would seemingly question why a woman would ever choose conception and childbirth.


22 Post-pregnancy death rates within one year were nearly 4 times greater among women who had a TOP (100.5 per 100,000) compared to women who carried to term (26.7 per 100,000). Gissler, M. et al. Pregnancy Associated Deaths in Finland 1987-1994: Definition Problems and Benefits of Record Linkage. 76 A Acta Obstetricia et Gynecologica Scandinavica. 1997, 76: 651-7; mortality was significantly lower after a birth (28.2 per 100,000) than after a TOP (83.1 per 100,000). Gissler, M., Berg, C., Bouvier-Colle, M., Buekins, P. Pregnancy-associated mortality after birth, spontaneous abortion, or induced abortion in Finland, 1987-2000. American Journal of Obstetrics and Gynecology, 2004, 190: 422-427; women who aborted, when compared to women who delivered, were 62% more likely to die over an 8 year period from any cause after adjustments were made for age. Reardon, D. et al. Deaths Associated with Pregnancy Outcome: A Record Linkage Study of Low Income Women. Southern Medical Journal, 2002, 95: 834-841.
Short & Long Term Risks of TOP

20. With the caveats identified above, and acknowledging the weaknesses of existing epidemiological research on TOP outcomes, risks from surgical TOP include bleeding, infection, and damage to bowel, bladder, or upper genital tract. The risks from medical TOP include failed abortion, incomplete abortion, bleeding, and infection which are greater than for surgical TOP, according to existing research.23 Heavier bleeding and more severe cramping are more common in medical TOP. Off-label use of medical TOP is inadvisable given the number of adverse event reports and deaths.24 Complication rates range from 2-10% and most complications can be managed without major surgery. While TOP complication rates tend to increase proportionately with gestational age, based upon the limited and incomplete data available, and while the magnitude of risk remains small, after 16 weeks, risks from TOP may exceed the risks of carrying a pregnancy to term and certainly do so by 20 weeks.

21. While there have been numerous claims that TOP has no long-term health consequences beyond the immediate complications identified above, these assertions are based upon the data limitations previously discussed, particularly lack of completeness and the sole use of observational data generated by self-report of TOP exposure. Methodologically sound research has, however, indicated significant associations between TOP and placenta previa, preterm birth, breast cancer, and mental health problems, i.e., mood disorders, substance abuse and suicide.25

The Importance of Admitting Privileges

22. Credentialing and privileging are two distinct parts of hospital staff membership. Credentialing is the formal hospital process of identifying, confirming and evaluating information regarding professional and technical competence, whereas privileging is the process whereby the hospital’s medical staff evaluates and recommends if an individual practitioner should be allowed to provide specific patient care services in the institution. There are four main benefits supporting the requirement that operating surgeons hold local hospital admitting

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23 Similar to the findings of other studies, the incidence of hemorrhage is 15.6 percent following medical TOPs, compared to 5.6 percent for surgical TOPs; 6.7 percent of medical TOPs result in incomplete abortion, compared to 1.6 percent of surgical TOPs; and the rate of need for surgery following medical TOP is 5.9 percent. M. Niinimaki, et al., Immediate Complications after Medical Compared with Surgical Termination of Pregnancy, Obstetrics & Gynecology. 2009,114:795-799 (2009). For a discussion of complications associated with medical TOP <49 weeks gestation versus 49>, see: Amici Curiae Brief of Dr. John Thorp et al., Cline, et al. v. Oklahoma Coalition for Reproductive Justice, et al., U.S. Supreme Court, No. 12-1094, 2013.


privileges: (a) it provides a more thorough evaluation mechanism of physician competency which better protects patient safety; (b) it acknowledges and enables the importance of continuity of care; (c) it enhances inter-physician communication and optimizes patient information transfer and complication management; and (d) it supports the ethical duty of care for the operating physician to prevent patient abandonment.

23. The granting of admission and procedural privileges by a hospital’s medical staff and executive board is an important and necessary process that determines which physicians may admit or perform procedures at a given inpatient healthcare facility. According to The Joint Commission this process is intended to assure patient safety by permitting only qualified physicians to provide such care. There are varying categories of hospital staff membership. Being credentialed and privileged by a hospital is a necessarily lengthy and detailed process, but not an insurmountable one, providing the applicant physician is a graduate from an accredited medical school and residency, is typically board eligible or certified, competently trained and experienced, has no history of violations of practice standards, and hold’s state licensure in medicine. All competent physicians endure the “burdensome” nature of applying for hospital privileges for the safety and well-being of their patients.

24. Hospitals have a duty to protect their healthcare organization, their patients, and their reputation, and to avoid legal liability, exclusion from federal and state program participation, and/or loss of accreditation caused by association with incompetent and low-quality providers. As corporate health care providers, these organizations are themselves subject to surgical case reviews, mortality and morbidity review, adverse patient outcomes reporting, all of which may be negatively affected by unqualified providers. This is the practical and functional system of inpatient health care delivery that all physicians, including TOP providers, are subject to and accept.

25. Serious complications can only be evaluated in full-service hospitals and often occur after regular business hours. Given the frequency of short-term complications from TOP (estimated to be 2-10%), follow-up medical care is often needed on an urgent basis to treat infection, bleeding, or organ damage. If recognized and attended to promptly, long-term sequelae can be minimized. Commonly, TOP procedures are performed in freestanding clinics during weekday hours and complications are managed in urgent care centers or emergency departments after hours or on weekends. In addition, the checks and balances for auditing patient outcome in the hospital setting are less likely to be found in TOP clinics which are not regulated as ambulatory surgical centers in Wisconsin. Thus, it is important that the ob-gyn inducing the termination of pregnancy have medical staff privileges at a local hospital to reasonably meet the health care needs of his or her patients, and to have appropriate accountability.

26 The Joint Commission, Comprehensive Accreditation Manual for Hospitals (CAMH), §§ MS. 01.01.01 (2013).

27 “Membership on the medical staff is not synonymous with privileges. The medical staff may create categories of membership, as in active member, courtesy member, and so forth. These categories may be helpful in defining the roles and expectations for the various members of the medical staff.” The Joint Commission, Hospital Medical Staff, E-dition, July 1, 2013.
26. When the TOP provider is an ob-gyn and has admitting privileges at a local hospital, he or she is more likely to effectively manage patient complications by providing continuity of care and decrease the likelihood of medical errors. Medication errors resulting from either incomplete medication history taken at admission or from inadequate communication between community and hospital caregivers are one of the leading causes of patient harm in hospitals. This failure to communicate a patient's medication history often results in incorrect drug treatment, and subsequently adverse drug events and potentially life-threatening situations for patients. Then too, with the stigma and shame associated with induced termination of pregnancy, many women may be reluctant to even disclose a TOP in accessing emergency medical care which can place them at increased risk.

27. In my medical opinion, I believe most patients would assume that their surgeon for an elective procedure would have both current medical licensure and admitting privileges at an acute care hospital that would allow for the diagnosis and treatment of any unforeseen complications or harms that could arise from their surgery. Not having these safeguards in place violates the patient's legitimate expectations of safety. The Act conforms to this reasonable patient expectancy of professional competency in their medical provider and the protection of their health and safety.

28. In the absence of the Act, in my opinion, it is the duty of the TOP provider to inform his/her patient prior to performing the termination that should a complication arise requiring hospitalization, that he/she will not and cannot be involved in her urgent care at the hospital due to the fact that the provider does not have admitting privileges at any hospital close to the TOP clinic. TOP patients should also be informed that in the event of a serious complication their emergent and ongoing care would be transferred to another provider, and that this transfer of care may result in a delay in treatment and possible worsening of their complication.

29. Because the termination of pregnancy is unique in medicine and because it involves the purposeful and irrevocable ending of the life of the ob-gyn's second patient, i.e., the fetus, standards of care should be higher, not lower given the potential life-changing nature of this medical intervention. In the absence of empirical validation of TOP's safety as delineated above, and given the considerable TOP providers' conflict of interests, it is logical and reasonable to emplace more protections and increased safeguards rather than less. Additionally, women considering TOP are particularly vulnerable. Often they have not told

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30 Women who terminate their pregnancies are more likely than women with no termination history to have experienced parental mental illness, personal safety threats, and childhood adversity including abuse. See: Steinberg,
family members and friends about their decision. Thus, they may often be deprived of the social and physical support that other non-TOP patients benefit from when a complication arises after elective surgery. For these reasons and others, the Act protects the best interests and safety of TOP patients.

30. Furthermore, in my medical opinion, the Act's provision is reasonable and beneficial because the operating surgeon is most familiar with the patient's history, physical exam, and surgical procedure. Thus, he/she is best positioned with the knowledge necessary to diagnose and correct complications that arise. Moreover, he/she has gained that patient's confidence prior to the TOP, and is most familiar with her future reproductive plans. Her future plans are often crucial in decision making when treating a serious complication.

31. The largest association of TOP providers in the U.S. is the National Abortion Federation (NAF). Long before any state law requiring a TOP provider to hold admitting privileges at a local hospital had been enacted, it is abundantly clear this issue was a settled matter and an accepted mandate for NAF's own standard of "good care:" "In the case of emergency, the doctor should be able to admit patients to a nearby hospital (no more than 20 minutes away)." I am unaware of any compelling evidence in the medical literature in the 14 years since this was published to warrant deviating from this standard of care, including the emergence of hospitalists.

32. Acknowledging the importance of hospital admitting privileges, the American College of Surgeons (ACS), along with 32 other medical associations, all affirmed the value of holding hospital admitting privileges in their core principles: "Physicians performing office-based surgery may show competency by maintaining core privileges at an accredited or licensed hospital or ambulatory surgical center, for the procedures they perform in the office setting." Core Principle #4 requires: "Physicians performing office-based surgery must have admitting privileges at a nearby hospital, a transfer agreement with another physician who has admitting privileges at a nearby hospital, or maintain an emergency transfer agreement with a nearby hospital." Relevant to TOP clinics, ACS also affirmed that physicians who perform office-based surgery should have their facilities accredited and or licensed by national or state entities (Core Principle #3). Multiple other authorities also affirm the critical role of hospital staff


membership: "The surgeon should be credentialed to perform the selected surgical procedure at a hospital in close proximity to the office surgical suite."  

33. In his Declaration ¶ 26-27, Dr. Laube marvels at the realities of contemporary medical practice and the hospitalist model of care where a multidisciplinary team will stabilize, assess, and determine whether a specialist is needed. What he does not indicate is whether or not these realities actually occur in practice and whether or not they are true for Wisconsin. Nationally, 73% of emergency departments report inadequate on-call coverage by specialist physicians, including obstetricians/gynecologists who are particularly difficult to secure. Dr. Laube's optimism of the ready availability of needed specialists like ob-gyns to manage serious post-TOP complications is ill-founded and, in my opinion, more likely to contribute to delay in treatment and increase health risks for TOP patients with critical complications. The idea that there is a clear divide between inpatient and outpatient care in contemporary medical practice in this country is false. This may be true in some areas in internal medicine and pediatrics but certainly not in obstetrics and gynecology. Furthermore, evidence suggests the hospitalist model may increase rather than decrease medication and communication errors. A recent study found that when the primary care provider has admitting privileges continuity of care increases and medication errors decrease.

34. I am unaware of any reliable evidence suggesting patient care improves and patient satisfaction increases when women's reproductive health care or TOP complications are managed by hospitalists who have no prior relationship with their patients and potentially no information on the patient's TOP. In fact, in one study when physicians who did not hold admitting privileges had their patients emergently hospitalized and treated by a hospitalist, approximately half of those patients were admitted with at least one medication error. In his Declaration ¶ 27, Dr. Laube opines the staff privileges requirement of the Act "is at odds with the development of inpatient 'hospitalists . . ." and that "laborists" provide inpatient obstetric


care and a “community obstetrician manages the pregnant patient as an outpatient.” I disagree. Almost all gynecologist surgeons provide both inpatient and outpatient care.

35. It is certainly possible that the patient may return home and be living some distance from the TOP clinic at the time when complications arise. In my opinion, in this situation it would still be important for the TOP provider, not as an admitting physician, to communicate with the local physician. I would argue that severe complications such as severe hemorrhage and uterine perforation are more likely to occur immediately during or after the TOP procedure. Thus it is both prudent and medically necessary for the Act to require TOP providers to hold hospital admitting privileges within 30 miles of the TOP clinic.

36. Dr. Laube asserts that physicians perform procedures that carry risks and rates of complication greater than TOP at ambulatory surgical centers and likely do not hold admitting or staff privileges at a local hospital (Decl. ¶ 30-31). I disagree. In my experience, it is common and very often required for physicians performing surgeries at ambulatory surgical centers to hold hospital privileges nearby.

37. Optimal patient outcome results from continuity of care, which in turn relies upon good communication. On this Dr. Laube and I agree. Dr. Laube does opine that it is standard practice for a referring physician to contact the emergency room physician in order to inform the medical staff about the patient (Decl. ¶ 17). He does not, however, provide any evidence that good communication between the TOP physician and the ER physician in fact occurs. In the medical center where I practice at UNC, good inter-physician communication is not the case except for those physicians who are on our staff. The use of electronic medical records is another concern, particularly if TOP clinics and hospitals use different systems and when the TOP physician has no relationship with the hospital where the patient is transferred.

Continuity of Care & the Physician-Patient Relationship

38. Continuity of care, which the Act facilitates, has been conceptualized as having three primary components: (a) physician continuity; (b) management continuity; and (c) information continuity. However, the critical focus of continuity of care is fundamentally the patient’s health and safety. When ob-gyn TOP providers hold hospital admitting and staff privileges, transfer of care to another physician is generally less likely, and management continuity is enhanced when the TOP ob-gyn treats his/her patient’s serious complications at the hospital. Improving information transfer is more likely as well. Existing evidence suggests that inter-physician communication is insufficient at transition points of patient care, including between ER physicians and hospitalists. These insufficiencies include information that is not


provided in a timely manner, the omission of essential information, or information with excessive ambiguities that unnecessarily put patients at risk. According to one study, an information gap was identified in 29.4% of patients presenting at the emergency department with a gap in medical history information most prevalent (58%) which ER physicians felt to be essential to patient care in 47.8% of the cases. Clearly, continuity of care is a vital part of contemporary medical practice. A systematic review of the medical literature concluded that continuity of care improves quality of care and patient outcomes.

39. Communication between physicians is so important that The Joint Commission commenced a collaborative project in 2009 to increase information flow and decrease miscommunication problems, particularly at crucial patient care transitions. Among the participating hospitals are Johns Hopkins, Mayo Clinic, New York-Presbyterian, Kaiser Permanente and Stanford Hospital & Clinics. The Joint Commission estimates that 80 percent of serious medical errors involve miscommunication between caregivers when patients are transferred or handed-off. Hospital referral and discharge research also confirms that interphysician communication occurs rarely. While responsibility for improving patient safety is widely shared, it is clear that major responsibility for both patient safety and the provision of critical information lies with the physician provider and limited accountability. Discontinuities in the patient care continuum increase the risk of adverse events and threats to patient safety.

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41 Inter-physician communication is challenging under the best of circumstances: “Through ongoing, professional give and take, one party must paint a picture and the other must see it, understand it, act on it, and, ultimately, communicate it to someone else. All the while the medical environment is changing, such that by the time the handoff is complete, the information may very well be old.” Gibson, S., Ham, J., Apker, J., Mallak, L. & Johnson, N. Communication. Communication. Communication: The Art of the Handoff. Annals of Emergency Medicine, 2010, 55(2): 181-182.


Based upon my experience, I believe communication errors are less likely to occur when operating surgeons hold hospital admitting privileges and are actively involved in managing their patients’ serious complications.

40. Requiring TOP providers to hold hospital admitting privileges is reasonable and medically necessary because differences do exist between the support available in a hospital operating room versus a freestanding TOP clinic. For example the ability to obtain laboratory tests postoperatively, provide blood or blood products, or obtain consultations is frequently available in a hospital operating room. Rarely is it possible to provide this type of care in a freestanding ambulatory surgical center or at a TOP clinic.

**Qualifications of TOP Physicians**

41. Termination of pregnancy is not a benign medical procedure. In some cases, serious complications, even life-threatening ones, arise and necessitate optimal and evidence-based treatment. Competency in performing a medical procedure also includes the management of complications. Family practice physicians, despite their commitment to providing reproductive health services, are simply not adequately trained and experienced to perform TOPs, and are unlikely to be granted admitting and staff privileges to provide procedures ob-gyn hospital staff members perform. In my opinion, obstetrician/gynecologists are best trained to perform termination of pregnancy; they are also the physicians who are best prepared to safely treat and manage TOP complications. Obstetrician/gynecologists handle all of the serious complications arising from surgical terminations. An obstetrician/gynecologist focuses on the health of women before, during, and after childbearing years, diagnosing and treating conditions of the reproductive system and associated disorders. It is for this reason that the vast majority of TOP providers are obstetrician/gynecologists.

42. Termination of pregnancy is an elective medical or surgical procedure that requires not just the technical ability to complete but clinical judgment in the assessment of the patient, the choice of technique, the setting where the termination is accomplished, and the recognition and management of complications. Failure to exercise clinical judgment, despite technical expertise, can endanger the life and health of the patient seeking termination of pregnancy.

43. The initial assessment of a patient must include a history and physical exam and appropriate diagnostic tests to confirm that a pregnancy exists, a determination that it is intrauterine and not ectopic, and an estimation of gestational age. Contraindications to various methods of termination of pregnancy or recognition of conditions that should alter the physician’s approach must be sought for and recognized. These would include congenital


abnormalities, common neoplastic conditions such as leiomyomata, multifetal gestations, and placentation problems such as placenta previa or accreta. Underlying maternal medical problems must be excluded or if present, recognized and managed.

44. After the assessment is completed and the termination of pregnancy has begun, acute complications that are inherent to all such procedures must be recognized and emergent care provided to prevent permanent disability or death. These complications would include failure to complete the termination with retention of part or all of the pregnancy, perforation of the uterus with or without damage to intra-abdominal organs such as bowel or bladder, and acute blood loss. Delays in recognition or initial management of termination of pregnancy complications can threaten a patient's life and render her incapable of having children in the future.

45. Plaintiffs' witness Teresa Huyck in her Declaration ¶ 11 and Dr. Broekhuizen in his Declaration ¶ 9 both assert that all of Planned Parenthood's physicians are either board certified ob/gyns or family medicine and that most have hospital admitting privileges. This is a clear acknowledgement of both the importance of employing ob/gyns in TOP care, and the necessity of having admitting privileges for continuity of care and patient safety. Privileged surgery is one that is generally recognized by the certifying board as falling within the scope of training, practice and competency of the physician providing the care. If TOP providers who are family medicine physicians are unable to obtain local admitting privileges to manage TOP complications and those procedures are best done by ob/gyns by virtue of their training and competency, then patient safety rightly remains foremost and TOP clinics must adapt their hiring policies accordingly.

Additional Issues

46. Plaintiff’s expert, Dr. Laube, asserts: “the vast majority of abortions can be performed safely and effectively in an outpatient setting without any need for the performing physician to have admitting privileges at a local hospital.” (Decl. ¶ 9). From his viewpoint, hospital admitting privileges seemingly constitute an unnecessary burden for the safety and well-being of a minority of his patients. Dr. Laube continues: “... it is no longer necessarily expected that a physician who provides only outpatient care would have hospital privileges.” (Decl. ¶ 26) I strongly disagree. When patients undergo surgery, they expect their doctor to have admitting privileges. The expectations of women seeking a termination of pregnancy are no different and they should not be provided a lower standard of care in my opinion. From the patient's viewpoint, knowing her physician is credentialed and privileged at a local hospital is assurance of quality care in the event of serious complications and a commitment to the physician-patient relationship when it is needed the most.

47. In ¶ 14 & 15 of his Declaration, Dr. Laube attests that the risks, invasiveness, and instrumentation for surgical TOP are comparable to other procedures routinely performed in a physician's office. I disagree. The majority of hysteroscopies and D&Cs performed in the U.S. are done in ambulatory surgery centers with equipped operating theaters. In my opinion, most of these physicians already hold hospital admitting privileges. Furthermore, the pregnant uterus, unlike the case with a failed pregnancy or when a woman is not pregnant, receives 10-15% of the total cardiac output of the heart and thus is more prone to bleeding as a complication.
Likewise, an endometrial biopsy is in no way comparable to surgical TOP as it does not require cervical dilation. In a failed pregnancy or miscarriage the cervix is already somewhat dilated as part of the natural process of pregnancy loss.

48. Dr. Laube, also alleges in his Declaration ¶ 25 that the American Congress of Obstetricians & Gynecologists opposes state-mandated admitting privileges for TOP providers. The American Congress is part of the American College of Obstetricians and Gynecologists (ACOG) which has a long history of supporting a woman’s right to terminate her pregnancy. For example, more than two decades ago it stated: “The College continues to affirm the legal right of a woman to obtain an abortion prior to fetal viability” (approved by the Executive Board in January 1993 and reaffirmed in July 2011). ACOG’s opposition to any statutory regulation of TOP practice is well known; given their long standing advocacy of unrestricted TOP, their opinion on this issue is neither authoritative nor persuasive.

49. Plaintiffs argue that because of the Act’s hospital admitting privileges requirement, some Wisconsin TOP clinics will be forced to close for failure to obtain these privileges. Among the other alleged adverse outcomes for Wisconsin women are that they will be: delayed in obtaining their terminations and will have increased complications as a result, forced to travel great distances or be otherwise unable to terminate their pregnancies or obtain illegal terminations, be forced into carrying unwanted pregnancies to term and as a result be exposed to increased risks of death, exposed along with their newborns to risks of complications during pregnancy and after delivery, etc. I am unaware of any credible evidence supporting these assertions. If Wisconsin’s existing TOP providers cannot meet the Act’s requirement to obtain hospital admitting privileges, in my medical opinion, women would be safer and better served driving greater distances to ensure their terminations are performed by providers who are hospital privileged than seeking terminations from more convenient but substandard providers. It is not an undue burden for a patient to insist and receive optimal care and safety.

50. And finally, the Act is medically necessary to prevent itinerant surgeons from being allowed to abandon their patients if complications arise and emergent follow-up intervention is necessary. Itinerant surgery was expressly proscribed by the American College of Surgeons at the turn of the last century in their Fellowship Pledge & Statements of Principles believing that the surgeon has a moral, ethical and legal obligation to give patients upon whom he/she has operated his personal attention, and to attend his patients postoperatively. The Inspector General of the U.S. Department of Health & Human Services in 1989 concluded: “There is a higher-than-average risk of poor quality care in itinerant surgery.” Women deserve the best medical care, not what is easiest or most convenient for the physicians providing the

50 The American Congress of Obstetricians and Gynecologists is a 501(c)(6) advocacy organization of the American College of Obstetricians and Gynecologists (ACOG).


care. Wisconsin women who obtain terminations of pregnancy expect and deserve to receive responsible medical services which conform to accepted standards of care in medicine, not substandard care offered by unethical itinerant surgeons who arrive at the clinic from out of town one day and after performing their procedures, then leave their surgical complications to hospital providers unknown to the patient. Patient safety and quality of care are inextricably linked, and neither should be compromised, even in the name of reproductive choice.

II. Facts or Data Considered in Forming My Opinions

The following medical literature has in part contributed to the formation of the opinions I have presented here; by no means, however, does this literature represent all of the data upon which my opinions are based. My opinions are also based upon my medical and epidemiological education, training and experience, and informed by research literature too vast to enumerate.


• The Joint Commission, *Comprehensive Accreditation Manual for Hospitals* (CAMH), §§ MS. 01.01.01 (2013).


III. Exhibits To Be Used to Summarize or Support My Opinions

None.

IV. Qualifications, Including a List of Publications Authored in the Previous Ten Years

1. I received my M.D. degree from East Carolina University Medical School in 1983. My residency training took place at the University of North Carolina (Chapel Hill) School of Medicine in general obstetrics and gynecology (1983-1987). I also completed my fellowship in Maternal-Fetal Medicine at the University of North Carolina (Chapel Hill) School of Medicine in 1989. I received my Master of Health Sciences degree in Clinical Leadership from Duke University School of Medicine in 2009.
2. Since 1991 I have been a board-certified obstetrician/gynecologist and since 1992 I have also had a certification in the sub-specialty of Maternal-Fetal medicine. I am a Fellow of the American Gynecological and Obstetrics Society and a member of the American College of Obstetricians and Gynecologists.

3. I am the Hugh McAllister Distinguished Professor of Obstetrics and Gynecology at the University of North Carolina (Chapel Hill) School of Medicine. I am also a Professor in the Department of Maternal and Child Health, School of Public Health at the University of North Carolina at Chapel Hill. In that role I teach both medical students and residents in Obstetrics and Gynecology. Up until very recently, I had administrative oversight of the Family Planning Fellowship and Residency training programs at UNC. Members of my unit staff the abortion services at our academic health center.

4. I am also an Adjunct Professor in the Departments of Epidemiology at both the School of Public Health at the University of North Carolina and the School of Public Health and Tropical Medicine at Tulane University. I am the Deputy Director of the Center for Women’s Health Research, Cecil G. Sheps Center for Health Services Research at both the University of North Carolina School of Medicine and School of Public Health (Department of Obstetrics and Gynecology and Department of Epidemiology, respectively).

5. I am also the Vice Chair for Research and Division Director of Women’s Primary Healthcare, Program Director of the Women’s Reproductive Health Research Scholars Program and Research Core Co-Director of the Women’s Reproductive Health Research Scholars Program at the University of North Carolina.

6. In addition, I am a Fellow of the Carolina Population Center and have been the Director of the Biomedical Core of the Carolina Population Center of the University of North Carolina at Chapel Hill since 2003.


8. I have written or co-written 317 peer-reviewed articles in the professional literature, 157 abstracts discussing medical research, and 39 non-peer reviewed articles.

9. Other professional activities of mine include being an oral examiner for the American Board of Obstetrics and Gynecology, and a member of the science and grant review panels for the National Center for Research and the National Institute for Child and Human Development, National Institutes of Health. My research responsibilities include administrative and scientific leadership in multiple active grants exceeding $12 million.
10. For a complete listing of my professional background, experience, responsibilities, and publications, please see my Curriculum Vitae, attached as Exhibit A.

V. List of All Cases in the Past Four Years in Which I Have Testified As an Expert at Trial or by Deposition

A. Constitutional Cases in Which I Have Provided Testimony:


B. Medical Malpractice Cases in Which I Have Provided Testimony:

I do not maintain records that will allow me to provide names of cases and courts for the medical malpractice cases listed below. I maintain only contact information regarding the attorneys and law firms that I provided expert witness assistance to and the dates of my work.

- Trial testimony on 3/1/13, 1/28/11; Deposition testimony on 3/22/10, 2/19/10, 10/9/09, 8/21/09, 6/9/09, Shumaker, Loop & Kendrick, Charlotte NC.
- Deposition testimony on 10/11/12, Heath & Carcioppolo, Ft. Lauderdale FL.
- Trial testimony on 8/24/12; Deposition testimony on 4/7/11, 3/7/09, Huff, Powell & Bailey, Atlanta GA.
- Trial testimony on 7/23/12, Tharrington & Smith, Raleigh NC
- Trial testimony on 5/21/12; Deposition testimony on 12/22/11, Wilson Helms & Cartledge, Winston-Salem NC
- Deposition testimony on 4/30/12, Mundy Rogers & Assoc., Roanoke VA
- Deposition testimony on 3/20/12, 1/27/11, 1/3/09, 7/28/09, Haliczer, Pettis & Schwamm, Ft. Lauderdale FL.
- Deposition testimony on 3/15/12, 9/3/10, Wilson, Elser, Moskowitz, Edelman & Dicker, Washington DC.

- Trial testimony on 3/9/12, 4/4/11, 5/13/10; Deposition testimony on 5/6/09, Walker, Allen, Grice, Ammons & Foy, Goldsboro NC.

- Deposition testimony on 3/2/12, Hamilton, Altman, Canale, & Dillon, Fairfax VA

- Trial testimony on 1/25/12, Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, Raleigh NC.

- Trial testimony on 1/20/12, Adams Coogler, West Palm Beach FL.

- Deposition testimony on 1/17/12, Law Office of Michael Goodman, Englewood CO

- Deposition testimony on 11/3/11, Cecily E. Steele, Cary NC.

- Deposition testimony on 9/1/11, Shuttleworth & Ingersoll, Cedar Rapids IA.

- Deposition testimony on 7/8/11, 6/3/11, 1/3/11, Baker & Whitt, Memphis TN.

- Deposition testimony on 6/1/11, 5/10/1, Feldman Shepherd, Philadelphia PA.

- Deposition testimony on 5/16/11, Owen, Gleaton, Egan, Jones & Sweeney, Atlanta GA.

- Deposition testimony on 5/13/11, 12/18/09, 10/15/09, 7/10/09, 5/26/09, 4/22/08, 1/24/08; Trial testimony on 1/26/11, Cranfill, Sumner & Hartzog, Raleigh NC.

- Deposition testimony on 1/4/10, Parker Poe, Charlotte NC.

- Deposition testimony on 12/2/10, 10/25/10, Yates, McLamb & Weyher, Raleigh NC.

- Deposition testimony on 11/19/10, Harris, Ward & Blackerby, New Bern NC.

- Trial testimony on 9/24/10, Dameron Burgin, Parker, Lorenz & Jackson, Marion NC.

- Deposition testimony on 1/4/10, 6/25/09, Parker Poe, Adams & Bernstein, Charlotte NC.

- Deposition testimony on 12/4/09, Forrester & Brim, Gainesville GA.

- Trial testimony on 10/20/09; Deposition testimony on 5/29/09, Goodell, DeVries, Leech & Dann, Baltimore MD

- Deposition testimony on 9/29/09, 6/9/09, Rodney Dickanson, Sloan, Akin & Robb, Albuquerque NM.
• Deposition testimony on 9/4/09, Leech & Dann, Baltimore MD.

• Deposition testimony on 9/1/09, Daniel Weinstock, Feldman Shepherd, Philadelphia PA.

• Deposition testimony on 9/1/09, Paralegal to Rishard Ramsey, Wicker, Smith, O’Hara, McCoy & Ford, Jacksonville FL.

• Deposition testimony on 8/28/09, Adams & Bernstein, Charlotte NC.

• Deposition testimony on 8/28/09, Nancy E. Carr Claims and Risk Management Services, Miami FL.

• Deposition testimony on 7/23/09, The Keenan Law Firm, Atlanta GA.

• Deposition testimony on 7/20/09, 5/27/09, 1/22/08, 12/21/07, Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, Raleigh NC.

• Deposition testimony on 7/12/09, Dickie, McCamey & Chilcote, Pittsburg PA.

• Deposition testimony on 6/31/09, Matthew W. Sowell, Jacksonville FL.

• Deposition testimony on 3/12/09, 6/20/08, 1/29/08; Trial testimony on 11/18/08, Wilson & Coffey, Winston-Salem NC.

• Deposition testimony on 3/3/09, 4/17/08, Upton & Hatfield, Concord NH.

• Deposition testimony on 2/2/09, 1/22/08, 12/11/07, Hood Law Firm, Charleston SC.

VI. Statement of Compensation

I will be compensated at the rate of $500 per hour for work performed in this case. I charge $5,000 per day for time spent testifying either in deposition or at trial, and it is also my understanding that if travel is required, that all of these expenses will also be paid in conjunction with my testifying.
February 14, 2014

John Thorp, Jr., M.D., M.H.S.
EXHIBIT A:

Curriculum Vitae of

John Thorp, Jr., M.D., M.H.S.
CURRICULUM VITAE
JOHN M. THORP, JR., M.D.

Personal Information

Name: John M. Thorp, Jr., M.D.
Department of Obstetrics and Gynecology
3027 Old Clinic Building
CB # 7570
Chapel Hill, NC 27599-7570

Telephone: (919) 843 7852
Fax: (919) 966-6001
E-mail: thorp@med.unc.edu

Education

Master's
Duke University School of Medicine
Master of Health Sciences in Clinical Leadership 2009

Fellowship
University of North Carolina School of Medicine
Chapel Hill, North Carolina
Fellowship in Maternal-Fetal Medicine
Fellowship Director: J.W. Seeds

Residency
University of North Carolina School of Medicine
Chapel Hill, North Carolina
Residency in Obstetrics & Gynecology
Program Director: W.C. Fowler

Medical School
East Carolina University Medical School, M.D.
Greenville, North Carolina

College
University of North Carolina at Chapel Hill
B.A. Zoology

Certification:

Licensure
Medical Council of Malawi 2012

Board Certification
Obstetrics and Gynecology 1991 – annually to present
Sub-Specialty: Maternal-Fetal Medicine

**Professional Experience**

**Vice Chair**
- Research

**Division Director**
- Women's Primary Healthcare

**Program Director**
- Women's Reproductive Health Research Scholars Program

**Research Core Co-Director**
- Women's Reproductive Health Research Scholars Program

**Interim Director**
- Center for Women's Health Research
- Cecil G. Sheps Center
  - For Health Services Research
  - Department of Epidemiology
  - School of Public Health
  - Department of Obstetrics & Gynecology
  - School of Medicine
  - University North Carolina-Chapel Hill

**Professor**
- Department of Maternal and Child Health
- School of Public Health
- University of North Carolina, Chapel Hill, NC

**Adjunct Professor**
- Department of Epidemiology
- School of Public Health
- University of North Carolina, Chapel Hill, NC

**Director**
- Biomedical Core
- Carolina Population Center
- University of North Carolina, Chapel Hill, NC

**Deputy Director**
- Center for Women's Health Research
- Cecil G. Sheps Center
  - For Health Services Research
  - Department of Epidemiology
  - School of Public Health
  - Department of Obstetrics & Gynecology
  - School of Medicine
  - University North Carolina-Chapel Hill

**Adjunct Professor**
- Department of Epidemiology
- University of North Carolina, Chapel Hill, NC

**Professor**
- School of Public Health and Tropical Medicine
- Tulane University

1992 – annually to present

February 2013

July 2006 – present

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July 2006 – present

July 2006 – present

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July 2005 – present

July 2004 – present

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July 2003 – present
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<td>Division of Maternal-Fetal Medicine</td>
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<td>Division of Maternal-Fetal Medicine</td>
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University of North Carolina, Chapel Hill, NC

Clinical Assistant Professor
Division of Maternal-Fetal Medicine
Department of Obstetrics and Gynecology
School of Medicine
University of North Carolina, Chapel Hill, NC

Honors

Substance Abuse and Mental Health Services Administration (SAMHSA) Science and Service Awards 2013

Golden Tarheel Award for Medical Student Education 2012

University of Rochester School of Medicine Teaching Fellow 2010

Golden Tar Heel Medical Student Teaching Award 2005, 2006

Robert C. Cefalo Excellence in Teaching Professors Award 2004 – 2005

Hugh McAllister Distinguished Professorship in Obstetrics and Gynecology 2002

Professor Teaching Award Department of Obstetrics & Gynecology School of Medicine University North Carolina-Chapel Hill 1993, 2000

Perinatal Health Model of Excellence North Carolina Department of Health and Human Services in Conjunction with the March of Dimes 1999

North Carolina Division of Mental Health Developmental Disabilities and Substance Abuse Services Recognition Award for Outstanding Service to Women and Children 1999

APGO/CREOG Departmental Teaching Award Department of Obstetrics & Gynecology School of Medicine University North Carolina-Chapel Hill 1992, 1995

Junior Faculty Teaching Award Department of Obstetrics & Gynecology School of Medicine 1990, 1992, 1995
University North Carolina-Chapel Hill

Family Medicine Teaching Award 1989
Department of Family Practice
School of Medicine
University North Carolina-Chapel Hill

One of the top 100 reviewers for the academic year

**Memberships**

Fellow, American Gynecological and Obstetrical Society 2004 – present

Vice President, Southern OBG Seminar 2003 – present

Southern Obstetrics & Gynecologic Seminar 1994 – present

South Atlantic Association of Obstetrics and Gynecology 1994 – present

Society for Gynecologic Investigation 1993 – present

Association of Professors of Gynecology and Obstetrics 1993 – present

Society for Maternal-Fetal Medicine 1984 – present

American College of Obstetricians and Gynecologists 1983 – present

**Administrative Accomplishments**

Four of six clinicians in Women's Primary Care Division were cited for excellence in graduate and postgraduate medical education 2005

Four of seven clinicians in Women's Primary Care Division were cited for excellence in resident Medical education

**Bibliography**

**Book Chapters**


Journal Refereeing

Reviewer The Netherlands Organisation for Health Research and Development (ZonMw)
Reviewer African Journal of Reproductive Health
Reviewer Journal of Developmental Origins of Health and Disease
Reviewer The Journal of Obstetrics and Gynaecology Research
Reviewer Obstetrics and Gynecology International
Reviewer Human Reproduction
Reviewer British Journal of Obstetrics and Gynaecology
Reviewer American Family Physician
Reviewer Mayo Clinic Proceedings
Reviewer Journal of the American Women’s Association
Reviewer International Journal of Psychophysiology
Reviewer Journal of the American Medical Association
Reviewer New England Journal of Medicine
Reviewer Clinical Anesthesia
Reviewer Preventive Medicine
Reviewer Journal of Maternal-Fetal Medicine
Reviewer Primary Care Field Reviewer’s Guide to Substance Abuse Service for Primary Care Clinicians
Reviewer Paediatric and Perinatal Epidemiology
Reviewer American Journal of Perinatology
Reviewer Obstetrics and Gynecology
Reviewer American Journal of Obstetrics and Gynecology
Reviewer Journal of Pediatrics
Reviewer Journal of Perinatal Medicine
Reviewer Journal of Perinatology
Reviewer Reproductive Toxicology
Abstracts and presentations:


23. Gavin NL, **Thorp JM**. Medical care costs associated with postmenopausal hormone replacement therapy. Accepted for poster presentation at the World Congress on Osteoporosis 2000. Chicago, IL, June 15-18, 2000.


32. Savitz DA, Terry J, Dole N, Thorp JM, Siega-Riz AM, Herring A. Comparison of pregnancy dating by last menstrual period, ultrasound, or their combination. Poster presentation at the Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research, June, 2001, Toronto ONT CAN.


75. Rouse, D for the NICHD MFMU Network. A Randomized controlled trial of magnesium sulfate for the prevention of cerebral palsy. Presented at the 28th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.


78. Mertz, H for the NICHD MFMU Network. Placental eNOS in multiple and single dose betamethasone exposed pregnancies. Presented at the 28th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.


80. Rouse, D for the NICHD MFMU Network. When should labor induction be discontinued in the latent phase? Presented at the 28th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.


82. Contag, S for the NICHD MFMU Network. Operative vaginal delivery versus cesarean delivery in the second stage of labor. Presented at the 26th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.

83. Rogers, B for the NICHD MFMU Network. Placental pathology associated with the factor V leiden mutation. Presented at the 28th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.


86. Sciscione, A for the NICHD MFMU Network. Perinatal outcomes in women with twin gestations who conceived spontaneously versus by assisted reproductive techniques. Presented at the 28th Annual Meeting of the Society for Maternal-Fetal Medicine, Dallas, TX, February 2008.


91. Rouse D, for the Eunice Kennedy Shriver National Institute of Child Health and Human Development MFMU Network, Bethesda, MD. Magnesium sulfate (MgSO4) dose and timing, and umbilical cord Mg++ concentration: Relationship to cerebral palsy (CP). Presented at the 29th Annual Meeting of the Society for Maternal-Fetal Medicine, San Diego, CA, January 2009.


95. Silver R, for the Eunice Kennedy Shriver National Institute of Child Health and Human Development MFMU Network, Bethesda, MD. Prothrombin gene G20210a mutation and


104. Simhan HN, Caritis SN, for the Eunice Kennedy Shriver National Institute of Child Health and Human Development MFMU Network, Bethesda, MD. 17 alpha hydroxy-
progesterone caproate (17OHCPC) and corticotropin releasing hormone (CRH) among women with twins. Presented at the 29th Annual Meeting of the Society for Maternal-Fetal Medicine, San Diego, CA, January 2009.


presentation at the 31st Annual Meeting Society for Maternal-Fetal Medicine, San Francisco, CA, Feb 11, 2011.


131. Carreno C. et al (Thorp JM) for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. Excessive early gestational weight gain and risks of gestational diabetes and large for gestational

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164. Weigand S. et al. (Thorp JM) for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. Buprenorphone/Naloxone (B/N) and Methadone (M) Maintenance During Pregnancy: A chart Review and Comparison of Maternal and Neonatal Outcomes. Poster accepted

Podcasts:

International Journal of Obstetrics and Gynecology audio podcast entitled "Termination of pregnancy and the risk of subsequent preterm birth – what is the evidence?"

Taskforce Publications:


Publications

Peer Reviewed Articles


43. **Thorp, JM** Specialist's Perspective - The Obstetrician/Gynecologist (Special Focus: The Primary Care Setting--Recognition and Care of Patients With Alcohol Problems). *Alcohol Health and Research World* 1994; 8(2):117-20.

44. **Kurtzman JT, Thorp JM, Spielman FJ, Perry S, Mueller RA, Cefalo RC.** Estrogen mediates the pregnancy-enhanced cardiotoxicity of cocaine in the isolated perfused rat heart. *Obstet Gynecol* 1994;83(1):89-91. PMID: 8272315


78. Coulson CC, Thorp JM, Mayer DC, Cefalo RC. Central hemodynamic effects of oxytocin and interactions with magnesium and pregnancy in the isolated, perfused rat heart. *Obstet Gynecol* 1997;177:91-3. PMID: 9240588


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Health and Human Development Maternal-Fetal Medicine Units Network. Omega-3 fatty acid supplementation to prevent recurrent preterm birth: A randomized controlled trial. *Obstet Gynecol* 2010 February;155(2) part 1:234-42. PMID: 20093894


cesarean delivery at term and maternal perioperative outcomes. Obstet Gynecol 2011 February;117(2):280-86. PMID: 21252740


255. Meltzer-Brody S, **Thorp J**. The contribution of psychiatric illness on perinatal outcomes. *BJOG* 2011;118:1283-4. PMID: 21790958


279. Dolbier CL, Rush TE, Sahadeo LS, Shaffer ML, Thorp J. Relationships of race and socioeconomic status to postpartum depressive symptoms in rural African American and...


315. Namazy J, Cabana M, Scheuerle A, Thorp JM Jr., Chen H, Carrigan G, Wang Y, Andrews E, Scripps Clinic, La Jolla, CA, Department of Pediatrics, University of California, San Francisco, CA, Tesserac Genetics, Dallas, TX, School of Medicine, University of North Carolina, Chapel Hill, NC, Genentech, Inc., South San Francisco,
Xolair Pregnancy Registry (EXPECT): the safety of omalizumab use during pregnancy

Jennifer Namazy, MD
Michael D. Cabana, MD
Angela Scheuerle, MD
John M. Thorp, Jr., MD
Hubert Chen, MD
Gillis Carrigan, PhD
Yan Wang, PhD
Elizabeth B. Andrews, PhD
Tesserae Genetics, Dallas, Texas, USA
School of Medicine, University of North Carolina, Chapel Hill, North Carolina, USA
Genentech, Inc., South San Francisco, California, USA
RTI Health Solutions, Research Triangle Park, North Carolina, USA
Submitted July 2013

Non-Peer Reviewed Articles


17. **Thorp, JM.** Should I Incorporate Fetal Fibronectin into my Practice; and if so, How? *OBG Management.* Accepted, Sept, 1996.


Teaching Activities

Faculty Committees 1. Tenured Medicine Council 2. Faculty Executive Committee(alternate) 2007

Liaison Area Health Education Center Liaison School of Medicine University North Carolina-Chapel Hill 2000-2003
Member: Doctoral Dissertation Committees
Department of Epidemiology
School of Public Health
University North Carolina-Chapel Hill

Oral Examiner: American Board Obstetrics and Gynecology MFM Subspecialty

Oral Examiner: American Board Obstetrics and Gynecology

Fellowship Director: Division of Maternal-Fetal Medicine
Department of Obstetrics & Gynecology
School of Medicine
University North Carolina-Chapel Hill

Grants

**ACTIVE**

<table>
<thead>
<tr>
<th>No Number (Thorp)</th>
<th>01/01/1994 – present</th>
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<tr>
<td>NC DHHS</td>
<td>$5,000,000</td>
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<tr>
<td>Model Program for Perinatal Substance Abuse</td>
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HORIZONS. This is a demonstration project of a novel paradigm to treat perinatal substance use problems by combining perinatal and mental health care. It combines an array of treatment resources including a residential program in which families can receive substance abuse treatment.

<table>
<thead>
<tr>
<th>HHSN275201100005C (Entwisle)</th>
<th>03/1/2011 – 02/28/2013</th>
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<tr>
<td>NIH/NICHD</td>
<td>$3,610,855</td>
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<tr>
<td>The National Children's Study – Duplin County Vanguard Center</td>
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The goal of the National Children's Study is to identify a sample of 100,000 children, as early as possible in pregnancy, and follow them for 21 years to address the causes of a variety of health problems including obesity, injuries, asthma, and developmental delays. The University of North Carolina at Chapel Hill, in collaboration with Duke University and Battelle Institute, is conducting a study in Duplin County.

<table>
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<tr>
<th>U01HD044219-06 (Thorp)</th>
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<tr>
<td>NIH/NICHD</td>
<td>$399,385</td>
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<tr>
<td>Community Child Health Network (CCHN) Phase II</td>
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This is a collaboration among the Eastern NC Baby Love Plus Consortium, East Carolina University, Cecil G. Sheps Center for Health Services Research, and the Division of Women's
Primary Health at UNC to evaluate the effect of stress (allostatic load) on pregnant women and their partners in regards to pregnancy outcome and maternal and infant health. This is part of an ongoing collaboration aimed at understanding and eliminating Health disparities in rural North Carolina.

HHSN267200700049C (Entwisle) 10/01/2007 – 09/30/2012 No Salary Support – Supported on Main Grant
NIH/NICHD $3,019,699
National Children’s Study ** North Carolina Study Centers

This study will measure the effects of environmental, social, biological and behavioral factors on child health. The goal is to understand causes for a range of health problems, including asthma, developmental delays, autism, and obesity. The study will collect information from families about their health, their activities, and their neighborhoods. Various biological samples, along with air and water at home and in schools will also be collected.

HHSN275200800029C (Entwisle) 09/26/2008 – 09/25/2013 No Salary Support – Supported on Main Grant
NIH/NICHD $417,669
National Children’s Study Cumberland County

Cumberland County NC (population 299,060) is part of Wave 2 of the study.

3U01 HD044219-07S1 (Thorp) 09/01/2010 – 08/31/2012 No Salary Support – Supported on Main Grant
NIH/NICHD $125,000
Community Child Health Network, Eastern North Carolina, Fatherhood Supplement

This supplement is to focus on recruitment of fathers to participate in the Community Child Health Network study in Eastern North Carolina.

RO1 HD067683-01 (Steiner) 04/15/2011 – 3/31/2016 0.25 calendar
NIH/NICHD $375,915
Biomarkers of Infertility

The goal of this project is to determine the ability of markers of ovarian aging to predict infertility in the general population.

2U10HD040560-12 (Thorp) 04/18/2001 – 03/31/2016 1.20 calendar
NIH/NICHD $260,000
Cooperative Multicenter Maternal Fetal Medicine Units Networks

The Maternal-Fetal Medicine Units Network conducts clinical studies to improve maternal, fetal and neonatal health emphasizing randomized-controlled trials.

Grant Number OPP1090837 05/06/13 – 05/31/17
Bill & Melinda Gates Foundation $7,994,469.00
Global Development Malawi: Maternal Health and Safe Motherhood Initiative

Past Support

Influence of iron, zinc, and folate on preterm delivery 1999-2001
Funding Agency: NICHD/NIH
Co-Investigator
$570,000

Funding Agency: RW Johnson
Medical Director
$800,000

Evidence based management of Preterm Labor 1998-1999
Funding Agency: AHRQ
Scientific Director
$200,000

Perinatal iron metabolism 1996-1999
Funding Agency: CDC
Co-Principal Investigator
$386,000

Epidemiology of cocaine use 1996-1999
Funding Agency: NICHD
Co-Principal Investigator
$78,000

Perinatal HIV Prevention 1996-1997
Funding Agency: CDC
Co-Principal Investigator
$120,000

Perinatal smoking cessation 1993-1995
Funding Agency: Kate B. Reynolds Charitable Trust
Medical Director
$109,000

Smoking cessation 1995-1997
Funding Agency: R.W. Johnson
$205,000

Psychosocial Risks and Preterm Birth in 1999-2002
African-American Women.
Principal Investigator: David Savitz PhD
Funding Agency: ASPH S0807-18/20
$256,841

Drinking Water Disinfection By-Products and Spontaneous Abortion
Funding Agency: American Water Works Association 3,000,000
Direct: $1,666,000 Indirect: $1,332,000

Epidemiology of Exertion, Stress and Preterm Delivery.
Funding Agency: NICHD/NIH R01-HD3758 $3,735,28

Epidemiologic Study of Vaginal Bleeding during Pregnancy and Preterm Birth.
Funding Agency: March of Dimes $179,584

Gates Global Network to Improve Maternal Health.
Funding Agency: NICHD $2,800,000

Placental Vascular Compromise and Preterm Delivery:
Funding Agency: NICHD/NIH $2,350,497

Epidemiology of Leptin Production and Fetal Growth.
Funding Agency: NIH Funding: 5,500,000

Pregnancy-Related Weight Gain: A Link to Obesity.
Funding Agency: NIH/NIDDK $1,749,033

Professional Service

Specialty and Sub-Specialty Certification

Sub-Specialty certification, Gynecology 1992-present
American Board of Obstetrics and Gynecology
Diplomate American Board of Obstetrics and Gynecology 1991-present
Maternal-Fetal Medicine

Committee Assignment

University of North Carolina at Chapel Hill 2003 - 2005
Appointment to Promotion with Tenure Committee
Chapel Hill, NC

University of North Carolina at Chapel Hill
Appointments, Promotions, and Tenure Committee 2009-present

Proposal Reviewer

Member Study Section – Maternal & Child Health NICHD, Bethesda, MD 2002 - present

Member Steering Committee, MFMU Network
CHD, Bethesda, MD 2001 - present

Member Expert Review Panel – Evidence report on
post-term pregnancy
Duke University, Durham, NC 2001 - 2002

Proposal Reviewer Family Health International
RTP, NC 2000 - present

Member Special emphasis group on regional anesthesia
NICHD, Bethesda, MD 1999

Rev: October 2013