Contingent Care: Obstetricians' Lived Experience and Interpretations of Decision-Making in Childbirth

Author: Lauren Ashley Diamond-Brown

Contingent Care: Obstetricians' Lived Experience and Interpretations of Decision-Making in Childbirth

Lauren Ashley Diamond-Brown

A dissertation

submitted to the Faculty of

the department of Sociology

in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

Boston College
Morrissey College of Arts and Sciences
Graduate School

June 2017

Contingent Care: Obstetricians' Lived Experience and Interpretations of Decision-Making in Childbirth

Lauren Diamond-Brown

Advisor: Sharlene Nagy Hesse-Biber, Ph.D.

Do you know what social forces shape the diagnoses and treatment recommendations a doctor offers you in a medical visit? Sociologists have problematized this question since the dawn of medical sociology, and yet the complexity of health care demands that we keep vigilant with constant investigation of new answers to the problem. This dissertation seeks to understand obstetricians' lived experience of decision-making in childbirth and investigate how they interpret and respond to social forces that affect this process. Understanding how obstetricians make decisions in childbirth is important because maternity care in the United States is in crisis. Our system is failing women on multiple accounts: between 1990 and 2013, maternal mortality more than doubled in the United States, and is higher than most other high-income countries. In global comparison the U.S. ranks 39th in the world for maternal health (WHO 2014). Furthermore, women continue to suffer from abusive practices by maternity care providers who dismiss their concerns and sometimes outright refuse to honor their self-determination in childbirth (Exposing the Silence Project). Today multiple stakeholders acknowledge a need for maternity care reform; this creates new challenges for health care policy and opportunities for social science research. Obstetrician-gynecologists provide the majority of maternity care to American women, and this dissertation examines their lived experience of decision-making in birth and analyzes how a range of social forces affect this process. To investigate this phenomenon I performed 50 in-depth interviews with

obstetricians from Massachusetts, Louisiana and Vermont about how they make patient care decisions in birth. I employ multiple methods of qualitative analysis to their interviews. Through the lens of the obstetrician I show how decision-making in birth is contingent upon social forces from multiple levels of the clinical context. I present this in a three-article dissertation format that draws on a wide range of interdisciplinary literature including medical sociology, sociology and anthropology of reproduction, health services, public health and health communication. Each article offers individual contributions to debates about medical practice, health care delivery, and maternity care. Taken together they offer a rich understanding of the complexity of medical decision-making in the field of obstetrics that ultimately suggests that we need reform efforts that include ideological and organizational changes in order to better serve the needs of childbearing women and medical professionals.

I present the research in three articles:

The Doctor-Patient Relationship as a Toolkit for Uncertain Clinical Decisions

This paper draws on interdisciplinary literature on uncertainty and physician decision-making to examine how some obstetricians use the doctor-patient relationship as a toolkit for uncertain medical decisions in birth. Medical uncertainty is a well-recognized problem in healthcare in general and obstetrics has high incidences of medical uncertainty, yet how doctors make decisions in the face of uncertainty remains to be understood. Additionally, I ask what happens to this process when the doctor-patient relationship is fragmented. I answer these questions by examining the narratives of

obstetrician-gynecologists about how they make decisions when faced with uncertainty in childbirth. Between 2013 and 2014, I performed 21 semi-structured interviews with obstetricians from the greater Boston area. Obstetricians were selected to maximize variation in relevant physician, hospital, and practice characteristics. I began with grounded theory and moved to analytical coding of emerging themes in relation to relevant literature. My analysis renders it evident that some physicians use the doctor-patient relationship as a toolkit for dealing with uncertainty. I analyze how this process varies for obstetricians in different models of care by comparing doctors' experiences in models with a continuous versus fragmented doctor-patient relationship. My key findings are that obstetricians in both models appealed to the ideal of patient-centered decision-making to cope with uncertain decisions, but in practice physicians in fragmented care faced a number of challenges to using the doctor-patient relationship as a toolkit for decision-making. These challenges led to additional uncertainties and in some cases to poor outcomes for doctors and/or patients; they also raise concerns about the reproduction of inequality. Thus organization of care delivery mitigates the efficacy of doctors' use of the doctor-patient relationship toolkit for uncertain decisions. These findings have implications for theorizing about decision-making under conditions of medical uncertainty, for understanding how the doctor-patient relationship and model of care affect physician decision-making, and for forming policy on the optimal structure of medical work.

Patient Empowerment and Standardization as Countervailing Powers to the Authority of Obstetrician's Clinical Experience

This study examines patient empowerment and standardization as countervailing powers to physician authority in obstetricians' clinical decisions in childbirth. I conducted in-depth interviews with 50 obstetricians in three locations in the United States about decision-making in childbirth and found that obstetricians' explanations of how they make decisions referenced a set of competing and at times contradictory discourses about what it means to practice good medicine. I label these discourses: patient autonomy, standardization, and clinical experience, and theorize them as countervailing powers in healthcare. Countervailing powers have largely been studied at the macro level; this study contributes needed research on how these power relations are experienced by doctors in everyday clinical practice. Using thematic qualitative data analysis I investigate how and when obstetrician draw on these discourses in their decision-making and how they negotiate the tensions between them. Building on previous literature on the competing discourses that shape patient care I pay special analytical attention to the content and control (knowledge/power) of medical decision-making. Unlike previous scholarship that theorizes content and control separately, I suggest that in practice, knowledge/power are best understood as interdependent. Additionally, I find that obstetricians resist challenges to their professional power by capitalizing on tensions between standardization and patient empowerment. This study sheds light on how physicians are responding to changes in the macrosocial context of health care in their local practice environment. I show that countervailing power relations do not necessarily link to practice in ways that mirror the power relations at the macro level. My findings have implications for

theorizing the social status of medical professionals and for understanding the way power/knowledge functions in the contemporary doctor-patient relationship.

Obstetric Culture and Births of Convenience

In this study I examine how obstetricians understand convenience as a motivation for decision-making in childbirth. Anecdotal evidence suggests obstetricians sometimes make clinical care decisions based on concern for their own time and schedule. There is a paucity of scholarly work on convenience motivated decisions, and the ethical and public health implications for a doctor performing unnecessary medical interventions are serious. While we do not have a great deal of scholarly research on convenience as a motivation in obstetric decision-making, there are many ways research has focused on what seems like an issue of convenience, that is unnecessary cesarean sections. There is great variation in doctors' C-section rates, and a wide range of statistical analyses has failed to consistently show organizational factors, physician demographics, patient-level factors, or characteristics of the birth process itself as determinants of this variation. Instead multiple studies point to the "physician factor" as a potential explanation- but this factor remains elusive. There is a clear need for qualitative research on obstetric decision-making that can meaningfully explain obstetricians decision-making process. Therefore I ask: How do obstetricians talk about convenience? What are the clinical contexts in which it emerges as a theme in obstetricians' decisions in birth? Is there variation in how they understand convenience as a motivation in decision-making, and if so how do these differences affect their practice? I answer these questions drawing on 24 interviews with obstetricians from the United States from 2013-2015, and employing grounded theory

and thematic data analysis. My key findings are that doctors' stories match anecdotal evidence: that some obstetricians do make clinical decisions in childbirth based partially on their own convenience. Obstetricians discuss convenience in two main clinical contexts: induction of labor and interventions to speed up the course of labor. They display different understandings of these contexts and the implications for interventions of convenience. I organize these differences into two cultural categories: a culture of convenience and an anti-convenience culture, and show how doctors' ideas about interventions of convenience connect to doctors broader ideas about the nature of birth. My discussion addresses the implications of these differences for policy and advocacy efforts to improve maternity care.

Acknowledgements

It takes a village. Where to begin to honor all the people who supported me through the process of this research? My parents: Linda Johnson, Mark Brown, Linda Chicariello, and Jeff Tunnell, made a conscious effort to raise me to be curious, confident in the face of challenge, and with the courage to stand up after being knocked down. Anyone who has embarked on a doctorate degree knows that you are knocked down a lot. Thank you for giving me the strength to get up again and again.

My sociological imagination bloomed when I was an undergrad at Chapman University, and I was deeply inspired by the teachings of Pat See and Bernard McGrane whose ability to facilitate transformative learning made me want to become a teacher/researcher sociologist.

My feminist perspective and interest in reproduction and birth were incubated among a deep friendship with a four woman tribe: Andrea Dorwart Crane, Ashley Dockins, and Adara Tucker- you are my soul sisters, you saw me through every turn of this project and my personal development along the way.

Once I actually landed at Boston College, Sharlene Hesse-Biber was my first contact, and she is now the chair of my dissertation 10 years later. She believed in me from the beginning and challenged me in all the right ways. She is a prolific feminist scholar, a generous teacher, and a warm spirit, and I am grateful for her mentorship. Stephen Pfohl inspired me to think creatively and critically. Sara Moorman helped me through what felt like 100 drafts of my first article/chapter, a process that laid the groundwork for the rest of the dissertation. She is a master at talking through ideas for

clarity and returns drafts quicker and with more comments than anyone else. The greater Sociology Department served as an important intellectual home and source of support. Dissertation writing seminars and casual writing groups were especially fruitful for breaking down ideas, learning how to do research and write, and for the joy of venting to people who can understand.

Outside of BC, the Repronetwork scholars served as an important intellectual community for me. Emails kept me up to date on the field and personally connected to people who shared my passions, and I always felt refreshed and energized after spending time with them at annual meetings. I presented pieces of the dissertation at multiple ESS and ASA meetings, and my work was always moved forward through the thoughtful comments of fellow sociologists. Stefan Timmermans was especially generous with his time as a presider; he gave me extensive feedback on multiple drafts of my first article.

This research was funded by multiple grants and fellowships from the Sociology Department, the Graduate School of Arts and Science, and the Clough Center for Constitutional Democracy at Boston College. The research would not have happened without this generous financial support.

Thank you to my husband Jesse, for his patience, his faith, and for getting me outdoors to balance out graduate student life. Thank you for supporting me financially, emotionally, and intellectually on this long journey. Thank you for believing in me and for valuing the importance of childbirth. Thank you for being a truly egalitarian partner at home and with raising our child.

I found out I was pregnant with my son Dylan the week I did my last interview, and I spent my last writing year at home with him. The only way I managed to finish a

dissertation while at home with a precious demanding infant was with the help of family. My Mom spent months living with us throughout this year, caring not only for Dylan, but also Jesse and I in all of the most needed ways. Thank you for being an outstanding Mother and Nonnie. My in-laws, Hank Diamond and Lynne Cohen made me dinner and watched my son at least once a week. My best friend Adara Tucker lived with us for a few months to watch Dylan so I could write. Thank you to the Chicariello family for providing us with a wonderful home. Other family gave generously what they could and I am grateful for it all.

Thank you to the obstetricians who carved out time in their busy schedules to let me interview them. Most were parents themselves, all were incredibly busy people who had no idle time in their day; they gave generously to me and asked nothing in return, and most did so candidly and kindly.

Thank you to mothers. This dissertation is dedicated you, you are formidable and beautiful.

Table of Contents

Chapter One: Introduction

Conception of the Dissertation

In this dissertation I argue that obstetricians' patient care decisions in childbirth are contingent upon a number of social forces. Do you know what social forces shape the diagnoses and treatment recommendations a doctor offers you in a medical visit? Sociologists have problematized this question since the dawn of medical sociology, and yet the complexity of health care delivery demands that we keep vigilant with constant investigation of new answers to the problem (Clark & McKinlay 1991). This dissertation seeks to understand obstetricians' lived experience of decision-making in childbirth and investigate how they interpret and respond to social forces that affect this process.

Few moments in life are as meaningful as the birth of a child, and experts say American maternity care is in a "crisis" (Corry 2011). Obstetricians provide the majority of maternity care for women in the United States, and their practices in labor and delivery have profound implications for families. These practices have come under scrutiny as studies show that they routinely go against evidence-based recommendations and patient preferences, and lead to poor health and psychosocial outcomes. Between 1990 and 2013, maternal mortality more than doubled in the United States, and is higher than most other high-income countries. In global comparison the U.S. ranks 39th in the world for maternal health (WHO 2014). Furthermore, women continue to suffer from abusive practices by maternity care providers who dismiss their concerns and sometimes outright refuse to honor their right to self-determination in childbirth (Exposing the Silence Project). Public health experts, activists and scholars are fighting to improve care in

birth, and much of their critique is centered on obstetric practice- yet we know little about obstetricians' decision-making processes and *why* they make the decisions they do.

My thinking about obstetric decision-making unfolded through my interaction with two bodies of thought and scholarship: the medicalization of birth and its alternatives, and the sociology of medical decision-making. I first learned about the medicalization of childbirth while studying women's health activism in an undergraduate course. Childbirth is a classic case of medicalization, meaning the condition of pregnancy and the event of birth are defined in medical terms and turned into a medical problem to be handled by medical professionals (Conrad 2007). There is a large body of interdisciplinary work that critiques the over-medicalization of childbirth (Arms 1975; Block 2007; Davis-Floyd 1992, 1994, 1997; De Vries 2001; Fox & Worts 1999; Katz Rothman 1982; Gaskin 2003; Lane 1995; Simmonds et al. 2007). The common argument among this scholarship is that obstetricians define childbirth as inherently problematic and use medical interventions to manage and fix what is a healthy natural process. Critics argue that the over-medicalization of birth disempowers birthing women and fails to improve the health or psychosocial outcomes of the birth. These critical studies fit within a larger feminist framework that is concerned with the politics of women's bodies and the power granted to the medical profession to frame aspects of women's lives as deviant and place them under medical control.

When I began to think about birth within this theoretical framework, I met a woman who had all three of her children at home with a lay midwife. I was struck by the way this woman understood her body in birth as powerful and capable; her lived experience inspired me to read broadly about alternatives to the medical model of birth.

The alternative birth movement is composed of a broad range of thinkers going back to at least the 1970s including renegade doctors, traditional midwives, hippies who were questioning technocracy and authority, feminists challenging power dynamics, religious fundamentalists, and radical individualists (Kitzinger 1990; Reiger 2001). From this movement an alternative paradigm developed in opposition to the medical model, this is often referred to as the "midwifery model" as labeled by Katz Rothman or the "holistic" paradigm as labeled by Davis-Floyd (1994), but also "natural," or "normal" birth (Reiger & Morton 2012).

This model conceptualizes birth as a normal healthy event in the course of women's lives, which they are most often capable of doing with psychosocial and physical support rather than technomedical interventions (Davis-Floyd 2001; Reiger & Morton 2012). It frames birth as embodied, spiritual, social, and psychological. It prioritizes women's autonomy and relationships between the mother and caregiver throughout pregnancy and birth. This is in contrast to the medical model, which is criticized for disempowering women, and rendering them passive recipients, if not victims, of doctors' exclusive knowledge and medical interventions. This work emphasizes the importance of women's experiences of birth, and shows that women's perceptions of decision-making in particular affect the health outcomes of the birth (Benoit et al. 2007).

With these interests in mind, I wrote my master's thesis on women who choose alternatives to mainstream obstetric-attended hospital birth. As I researched women's choices and talked with them about their experiences, I found many women told stories of not being listened to by their doctors. Some women felt like they had no voice and

were bullied by the maternity care system. These stories are reflected in the work of other scholars who label this "obstetric violence" (Smith-Oka 2012, 2015) a concept that includes physical and emotional abuse, including subtle tactics of manipulation that lead women to feel like things did not go right, but they are not sure why. Scholarly research (Smith-Oka 2012, 2015), journalistic literature and film (Block 2007; Epstein 2008), and activist sources are flush with these stories (International Cesarean Awareness Network; Improving Birth; Exposing the Silence Project), and I wanted to figure out why some obstetricians practice this way.

At this time public concern over rising maternal morbidity and mortality rates and skyrocketing numbers of C-sections was increasing, with public health experts calling the present situation a "crisis" (Corry 2011) and "epidemic" (Morris 2013). Critics were pointing to obstetricians' overuse of interventions in birth to explain both (Corry 2011; Main & Menard 2013; Morris 2013). My feminist critique of the over-medicalization of women's bodies and a concern for women's power in birth now dovetailed with a growing public health crisis. In the alternative birth movement and feminist literature about birth it is assumed that obstetricians fundamentally operate from a highly medicalized and patriarchal point of view; it seemed obvious then that they would overuse interventions and not listen to women. Yet I was also beginning to study medical sociology, and I was reading about new eras of patient-centered care and evidence-based medicine and the decline of professional power. These theories did not match up with the absolute authority and technocracy of obstetricians described in critiques of the medical model of birth.

Also around this time the *Listening to Mothers Survey* was published (Declercq et al. 2002). This was the first national study of women's birth experiences in the U.S. This study did substantiate activists' concerns over women being pressured into unwanted medical interventions, but it also showed that some women had doctors who empowered them to participate in decision-making, and that there was significant variation in obstetricians' clinical practices in birth. I began to feel like the ideological underpinnings of my feminist sociological critique could not explain the variation in obstetric practice that existed in the empirical world. I decided that the best way to find out how and why obstetricians made the decisions they did, was to talk with them about it.

I started interviewing obstetricians in the Boston area in 2013 about how they make decisions in childbirth. At this point I was in the process of figuring out what my research questions and design would be. Thus the earliest interviews were largely exploratory. I asked open-ended questions about decision-making to see what would emerge as relevant in doctors' stories of practice in labor and delivery.

I recruited doctors through email. The first phase of recruitment was a random sample of 40 out of 237 obstetrician-gynecologists practicing within the city limits, drawn from the state's board of registration in medicine website. I emailed all 40 a request for a one-hour interview about decision-making in birth; this only yielded 7 interviews, so my next phase of recruitment was purposive sampling to maximize variation in the sample by type of hospital where they have delivery privileges (academic and community), type of practice they work in (private practice, managed care organization, hospital), and size of practice (small, medium, large group). It took me eight months to get my first 21 interviews. The interviews averaged one hour in length

and twenty were audio-recorded (one doctor declined to be taped), and transcribed verbatim.

As I listened to the obstetricians' stories different social forces emerged as influential to the decision-making process. In tandem I read everything I could find about medical decision-making in medical sociology. I thought if research on medicalization of childbirth could not explain variation in obstetric practice, perhaps research on medical decision-making more broadly could lead me in the right direction. Medical sociologists understand that clinical decision-making occurs within a social context and have studied different parts of this context using a range of theoretical and methodological approaches (Clark & McKinlay 1991).

For example, some theorize decision-making in terms of broad social historical changes in the political economy of health care that affect physicians' discretion over clinical decision-making (Hafferty & Light 1995; Ritzer & Walczak 1988; Timmermans & Oh 2010). Other research takes a sociology of knowledge approach and attends to how organizational features of health care delivery shape the particular knowledge medical professionals draw on in decision-making (Anspach 1993; Chiarello 2013; Jenkins 2015). There is ample research on doctor-patient interaction in the decision-making encounter that focuses on the roles each party takes in communication and decision-making (Heritage & Maynard 2006), including a body of work on emerging 'new' paradigms of patient-centered and shared decision-making (Bensing 2000; Charles, Gafni & Wheelan 1997, 1999; Collins, Drew, Watt & Entwistle 2005). The back and forth between this literature and my emerging data produced analytical categories and questions about social forces relevant to obstetricians experiences of clinical decision-making.

Initially I had hoped to study decision-making by observing births in a labor and delivery floor of a hospital. At the time I was conducting my first set of interviews in the greater Boston area I was also trying to build relationships with doctors to get access to do ethnographic research, but I did not find anyone willing to facilitate this kind of project. As I reviewed the medical sociology literature and my emerging preliminary data, I had to think about what questions could be answered through interviews. I decided to dive deeply into obstetricians' own understandings of their processes of decision-making and their experiences of the social context they work within. Conceptualizing decision-making as a lived social process highlights the way the social context structures doctors' work lives, as well as how individuals respond.

This study approaches decision-making through the lens of the obstetrician. It is through their lived experience of decision-making that elements of the social context come alive. Not all doctors experience the social context in the same way. Through listening to their narratives of working in labor and delivery, I analyze how doctors bring their own standpoint to their practice, how they interpret and interact with the structural environment, how these processes change over time in the context of their story, and the implications of these for patient care. I then ask comparative questions. Are there patterns to the ways doctors interpret and respond to social forces in the decision-making context?

The specific research questions in each article evolved through an iterative process of reflecting upon the themes emerging in the data and reviewing relevant literature. My methods of sample selection and data analysis evolved simultaneously, in relation to my questions at that stage of the research. The first article was written based on my first set of 21 interviews in the Boston area. Reflecting upon this article inspired

new questions that led to additional data collection and the categories of analysis in article two. Article 3 was born from the same reflexive process. In the next section I describe how my thinking and the research evolved.

Gestation of the Dissertation

Article one is based on the first 21 interviews I conducted in the grater Boston area. I began analysis with an analytical grounded theory approach (Charmaz 2006). Analysis was grounded in the sense that I maintained a close connection with the data through line-by-line coding and consistent memoing. In the memos I wrote summaries of what I saw going on in the data (i.e. how are the codes related, what do the codes mean in the context of the entire interview, what larger themes am I seeing), and noted key quotes, new questions, and reflexive comments. These processes allowed concepts, questions, and theories to emerge from the interviews rather than testing a pre-established theory (Hesse-Biber 2014). As ideas emerged I reviewed literature to frame my questions and theories within relevant debates.

One of the observations that immediately stuck out to me in the first 21 interviews was a substantial difference in the stories from doctors who worked in shift work models of care and those who had continuity of care with their patients. This was not something adequately explored in medical sociology. Shift work had mainly been written about in early work on the bureaucratization of medicine, which hypothesized that doctors would become akin to assembly-line workers and lose control over their clinical decisions. But there was also a contemporary body of work about how organizational structures shape medical decision-making (Anspach 1997; Chiarello 2013; Jenkins 2015). I saw how the

patterns of difference by model of care in my data could be a contribution to this discussion. I also immediately noticed the emphasis doctors placed on uncertainty in obstetrics. Whereas sociology and anthropology of reproduction had largely described a machine like flow of hospital birth where obstetric authority was grounded in their exclusive mastery of knowledge, I found doctors were speaking to a fundamental uncertainty they face in birth, to a lack of clarity in decisions. This is interesting because the uncertainty is an opening, a sort of chasm in the otherwise routine medicalized understandings of labor and delivery.

I was surprised to find that many physicians deferred to patient choice as a way to make decisions when facing uncertainty. This surprised me because my feminist critical background made me believe that obstetricians are not in the business of patient-centered care. There is ample interdisciplinary research defining what patient-centered and shared decision-making are, if and how doctors use these approaches, and examining the relationship between these approaches to outcomes of interest. Most of this work assumes a doctor has a set orientation to how patient-centered he or she is, whereas I was observing that a single doctor shifted his or her approach, depending upon the amount of uncertainty in the decision at hand. I also saw that the ideology of patient-centered care did not match the shift work structures some doctors were working within, and this caused all sorts of problems for them and their patients. This seemed important because perhaps shift work models were part of the problem explaining why women were experiencing conflict and disempowerment in their births.

When I researched medical sociology work on uncertainty I discovered an ongoing debate over its role in medical work that could benefit from the contributions of

my findings. When I submitted this article for publication, my reviewers pointed me to a wider interdisciplinary body of work on uncertainty that helped me clarify that while obstetricians turned to patient-centered care to ameliorate medical uncertainty, in shift work this actually created axiological, or moral uncertainty.

As I reflected more upon this first paper, I was curious about the outliers, the few doctors who did *not* acknowledge uncertainty at all. These were doctors who had a sort of absolute confidence in their ability to know what to do in all situations. I wondered if I would find more of these doctors elsewhere. I also was thinking about the way doctors talked about decisions where they *were* certain, where they knew what to do. In these cases there was significantly less emphasis on patient-centered care and I wanted to examine the other forces shaping these decisions. Multiple doctors recommended that I leave Boston to collect additional data because of geographical diversity in obstetric practice patterns. Additionally, I saw that one limitation of previous qualitative studies of medical decision-making was that they were ethnographic studies based on only one or two hospitals (Anspach 1997; Jenkins 2015), or interview studies where doctors were sampled from one hospital (often academic hospitals), or one state (Timmermans & Angell 2001; Morris 2013). I decided to collect five more interviews in rural areas of MA to get away from the academic medical hub of Boston, and to branch out to other states to collect the rest of my interviews. `

Since I was interested in practice variation, I sought to interview obstetricians who worked in different environments. There is significant variability among our nations' states for a number of measures related to maternity care. In reviewing the available data I found state wide measures on the following:

- cesarean delivery rates (birthbynumbers.com)
- maternal mortality rates (National Women's Law Center)
- percent of births attended by certified nurse midwives (Declercq 2011)
- percent of births that are homebirths (CDC 2012)
- average malpractice costs (Rayburn 2011)
- percent of births in the state covered by Medicaid (Markus et al. 2013).

I selected two states, Louisiana and Vermont, that when combined with MA would represent a wide range across these measures (See Appendix for exact figures). This strategy was not intended to provide specific factors for causal analysis as they would in a quantitative study (e.g. I am not analyzing the direct relationship between malpractice cost and physician decision-making), but rather to maximize variation across the sample to avoid analyzing narratives from a narrow cross-section of physicians.

In Louisiana and Vermont I used the same purposive sampling strategy to select obstetricians as I did in Massachusetts, to maximize variation by physician gender, age, type of hospital and practice. I spent three weeks in LA and interviewed 16 doctors across urban, suburban and rural locations in the north, central, and southern regions of the state. I spent another three weeks traveling across VT to interview 11 doctors. I had originally intended to perform more interviews in VT, but I felt that I had reached saturation after 11. See Table 1, page 53-54 for a description of the full sample of 50 obstetricians.

Indeed as I expanded my sample and captured a wider spectrum of doctors' experiences I began to think about different social forces at play. I continued to take a grounded theory approach to all new interview transcripts as I collected them, doing line by line coding to remain open to discovering new themes, writing memos, and reading literature as I made new discoveries. I wrote article two and three after finishing data collection. Whereas patient-centered care was a dominant approach for uncertain

decision-making in my first set of interviews, when I opened up the analysis to decision-making in general I found a wider group of influential social forces. I began thinking about how these related to one another, how they fit together in the interviews. There were three social forces that stood out as dominate themes: clinical experience, patient autonomy, and professional standards, so I chose to focus on those for my next paper.

For paper two I used my entire sample of 50 obstetricians and used template analysis to analyze how doctors thought about and used clinical experience, patient autonomy, and standards in decision-making. Template analysis is a combined inductive and deductive approach that allowed me to build on the insights gained from my first stage of analysis (Crabtree & Miller 1999). It consists of creating a codebook or a 'template' of codes representing themes from the data (in this case codes are developed based on my initial grounded theory analysis, memos, and subsequent literature review). I combed through all 50 transcripts, identified relevant segments of the narratives, and marked them with the appropriate code from the template. Although the template was created before hand, I revised and continued to develop the codes through ongoing analysis.

I searched for a while for the best way to theorize these. I wanted to emphasize that doctors had some level of agency based on their own interpretation of reality. This might seem obvious but much of the medical sociology I was reading argued that doctors clinical discretion was in decline (Light 1991; McKinlay & Marceau 2002; Ritzer & Walczak 1988). T. Morris's C-Section Epidemic (2013) was published at this time and her book centers upon an argument that obstetricians' hands are tied by malpractice insurance rules, hospital administration protocols, and standards of care set by

professional committees. In comparison, in my data I was seeing variation in how obstetricians practiced rather than a universal protocol-driven system of care. I saw variation even among doctors from the same hospital, and thus I wanted to highlight that doctors did have the power to interpret and react differently to forces structuring their environment.

I decided that a productive way to think about clinical experience, patient autonomy, and standards was as countervailing powers, and I write about these in article two. In terms of my desire to improve maternity care, it is a response to the findings in my data about how widely doctors varied with respect to patient empowerment in their decision-making approach. I was struck by how central this was to some doctors' stories and how others were so angry about it; there were some entire interviews characterized by doctors lambasting women who felt entitled to direct clinical care decisions in their births. I found it interesting how discourses of patient empowerment, standards and clinical experience played off each other in a single interview, and this aligned with an ongoing debate about physician discretion, and broader questions in medical sociology about how changes in the political economy and macro-level of health care affect micro everyday practice.

At this point I was seeing a bigger picture about how broad social political changes in health care, organizational features of care delivery, and individual obstetricians attitudes all greatly mattered to obstetric decision-making, and to the way knowledge and power fit together to produce a particular style of decision-making and practice. The way an individual doctor felt about the role of patient empowerment and standards shaped how these were negotiated with their clinical experience in decisions.

But I also realized that there was diversity within clinical experience itself. Obstetricians' own understandings of birth, their assumptions about the labor process, the nature of birth, and their experiences of training and practice all formed the 'clinical experience' they relied on. I felt like I could not explain decision-making without speaking to this variation of obstetric philosophy about birth. This insight lingered in my mind continuously throughout the project, as even my initial coding of the preliminary interviews included medicalized vs. demedicalized understandings of birth.

When I was thinking about ideas for my third article I was considering writing about this variation in obstetric culture, but I was also thinking about convenience, because it was an unexpected topic that emerged in the interviews. Convenience was addressed anecdotally in news coverage about maternity care and activists' accounts, but it was not present in scholarly work on decision-making. Yet it appeared as a theme in my data and I decided to dig into this a bit more and see what I could find. It turned out this was a perfect opportunity for me to write about something that would be a contribution to the reproductive justice movement: I wanted to give something to women who experienced convenience-driven decisions by their doctors and were trying to raise awareness about the problem (Exposing the Silence Project; ImprovingBirth). It was also an opportunity for me to analyze variation in obstetric culture I saw simmering in the data. I began coding all 50 interviews to develop themes for cultural variation and I quickly realized the dimensions of cultural variation were too expansive to cover in a single article. I decided to limit the focus to dimensions of cultural variation having to do with interventions of convenience. Because I narrowed the focus of the article to

convenience, I selected a sub-sample of 24 interviews (out of the 50 total) that included mention of convenience to analyze for this last paper.

Case Selection

In terms of the relevance of obstetrics to the study of medical decision-making more broadly, there are empirical and theoretical justifications for choosing obstetrics and decision-making in labor and delivery to study how different aspects of the social context affect physicians' decision-making process. Obstetrics has undergone a series of changes to its workforce that enable comparisons across organization of care and professional culture. There has been a decline in small private practice models and an increase in the share of doctors who work as employees in large group practices owned by hospitals and managed care organizations. This has led to an increase in the number of obstetricians engaged in bureaucratic shift work rather than the traditional private practice model of care delivery (ACOG 2003; Rayburn 2011).

A renaissance in North American midwifery has increased professional competition over maternity care and poses a direct challenge to obstetricians' biomedical model of birth (Davis-Floyd & Johnson 2006). Related to the rise of midwifery are the women's health and consumer/patients' rights movements, all of which have challenged the technical autonomy and cultural authority of obstetricians (Boston Women's Health Collective 2011; De Vries et al. 2001; Miller & Shriver 2012). This last point connects to my choice to focus on childbirth. Labor and delivery involve a high number of contested diagnoses and treatments and there is great variability in physician philosophy, style and skill (Goyert et al. 1989; Luthy 2003). This variability in practice is related to the fact that multiple decisions in childbirth are characterized by medical uncertainty.

Medical uncertainty is a well-recognized problem in health care, and a major topic in medical sociology (Atkinson 1984; Fox 1957, 1980; Gerrity et al. 1992; Light 1979; Timmermans & Angel 2001). Uncertainty is most simply defined as doubt about how to act. It is a subjective state rather than an objective truth, where the actor is aware of his or her lack of knowledge about some aspect of reality. There is debate about doctors' awareness of uncertainty (Atkinson 1984; Fox 1957,1980; Light 1979). However, empirical investigations of practicing physicians confirm the existence of uncertainty in physicians' subjective assessment of clinical work (Gerrity et al. 1992; Gabbay & le May 2004). Gerrity and colleagues (1992) identified obstetrics and gynecology as 5th out of 14 specialties for physicians' perceptions of the amount of uncertainty in their daily work (p.1038). Uncertainty magnifies the power of social forces to shape decision-making, thus labor and delivery offer a fruitful clinical focus for this study (Brown 1995).

Chapter Two: The Doctor-Patient Relationship as a Toolkit for Uncertain Clinical Decisions

Introduction

> One thing about OB [obstetrics] is it's so hard to know…and there is this expectation that you are never going to let anything bad happen. It's tricky right, you're not supposed to let anything bad happen, and that's hard, because your predictive powers are poor.

The obstetrician in the opening quote describes having 'poor predictive powers' in situations of medical uncertainty, where the consequences of potential action or inaction are not predicted by strong scientific or experiential evidence. Medical uncertainty is a well-recognized problem in health care, and a major topic in medical sociology (Atkinson, 1984; Fox 1957, 1980; Gerrity, Earp, DeVellis, & Light, 1992; Light, 1979; Timmermans & Angell, 2001). Yet much of the foundational work on uncertainty was based on doctors in training (Atkinson, 1984; Light, 1979; Fox, 1957). There is a lack of research about how practicing physicians understand and react to uncertainty. A notable exception is Gerrity and colleagues' (1992) study, which confirms the existence of physicians' subjective awareness of medical uncertainty and measures doctors' reactions to it. Gerrity and colleagues (1992) identified obstetrics and gynecology as 5th out of 14 specialties for physicians' perceptions of the amount of uncertainty in their daily work (p.1038). Additionally, a renaissance of North American midwifery and the women's health movement have challenged obstetricians' authoritative knowledge and created a climate with diverse opinions regarding best

practices (Simonds, Rothman, & Norman, 2008) and patient preferences (Declercq, Sakala, Corry, Applebaum, & Herrlich, 2013; Miller & Shriver, 2012). Even within obstetrics there is great variability in physician philosophy, style and skill (Luthy, Malmgren, Zingheim, & Leininger, 2003). Indeed my research reveals obstetricians' narratives of decision-making in birth are riddled with uncertainty.

This study draws on interdisciplinary literature on uncertainty and physician decision-making to examine a specific physician response to uncertainty: using the doctor-patient relationship as a toolkit. The doctor-patient relationship is featured in studies of clinical decision-making, but I move beyond descriptive studies of interaction to examine its role in physician decision-making under conditions of uncertainty. Additionally, I ask what happens to this process when the doctor-patient relationship is fragmented. By examining model of care delivery, I engage with work that studies how organizational frameworks shape the doctor-patient relationship and decision-making. I focus on how model of care shapes the doctor-patient relationship and thus the interactive knowledge doctors use for uncertain decisions.

To investigate this, I conducted semi-structured interviews with twenty-one obstetricians about decision-making in labor and delivery. Obstetric decision-making in childbirth is a compelling case for this study because of the high degree of medical uncertainty and variation in model of care. The traditional private practice on-call model for labor and delivery is increasingly being replaced with shift work models in large group practices (ACOG, 2013; Rayburn, 2011); presently both exist, which allows for comparison within one specialty at one specific clinical moment. This remains

understudied but it is important to know because of the move towards large group practices and shift work, which fragment the once continuous doctor-patient relationship.

My analysis renders it evident that some physicians use the doctor-patient relationship as a toolkit for dealing with medical uncertainty. I argue that doctors working in fragmented care face challenges to relying on the doctor-patient relationship to cope with uncertain decision-making. These challenges lead to additional uncertainties and in some cases to poor outcomes for doctors and/or patients. The findings of this paper raise concerns about the reproduction of inequality and have implications for theorizing about decision-making under conditions of medical uncertainty, for understanding how the doctor-patient relationship and model of care affect physician decision-making, and for forming policy on the optimal structure of medical work.

The Nature of Uncertainty and Physician Response

Renee Fox's (1957, 1980) foundational work suggests uncertainty is endemic to medicine and recursive. She argues that uncertainty is a moral existential problem that medical students reflexively struggle with as they train to become physicians. Fox is challenged by Light (1979) who argues that doctors avoid uncertainty by adopting a particular 'school of thought' that provides certainty based on clinical experience and professional norms. Atkinson (1984) also challenges Fox's characterization of doctors as reflexive scientists, and argues medical training socializes physicians to control uncertainty through reductive modes of explanation that allow doctors to make decisions with trust in their 'thinking as usual.'

Although there is debate about how doctors-in-training are socialized to orient themselves to uncertainty, research shows some practicing physicians do acknowledge

uncertainty in clinical work (Gerrity et al., 1992). The questions then become: what is the nature of the uncertainty and how do doctors respond? Interdisciplinary research offers clarification on the nature of uncertainty (Brashers, 2001; Han, Klein, & Arora, 2011). Of particular use to this paper is Babrow's (2001) distinction between ontological (indeterminacy of causes) and epistemological uncertainty (nature of knowledge), and Vos, Anthony & O'Hair's (2014) third type, axiological uncertainty: uncertainty about the moral implications of an event (p. 874). In my study obstetricians experience all three types of uncertainty, but not in the same way. The variation in their experience of and response to uncertainty has to do with differences in the social context of practice.

Gerrity and colleagues (1992) present five factors of the social context that shape physician response to uncertainty: the patient, the medical problem, physician characteristics, test and treatment characteristics, and organizational structure (p. 1030). Their findings are limited to mainly physician-level characteristics as predictive factors. They find extensive variation in physician response, and disparities between doctors' beliefs about what they should do in the face of uncertainty, versus what they actually do. They suggest we need "comparative studies done on attitudes, intentions, and actual behaviors of physicians in different settings operating under different organizational and financial constraints and incentives" (p.1044).

One organizational change to medicine especially relevant to uncertainty is the evidence-based medicine (EBM) movement. EBM and what Tanenbaum (1999) refers to as the outcomes movement more generally, is in part a response to uncertainty and variation in medical practice. These seek to replace the subjective forms of knowledge doctors use in decision-making (clinical experience, the doctor-patient relationship,

professional norms) with probability-based statistical evidence (Ghosh 2004; Lambert, Gordon & Bogdan-Lovis, 2006; Mykhalovskiy & Weir, 2004). But research on how EBM is actually used by physicians shows how EBM is integrated into tacit knowledge within doctors' social networks (Gabbay & le May, 2004), and combines with rather than replaces subjective knowledge (Armstrong, 2002; Timmermans & Angell, 2001). The attempt to reduce uncertainty through promoting rationalized knowledge has not removed ontological uncertainty, and in some cases creates new epistemological uncertainties.

The Doctor-Patient Relationship and Physician Decision-Making

While we have limited data on physicians' responses to uncertainty, literature on clinical decision-making more broadly identifies the doctor-patient relationship and organizational structure of care as central components of the decision-making process (Clark, Potter and McKinlay, 1991; Eisenberg, 1979). The doctor-patient relationship figures heavily into studies of decision-making; research focuses on the roles each party takes in communication and decision-making, analyzing who sets goals for the encounter and the status of patients' values (Heritage & Maynard 2006). As patient-centered care and shared decision-making have become new standards of practice, much work has focused on these new models in the medical encounter.

Bensing (2000) conceptualizes patient-centered care by distinguishing between the content and control of a doctor-patient encounter. The content of the consultation may be 'patient-centered' or 'disease-centered', the former focuses on patients' needs from a biopsychosocial model, and the latter is strictly biomedical. Control has to do with who sets the agenda and maintains power in the decision-making process. The focus on power has been analyzed by many, such as Collins, Drew, Watt & Entwistle's (2005) bilateral

vs. unilateral approach, Emanual & Emanuel's (1992) paternalistic, mutual, and consumerist relationships, and Charles, Gafni & Wheelan's (1997, 1999) model of shared decision-making, which includes "the exchange of both information and treatment preferences by both physician and patient and agreement by both parties on the treatment to implement"(1997, p. 682). These studies clarify differences in types of doctor-patient interaction, but we do not know how these change in response to uncertainty, or how structure of care may alter a doctor's approach.

Through moving the discussion into an organizational framework I engage with work that examines how the structure of care shapes doctor-patient interaction and affects physician decision-making. Anspach, (1993) for instance highlights how NICU nurses spend more time interacting with patients than doctors, which changes the nature of their knowledge and thus their decision-making. Time spent with patients, or lack thereof, also factors into work on decision-making in the emergency room. ER staff rely on first impressions of social cues to label a patient worthy or unworthy of care (Jeffery, 1979; Lara-Millan, 2014; Roth, 1972; Vassy, 2001). This literature establishes the prominence of doctor-patient interaction to clinical decision-making and highlights problems that arise when interaction is brief. However it is methodologically limited by its ethnographic and case study approach. By examining the content of interactive knowledge and the decision-making processes from doctors in fragmented and continuous models of care from numerous hospitals and practices, I clarify our understanding of how the doctor-patient relationship and model of care affect physician decision-making.

Obstetric Practice Settings and the Fragmentation of Care

Obstetrics is one of many fields experiencing an increase in hospital care models that fragment the once continuous doctor-patient relationship (Wachter & Goldman, 1996; Rayburn, 2011). Solo private practices where the doctor is on-call 24/7 for their patients have the most continuity of care: A doctor sees his or her patients throughout pregnancy in office visits, and the doctor is called to the hospital for the birth. On the opposite end of the spectrum are obstetricians who work shifts in labor and delivery for large hospital groups who attend to any patients admitted on their shift, in these models doctors and patients have usually not met prior to birth. This model represents a fragmented doctor-patient relationship.

These two situations reflect ideal types of continuous and fragmented models, but in reality there is a spectrum between the two. The number of obstetricians in solo private practice is declining, and the majority of private practices are groups with an average size of 6 (Rayburn, 2011). In group practices, obstetricians often share call for all patients, and the larger the group the less likely it is that physicians attend their own patients' births. Even doctors in solo private practice may share call on weekends or holidays with other practices, or contract with a laborist: An obstetrician who works hospital shifts and has no out-patient practice of their own. Thus, the range of continuity across models is vast, and even within one doctor's practice there may be continuity with some patients but not others.

We do not have national data in the U.S. that measures continuity, but we do have data on ownership as an indication of organizational model. Ownership is not identical to model of care, but physician employees of hospitals or managed care organizations often work shifts in large groups, while private practice physicians are more likely to be on-call

for a smaller group. From 1983 to 1997, the total number of patient-care physicians across all specialties working as employees rose from 24 to 43 percent, and the number of doctors self-employed in private practices dropped from 40 to 26 percent (Mckinlay & Marceau 2002, p. 388-389). From 1991 to 2003 the number of obstetricians employed in private practice dropped from 77 percent to 70 percent, and those in solo private practice dropped from 33 to 23 percent. Hospital employment increased from 5 to 14 percent from 1991 to 1998 (ACOG, 2003).

Methods

Between October 2013 and May 2014 I interviewed 21 obstetrician-gynecologists from a city on the East Coast of the United States. My home institution's ethical review board approved this study. I sampled within a 50-mile radius of the city. I used purposive sampling to maximize variation by (a) type of hospital –academic or community - where the obstetrician had delivery privileges; (b) percent of hospital patients whose maternity care was paid for by the state, (c) type of practice (i.e., private practice vs. managed care organization/ hospital group); and (d) size of practice. The only requirement for participation was that the physician practice obstetrics, as some obstetrician-gynecologists only practice gynecology.

The data in this study were collected at the beginning of a larger project on obstetric decision-making more broadly which asked the following questions: what factors do obstetricians take into account in their decision-making in childbirth, and how do they describe the decision-making process? Interviews are a suitable method because I aim to understand obstetricians lived experience of decision-making. The interviews were semi-structured, one hour in length, audio-recorded (one doctor declined to be taped), and

fully transcribed. Sample interview questions include: Describe the type of practice you currently work in as well as other places you've worked? What is it like to make decisions in labor and delivery? How do you make clinical decisions? What factors do you take into account? What are the most difficult kinds of decisions in birth?

Because these interviews were collected as preliminary data for a larger study, I began with a grounded theory approach to analysis (Charmaz, 2006). I performed open thematic coding using hyperResearch, software designed for qualitative data analysis. I iteratively developed my codebook by continuously checking codes against previously coded transcripts, and used memos to refine the definition of codes by noting differences and similarities in their meaning across interviews. Numerous codes emerged repetitively in the data, such as: uncertainty, interactive knowledge, shared decision-making, shift-work, and trust. I was not familiar with literature on uncertainty before collecting data, so I reviewed this along with literature on the doctor-patient relationship and decided for this paper to focus my analysis on doctors' use of the doctor-patient relationship to deal with uncertainty across different models of care. This focus fit the majority of the data with the exception of two physicians who did not acknowledge uncertainty in their practice. I excluded these two from the analysis because this paper is specific to doctors who do experience uncertainty.

Of the 19 remaining obstetricians, 11 work in models with fragmented care, 6 with continuity of care, and 2 work in both. 7 had prior experience working in both models, which allowed me to compare within an individual doctor's narrative. I define fragmented care as doctors who work shifts in labor and delivery for large groups where they usually do not meet the woman in labor before her birth. I define continuity of care

as doctors who work in smaller practices where they are on-call for their groups' patients and have usually met the patient during pregnancy. Of the continuity of care group, 2 work in solo or two-person practices and 6 work in groups of 3-8.

Doctors were evenly split between academic and community hospitals, representing a total of 9 hospitals. 13 obstetricians are female and 6 male. Years in practice range from 3 months to 40 years. 15 are generalist obstetrician-gynecologists, and 4 are MFMs-maternal fetal medicine specialists, obstetricians with additional training to care for high-risk pregnancies. While MFMs occupy a different position than generalists in the field of maternity care, in this paper I am not drawing any distinctions because the MFMs share call with generalist obstetricians and work on the labor and delivery floor attending all patients (low and high risk) who are admitted during their shift.

Findings

Uncertainty in Obstetricians' Decision-Making

When I asked obstetricians what it was like to make decisions in labor and delivery, the topic of medical uncertainty emerged without my solicitation. They said the outcomes for some decisions were indeterminate, as expressed in the phrase "we have poor predictive powers." They described uncertainty in regards to the lack of, or quality of research evidence on a situation, articulated in quotes like "We don't have an exact answer, we know it's not an exact science, there's no science." Others expressed uncertainty due to the multiple treatment options available for some decisions: "There's always more than one way in medicine to do something."

These obstetricians felt extensive social and legal pressure to have healthy outcomes in every birth, yet they sometimes encountered situations where the usual components of their clinical judgment (scientific evidence, clinical experience, and local professional norms), were inconclusive and did not provide a clear understanding of the situation at hand or how to treat it. Uncertainty was not understood as a constant characteristic of obstetric practice, it was situational, and there was a spectrum across the sample in regards to the perception of the amount of uncertainty in birth. Some felt labor and delivery had large amounts of uncertainty, ie. "Childbirth is an unpredictable process." Others felt certain about most of their decisions in birth and identified uncertainty in a small minority of situations. Of the original sample of 21, two outliers did not identify any uncertainty in their practice. They had a confident assurance that they always knew the correct thing to do in any situation. However, the majority did acknowledge uncertainty in some situations in childbirth, and these 19 are the focus of this paper.

The Toolkit as a Response to Uncertainty

When doctors described decision-making in the face of medical uncertainty, they explained a few strategies that I label the doctor-patient relationship toolkit. The doctor-patient relationship develops through interaction; this may be a brief one-time encounter, or a 9-month process throughout pregnancy. During this process the physician gains extra-medical information about the patient, meaning beyond the standard medical information that would be included in a patient's chart in the U.S. Doctors gathered value-related and social information about patients such as feelings about vaginal birth vs. cesarean delivery, induction and pain management, plans for after the birth and for

future children, religion, and social support network. They also observed the patient's communication style and decision-making preferences. In other contexts such as a coordinated single-payer system, patient charts may include this information; however these doctors said medical records do not contain values-related or social information. The toolkit includes this collection of interactive knowledge, which is explicit and tacit knowledge about the patient garnered through interaction, as well as trust. Obstetricians facing uncertainty in birth use any single tool or combination of them to guide their decision-making.

In some cases doctors drew on interactive knowledge to inform their own treatment recommendations by weighing the risks and benefits of different options relative to the woman's life circumstances and personal values, but took a unilateral approach to decision-making. This would classify as patient-centered content, but not control according to Bensing (2000). Other doctors used interactive knowledge to guide their treatment recommendations but also included the patient in the decision-making process; this fits Charles and colleagues' (1997) definition of shared decision-making. However, obstetricians' reliance on the toolkit was predicated on uncertainty: When doctors were certain about a medical diagnosis or treatment recommendation, there was less talk of integrating the patient into decision-making in terms of content or control.

The Toolkit in Continuous Care

A common example of when obstetricians used the doctor-patient relationship toolkit was deciding whether or not to induce labor, which means to artificially start labor rather than allowing labor to start on its own. In the quote below a doctor narrates her thought process in this kind of scenario.

> How about something like the water breaking before labor... she's low risk, healthy… We could give you Pitocin [to induce labor] and it has the advantages of shortening time till the baby is born, reducing the risk of infection which is really small, but it takes it from very small to even smaller. But infections are not very common, most of the time women will go into labor on their own. So I feel at the time the water breaks, time zero or an hour or two later when we're seeing each other at the hospital or in the office, you have a very neutral offer of Pitocin or what we would call expectant management, and you could go home if you want to. And I sometimes even encourage people to go home 'cause I kind of know that's what they want. And unless there's some other compelling reason to stay, I'm fine with that. Now if there's a snowstorm out there, we're going to factor that into the situation, or your Mom's in town, and you have a toddler home, and she's leaving tomorrow night, we're going to factor that in too- but the medicine is very neutral.

This illustrates how the doctor's interactive knowledge about a patient (her desire to be at home rather than the hospital for early labor and her childcare circumstances) is incorporated in the way the physician assesses the clinical scenario and decides on what to recommend. In addition to using interactive knowledge in their judgments, doctors also relied on the doctor-patient relationship to engage patients in the decision-making process itself.

An example of shared decision-making that emerged in multiple interviews was deciding if and when to do a cesarean section given signs of potential problems in labor:

> Interviewer: Are you ever unsure about what the best thing for the patient is?
>
> Obstetrician: Sometimes, and I'll share that with them, that we don't know what the right thing is here. You know we think that a C-section is the best thing here, but we can't prove that a vaginal delivery is not equally optimal. And so I'll share that with them, and give them my sort of gut instinct about what the right thing to do is, and talk about the risks and the benefits. And I think that I try to give patients choices when choices are available and to talk about what those reasonable choices are, and allow them, and help them, to figure out what the best decision is for them to make in the context of their belief system and everything else that is going on.

This doctor explains that when the medicine is unclear, a 'good' decision is one the doctor and patient make together. However, not all patients want to participate this way. Thus doctors also used their interactive knowledge of patients to tailor their communication style and how they engaged the patient in decision-making.

> Shared decision-making is a little bit of a fallacy; it doesn't work with every patient…there's a significant portion of patients who just want to be told what to do.

In cases of uncertainty where the doctor interpreted that the patient's preference was to defer to the physician to make the decision, doctors used interactive knowledge to determine treatment and took a unilateral approach to decision-making.

Obstetricians' reliance on the doctor-patient relationship to navigate uncertainty makes this relationship an essential toolkit for doctors' clinical work. The medical uncertainty in obstetrics also makes this relationship vulnerable to conflict. Obstetricians vary in their philosophy of birth, approach to labor and delivery, and even the skills they use in birth. Women have varied beliefs and preferences about birth, and in some cases deeply held convictions about clinical choices made in labor and delivery. This amount of variability from both parties, the high stakes nature of decision-making in birth, and the expectation of relying on the doctor-patient relationship in the face of uncertainty, makes a positive relationship an advantage for obstetricians facing uncertainty.

Prenatal care played an important role for building this relationship for doctors with continuity of care. Frequent meetings during pregnancy provided multiple opportunities to talk about birth preferences and practices and vet expectations about the labor and delivery process. If the patient wanted a procedure the doctor will not perform, or if they have conflicting philosophies and cannot develop a positive working

relationship, the doctor or patient might end the relationship. Many doctors spoke about this element of choice for patients and themselves, and gave examples of asking a patient to find a different provider when there was reoccurring conflict in prenatal care. This may not be possible if the doctor is the only one in the area, or if the woman's choices are limited by insurance, transportation, cost, or other factors.

No one can anticipate all the decisions that will emerge in labor and this unpredictability heightens the importance of developing trust in the doctor-patient relationship during pregnancy. Although trust has been widely recognized as important from the patient's point of view, many obstetricians spoke about its importance to their experience of decision-making, as illustrated below:

> [By the time of the birth] I feel like we have gotten to know each other really well. You know who I am, I don't change when you're in labor, I give you the same kinds of information, you trust me, you trust (name of her partner), that if something comes up you kind of know how I think, you know that I am on your side, and you're not trying to scope out who is this new person, who is this covering, what is their philosophy of birth…That's really, really hard… So even when there are difficult things that we have to talk about, if we've done some of that other decision making [during pregnancy] it's much easier. I have a tremendous advantage in that way, and a lot of trust is gained on both sides.

Trust makes uncertain decisions easier because physicians are confident in their ability to either work with the patient to reach a shared decision, or to make a decision on the patient's behalf given their accumulated interactive knowledge.

The identification of medical uncertainty in birth, and the use of the doctor-patient relationship toolkit for uncertain decisions were found consistently in all models of care. Differences in the narratives emerged when doctors gave examples of how this actually works in practice. For doctors in continuous care models, their lived experience of using the doctor-patient relationship for uncertain decisions matched their ideal: It worked, and

was a solution that made doctors feel confident about tough decisions. Doctors in fragmented care faced a range of challenges to this approach and their ideal of using the doctor-patient relationship toolkit did not always work out in practice.

The Toolkit in Fragmented Care

In fragmented care models doctors work shifts in labor and delivery where they care for any patients who enter the hospital and they have usually not met the patient prior to birth. One might guess that these doctors find other ways to cope with uncertainty given the absence of a doctor-patient relationship. Yet I found doctors still attempted to use the doctor-patient relationship toolkit for uncertain decisions, but the relationship is significantly limited in depth and breadth. In fragmented care, obstetricians' interactive knowledge was restricted to immediate first impressions about patients, and descriptions of patients were more superficial than those in continuity models. Consider the following narrative about how a doctor's impression of his patient guides when he recommends a C-section.

> We have two extremes of kinds of patients here, the culture in Brazil, is that a cesarean is the way to go, people have elective cesareans all the time-the ones who can afford it, they certainly don't have the negative connotation for it. And then the other extreme of patients we have here, these would be patients who emerge from our midwifery practice…these people have sometimes come up in life fearing cesarean like it's the plague…So if I'm dealing with an issue in labor and I have the first type of patient, who's actually asking for a cesarean the first time she feels pain…if something does happen to slip off the straight and narrow with that lady I'm going to be quicker to wheel her into the back and do a cesarean. If I have somebody else who is fighting us tooth and nail about that, I'm more likely to stick my neck out and help her to have the kind of birth she wants to have.

This quote reveals that the choice to have a C-section is not always a clear-cut medical decision, but open to the influence of values. The question then becomes how

accurately the doctor understands the woman's values. Doctors in fragmented care have a structural limitation on their ability to get to know patients. The use of superficial first impressions was also applied to doctors' expectations of patients' decision-making preferences. As mentioned in the previous section, not all patients want to participate in shared decision-making, even in a situation that is medically uncertain. Doctors in fragmented care face challenges to figuring this out in the middle of a brief discussion during labor, and sometimes rely on stereotypes as indicated in the following narrative.

> Well-educated middle and upper class are maybe a little more willing to listen to the primary evidence about, is this good or bad…From my less economically privileged patients, less educationally privileged patients, who tend to have a Hispanic background, it's much more, "Well Doctor, if you think it's a good idea I'll do it"…And then for my African American patients, I get more of a, "are you sure?" you know, really kind of more, not pushback, but skepticism.

This kind of stereotyping raises concerns about the reproduction of inequality. I am not suggesting that all patients want to participate in decision-making, but if doctors do not have time to get to know the patient, they risk acting on assumptions built on social inequality and reproducing it in the birth experience.

These challenges are exacerbated when the sociocultural divide between doctor and patient is wide as the following doctor explains:

> There are many cultural factors that you cannot, and do not have time to enter into as you walk into those settings, that you may not ever unpack. And you are going to carry them, and they are going to carry them, and you know, my job in that setting is to make sure everyone is safe.

We are left to question the meaning of safety in this doctor's context of practice, and how social inequality might create additional barriers to patient-centered care in shift work given the largely white and privileged class of physicians.

There was no pattern between the socio-economic status of patients and whether they saw a doctor in fragmented or continuous care. My assessment of socio-economic status is based on hospital averages of patients whose prenatal care is paid by the state. Patients who are economically and socially privileged have more choice in provider, but the popularity of large group practices means that in my sample the rich and poor are subjected to fragmented care. However, if exposed to fragmented care, socially disadvantaged patients have more to lose because of the social distance between them and their providers, and the kind of negative stereotypes employed by physicians in this study and other research. Physicians who worked in continuous models saw a mix of patients and had individualized assessments of their needs and did not rely on race, class, or nationality stereotypes.

Doctors in fragmented care have significantly less time to get to know their patients and do so in the acute setting of the hospital. Not only are they meeting the woman for the first time during birth, but if it is a busy labor and delivery floor, they may only have a few minutes to talk to a patient. Doctors admit the physical and psychological intensity of labor poses challenges to a woman's ability to engage in decision-making. The following doctor explains:

> Yeah that's tough, it can be really tricky, because sometimes people are like exhausted, and they're like I can't even think straight now and you're asking me this, and I'm like I'm sorry, but this is where we are, so we're going to have to regroup.

Physicians tried to work through as much decision-making prior to labor and make notes of patient information in the chart. However, unexpected complications emerge in labor that cannot always be anticipated during pregnancy. Additionally, what is

relevant to record in a patient's chart for one doctor is not always relevant to another. This raises issues about the coordination of fragmented care and challenges of group models to maintain continuity of patient information through medical records, meetings, and other attempts to work around fragmentation. This point is illustrated in the following discussion:

> Researcher: And what happens after you have done all this work [shared decision-making] and then there is a hand off, how does this all get translated?
>
> Obstetrician: That can be very very challenging. That can be very challenging in a shift work setting and I think that's definitely one of the reasons why some people don't like the concept of doing OB in shift work, you know. And then to think, you know it's better for your own doctor to be tired than to get someone you've never met before. Um, and things do get lost in translation. We have a very clear sort of set up of a transfer of information, twice a day everyone sits at the table and reviews the patients and talks about each of them individually, talks about any issues, but there are times where things sort of fall through the cracks.

In fragmented care some doctors told stories of coming into a birth where they felt the patient had been inappropriately counseled during pregnancy, or where the patient chart was missing information that the doctor needed in labor.

In addition to the break in continuity of care between pregnancy and birth, labor and delivery care is further fragmented in shift work designs where doctors change shifts every 12 or 24 hours. Doctors described situations where they were the third or fourth doctor to attend a single woman's labor. Sometimes they come into a birth on a shift change and disagree with the previous doctor's decisions. Doctors spoke of having to "clean up messes" created by other doctors and having to change plans mid-labor.

One example of this kind of scenario was how to deliver twins when the first baby is head down and the second is breach, which means buttocks down rather than head down, and poses a more difficult vaginal delivery. This is an area where doctors said

there is a lack of scientific evidence and great variation in professional opinion and clinical skill. The medical uncertainty in the situation means that doctors in fragmented care might approach it differently. One doctor walked me through this kind of situation: The first obstetrician discusses the medical uncertainty with the patient, explains the known risks and benefits and engages the patient's values, and together they decide on a vaginal delivery. Then a shift change occurs and the next obstetrician refuses vaginal delivery and orders a C-section. The doctor commented:

> It can be problematic for a patient who has been on call with someone who said "Yeah I'll do it for you, I'll do it", and then the shift ends and somebody else comes on and says no. Then that can be a big disappointment for the patient. It can be an unfortunate outcome for the patient. You know truly they would have ultimately had less pain and less complications if they had a vaginal birth instead of a C-section. That's again where the art can become a problem, when people have different comforts and skills and there are no clear answers.

This example highlights the importance of a well-matched doctor-patient relationship for clinical scenarios characterized by medical uncertainty, and how fragmented care in situations with 'no clear answers' can lead to additional personal uncertainty and conflict between colleagues and between doctors and patients.

Discussion

This study finds that some obstetricians acknowledge medical uncertainty in childbirth and use the doctor-patient relationship as a toolkit to cope with uncertainty. These findings challenge the idea that doctors seek to control uncertainty through denial or dominance (Atkinson, 1984; Light, 1979). It aligns with work that finds physicians acknowledge uncertainty and deal with it reflexively (Fox 1957, 1980; Gerrity et al., 1992). Across both models of care doctors used the doctor-patient relationship toolkit for uncertain decisions, but the content of the toolkit and the consequences of its use varies in

relation to the continuity of the doctor-patient relationship afforded in different models of care.

This paper further develops Gerrity et al.'s (1992) model of physician response to uncertainty by showing how organizational structure mitigates doctors approaches to uncertain decision-making, a potential explanation for their finding that doctors' ideals vary from their actual practices of dealing with uncertainty. It brings attention to the difference between a doctor-patient relationship as a distributed relational entity rather than a one-time singular encounter (Rapley, 2008).

Across all models, doctors use the toolkit for uncertain decisions by relying on interactive knowledge about their patients in diagnosis and treatment recommendations. The content of their decisions is patient-centered (Bensing, 2000). They also sometimes engage patients in shared decision-making, where content and control of decision-making is a shared process (Charles, Gafni & Wheelan, 1997, 1999). This builds on descriptive work of doctor-patient interaction by suggesting that doctors employ a range of communication and decision-making styles depending on the situation at hand. For these obstetricians, patient-centered approaches are understood as an appropriate solution for decisions characterized by medical uncertainty, but not necessarily for decisions the doctors interpret as medically certain.

Additionally, the organizational structure of care mitigates doctors' use of a patient-centered approach. For doctors in continuous models, using the toolkit for uncertain decisions works in practice. However, doctors in fragmented models use superficial interactive knowledge to guide their decisions. The use of interactive knowledge without an opportunity to get to know the patient can lead to the use of

stereotypes. In the ER, physicians read social cues and then apply their own value judgments to patients to determine patient legitimacy and worthiness of resource allocation (Jeffery, 1979; Lara-Millan, 2014; Roth, 1972; Vassy, 2001). In my study, obstetricians use interactive knowledge to try to access the patients' values; but even patient-centered intentions can lead to the reproduction of inequality under time constraints when the physician makes decisions grounded in existing social inequalities (i.e. Hispanic patients prefer paternalistic care).

The random assignment of doctor to patient in fragmented care also poses a challenge to shared decision-making if there is a mismatch between the doctor's philosophy and skills and the patient's preferences. Without an element of choice and the trust of an established and well-matched doctor-patient relationship, there is an increased the chance of conflict between doctor and patient. Thus organization of care mitigates the efficacy of doctors' use of shared decision-making. Shift work models may also increase personal uncertainty between physician colleagues because their approaches to care may clash in a hand-off.

My findings suggest that patient-centered care and shared decision-making are being integrated into doctors' decision-making when scientific evidence and clinical experience are indeterminate. In this way we might interpret patient centered care as a 'recipe for action' akin to Light's argument that doctors adopt a school of thought to deal with uncertainty (Light, 1979). However the difference is that this is not a premature closure but rather an acknowledgement of uncertainty, and the recipe for action provides a practical toolkit for how to approach uncertain decisions. Yet the stereotyping used in shiftwork suggests that patient-centered care as a resolution to uncertainty can make

doctors overly confident that they have resolved the uncertainty at hand, while they actually remain blind to the complexity of the patient and their values. Additionally, in the same fashion that technology or evidence-based data can create more uncertainties at the same time as they function to remedy others (Timmermans & Angell, 2001), doctors' use of the doctor-patient relationship to overcome ontological and epistemological uncertainty can lead to new axiological uncertainty for physicians, that is uncertainty about the moral implications of a decision (Vos et al., 2014). This is especially true when the doctor-patient relationship is fragmented and the clinical encounter is more vulnerable to personal uncertainty.

Fragmented care models are designed on the assumption of rationalized decision-making, where any doctor could be assigned to any patient because objective knowledge guides practice. This is not the reality of practice for the obstetricians in this study. Subjective modes of reason remain in decision-making and are heavily relied upon when faced with medical uncertainty. Actors from within and outside medicine have pushed for shift work models to encourage evidence-based decision-making, eliminate physician bias, and promote patient safety (Rosenburg, 2014; Iriye et al., 2013). This study suggests that these goals of standardization cannot rationalize all aspects of medical practice, and policy makers must not forget the function of a positive doctor-patient relationship. There is no guarantee that continuity of care will prevent a doctor from misunderstanding a patient or disregarding her preferences. But doctors with intentions to practice patient-centered care need systems of care delivery that support these relationship and time intensive practices. These findings are consequential and timely as fragmented care models become increasingly popular in American healthcare.

These data capture what doctors say they do in practice, rather than a direct observation of what they actually do. We can guess that doctors overestimate their good practices and underestimate their faults, though doctors were willing to discuss challenges of practice, including stories that ended with suboptimal outcomes for patients. The exclusive focus on obstetricians limits the generalizability to other specialties, but the presence of uncertainty and context of decision-making are similar in a variety of other clinical scenarios, and the growth of fragmented care is not limited to obstetrics. The small sample size does not allow for additional comparison across other social variables that shape decision-making. I tried to make up for this with a sampling strategy that maximized variation of other potential factors.

Future research should compare continuous and fragmented care in other regions. This study was done in one major city and academic medicine hub; it is possible that the almost-but not complete- universal acknowledgement of uncertainty and the use of doctor-patient relationship toolkit to deal with it is part of the local medical culture. To fully understand the nature of clinical decision-making in the face of uncertainty, a study that observes decision-making in action and includes both the patient's and doctor's perspective is needed.

There are many recent efforts to make clinical practice more patient-centered and at the same time a movement to rationalize medicine. This article suggests these goals have inherent contradictions and brings attention to how the structure of care mitigates physicians' abilities to get to know their patients and practice with their best interests in mind. We need to take into account the role of values in the practice of medicine, and the

interactive work that accompanies doctors scientific and clinical expertise- and provide structures of care delivery that optimize the use of both.

References

ACOG-American College of Obstetrics and Gynecology. (2013). *Profile of Ob-Gyn Practice.* http://www.acog.org/-/media/Departments/Practice/ProfileofOb-gynPractice1991-2003.pdf?dmc=1&ts=20150102T1250088954.

Anspach, R. (1993). *Deciding Who Lives: Fateful Choices in the Intensive-Care Nursery*. Berkeley: University of California Press.

Armstrong, D. (2002). Clinical autonomy, individual and collective: the problem of changing doctors' behavior. *Social Science & Medicine* 55(10):1771–77.

Atkinson, P. (1984). Training for uncertainty. *Social Science & Medicine* 19(9):949–56.

Babrow, A. (2001). Uncertainty, value, communication, and problematic integration. *Journal of Communication* 51(3):553–73.

Bensing, J. (2000). Bridging the gap: the separate worlds of evidence-based medicine and patient-centered medicine. *Patient Education and Counseling* 39(1):17–25.

Brashers, D. (2001). Communication and uncertainty management. *Journal of Communication* 51(3):477–97.

Charmaz, K. (2006). *Constructing Grounded Theory : A Practical Guide through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications.

Charles, C., Gafni, A., & Whelan, T. (1997). Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). *Social Science & Medicine* 44(5):681–92.

Charles, C., Gafni, A., & Whelan, T. (1999). Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model. *Social Science & Medicine* 49(5):651–61.

Clark, J., Potter, D., & McKinlay, J. (1991). Bringing social structure back into clinical decision making. *Social Science & Medicine, 32*(8), 853-866.

Collins, S., Drew, P., Watt, I., & Entwistle, V. (2005). 'Unilateral' and 'bilateral' practitioner approaches in decision-making about treatment. *Social Science & Medicine* 61(12):2611–27.

Declercq, E., Sakala, C., Corry, M., Applebaum, S., & Herrlich, A. (2013). *Listening to*

Mothers SMIII: Pregnancy and Birth. New York: Childbirth Connection.

Eisenberg, J.(1979). Sociologic influences on decision-making by clinicians. *Annals of Internal Medicine* 90(6):957–64.

Emanuel, E. & Emanuel, L. (1992). Four models of the physician-patient relationship. *Journal of the American Medical Association* 267:2221.

Fox, R. (1957). Training for uncertainty. In *The Student Physician*, Ed. R. Merton, G. Reader, and P. Kendall. Cambridge, MA: Harvard University Press.

Fox, R. (1980). The evolution of medical uncertainty. *Milbank Memorial Fund Quarterly* 58:1–49.

Gabbay, J. & le May, A. (2004). Evidence based guidelines or collectively constructed 'mindlines?' ethnographic study of knowledge management in primary care. *BMJ: British Medical Journal* 329(7473):1013–16.

Gerrity, M., Earp, J. DeVellis, R., and Light, D. (1992). Uncertainty and professional work: perceptions of physicians in clinical practice. *American Journal of Sociology* 97(4):1022–51.

Ghosh, A. (2004). On the challenges of using evidence-based information: the role of clinical uncertainty. *Journal of Laboratory Clinical Medicine* 144(8).

Han, P., Klein, W., & Arora, K. (2011). Varieties of uncertainty in health care a conceptual taxonomy. *Medical Decision Making* 31(6):828–38.

Heritage, J. & Maynard, D. (2006). Problems and prospects in the study of physician-patient interaction: 30 years of research. *Annual Review of Sociology* 32(1):351–74.

Iriye, B. et al. (2013). Implementation of a laborist program and evaluation of the effect upon cesarean eelivery. *American Journal of Obstetrics and Gynecology* 209(3):251.e1–251.e6.

Jeffery, R. (1979). Normal rubbish: deviant patients in casualty departments. *Sociology of Health & Illness* 1(1):90–107.

Lara-Millan, A. (2014). Public emergency room overcrowding in the era of mass imprisonment. *American Sociological Review* 79(5):866–87.

Lambert, H., Gordon, E. & Bogdan-Lovis, E. (2006). Introduction: gift horse or trojan horse? social science perspectives on evidence-based health care. *Social Science & Medicine:* 62(11).

Light, D. (1979). Uncertainty and control in professional training. *Journal of Health and*

Social Behavior 20(4):310–22.

Luthy, D., Malmgren, J., Zingheim, R., and Leininger, C. (2003). Physician contribution to a cesarean delivery risk model. *American Journal of Obstetrics and Gynecology* 188(6):1579–87.

Mckinlay, J. & Marceau, L. (2002). The end of the golden age of doctoring. *International Journal of Health Services: Planning, Administration, Evaluation* 32(2):379–416.

Menchik, D. (2014). Decisions about knowledge in medical practice: the effect of temporal features of a task. *American Journal of Sociology* 120(3):701–49.

Miller, A.C., and Shriver, T. (2012). Women's childbirth preferences and practices in the United States. *Social Science & Medicine* 75(4):709–16.

Mykhalovskiy, E. and Weir, L. (2004). The problem of evidence-based medicine: directions for social science. *Social Science & Medicine* 59(5):1059–69.

Rapley, T. (2008). Distributed decision making: the anatomy of decisions-in-action. *Sociology of Health & Illness* 30(3):429–44.

Rayburn, W. (2011). *The Obstetrician-Gynecologist Workforce in the United States*. USA: American Congress of Obstetricians and Gynecologists.

Rosenberg, T. (2014). In delivery rooms, reducing births of convenience. *The New York Times*, May 7.

Roth, J. (1972). Some contingencies of the moral evaluation and control of clientele: the case of the hospital emergency service. *American Journal of Sociology* 77(5):839–56.

Simonds, W., Rothman, B., & Norman, B. (2007). *Laboring on: Birth in Transition in the United States*. New York: Routledge.

Tanenbaum, S. (1999). Evidence and expertise: the challenge of the outcomes movement to medical professionalism. *Academic Medicine* 74(7):757–63.

Timmermans, S. & Angell, A. (2001). Evidence-based medicine, clinical uncertainty, and learning to doctor. *Journal of Health and Social Behavior* 42(4):342–59.

Vassy, C. (2001). Categorisation and micro-rationing: access to care in a French emergency department. *Sociology of Health & Illness* 23(5):615–32.

Vos, S., Anthony, K., & O'Hair, D. (2014). Constructing the uncertainty of due dates. *Health Communication* 29(9):866–76.

Wachter, R. and Goldman, L. (1996). The emerging role of 'hospitalists' in the American health care system. *New England Journal of Medicine* 335(7):514–17.

Chapter Three: Standardization and Patient Empowerment as Countervailing Powers in Obstetric Clinical Decision-Making

Introduction

Whether physicians maintain control over their clinical work amidst challenges by countervailing powers in health care is an ongoing question in medical sociology. Freidson (1970) and other scholars studying physicians as ideal types of professionals argued that autonomy was the distinguishing characteristic of medical professionals, and that it was secured by their exclusive relationship to specialized knowledge (Abbott 1988). Scholars have documented that 20th century physicians enjoyed great social authority and fought to consolidate and maintain professional dominance via strategic political, social, economic actions (Quadagno 2004; Star 1982). However, changes in the relationship between the state, corporations, and the profession of medicine in the last sixty years have led scholars to question if physicians were losing this autonomy and becoming deprofessionalized (Armstrong & Armstrong 2002; Hafferty & Light 1995). Additionally, a rising consumer movement decreased patients' trust in medical authority and empowered patients to participate in health care decision-making (Haug 1983; Light and Levine 1988). These processes have been analyzed from a paradigm of deprofessionalization, corporatization and proletariatization (Mechanic 1991); combined they produce what McKinlay and Marceau (2002) named "the end of the golden age of doctoring".

An alternative paradigm for understanding the social status of medical professionals is the countervailing power theory. This theory frames different stakeholders such as insurance companies, the state, hospital organizations, pharmaceutical companies, and patients in an ongoing and dynamic competition for power within the field of healthcare (Abbott 1988; Light 1991; Light and Levine 1988; Mechanic 1991; Quadagno 2004). This is a more fluid understanding of how power struggles are enacted across medicine (Timmermans & Oh 2010). Most studies of countervailing powers are at the macro structural level (Light and Levine 1988). As Vincon (2016) points out, we lack an understanding of how countervailing powers affect the everyday practice of medicine.

To remedy this gap this study examines patient empowerment and standardization as countervailing powers to physician authority in obstetricians' clinical decisions in childbirth. Patient empowerment and standardization, including evidence-based medicine and protocol-driven care more broadly, are two major challenges to the profession of medicine in sociological theory. Obstetrics is a suitable medical specialty to examine these movements because the women's health movement has posed a specific challenge to obstetric authoritative knowledge in childbirth (Simonds et al. 2008), and because scholars have observed that obstetrics is subject to many standards and protocol-driven care (Morris 2013; Reiger & Morton 2012).

I conducted in-depth interviews with 50 obstetricians about decision-making in childbirth and found that obstetricians' explanations for how they make decisions referenced a set of competing and at times contradictory discourses about what it means to practice good medicine. I label these discourses: patient autonomy, standardization,

and clinical experience, and theorize them as countervailing powers in healthcare. The first part of this paper distinguishes between these three discourses as ideal types as understood by physicians in the context of decision-making in childbirth. Drawing on previous literature on the tensions between standardization and patient empowerment (Bensing 2000; Reiger & Morton 2012), I pay special analytical attention to the content and control (knowledge/power) of decision-making in the clinical encounter.

In the second part of the paper I set out to understand how these countervailing powers manifest in practice. It is beyond the scope of a single article to present the possibilities of power relations, so I offer a focused analysis on patient autonomy. I examine how and when obstetricians use patient autonomy in their decision-making, and how they negotiate the tensions between patient autonomy and the countervailing discourses of clinical experience and standardization. Patient autonomy is chosen because it is one of the dominant discourses in my data and because previous research has identified patient empowerment as a major countervailing power to physician dominance (Timmermans & Oh 2010; Vincon 2016). Additionally, a focus on patient empowerment in maternity care contributes towards the scholarship and social movement for reproductive justice that is working to increase women's empowerment in maternity care (Almeling 2015; Reiger & Morton 2012).

This study sheds light on how physicians are responding to changes in the macrosocial context of health care in their local practice environment. I argue obstetrics is a turbulent environment where discourses of legitimate practice actively compete and countervailing power relations do not necessarily link to practice in ways that mirror the power relations at the macro level. My findings have implications for theorizing the

social status of medical professionals and for understanding the way power/knowledge functions in the contemporary doctor-patient relationship.

Standardization and Patient Empowerment as Countervailing Powers

The classic basis of legitimate authority for physician decision-making is clinical experience; as Reiger and Morton (2012) argue, "...medical knowledge is seen as objective and the basis of a set of observable and replicable clinical techniques. Hence, based on the professional knowledge gained in formal training and experience, the doctor holds professional authority and acts with an ethic of beneficence" (p.175). Standardization and patient empowerment both challenge this assumption.

Although the standardization of health care can be traced to early 20th century efforts to improve public health through the industrialization of medicine (Timmermans and Berg 2003), the evidence-based medicine movement was an unprecedented attempt to control doctors' clinical decisions. The evidence-based medicine movement began in the 1990s and sought to replace professional clinical judgment with the systematic application of research evidence, especially randomized controlled trials. Evidence is organized by medical elites in professional organizations and institutionalized into guidelines, clinical pathways, and protocols in clinical settings (Berg 1997; Daly 2005; Fox 2011; Lambert, Gordon & Bogdan-Lovis 2005; Lambert 2006; Mykhalovskiy & Weir 2001; Rycroft-Malone, Fontenla, Seers, and Bick 2009). Evidence-based medicine became a dominant measure of quality in wealthy western countries as reflected in medical education and health care policy, and insurers and regulators have adopted it as standard of care. For these reasons it can be understood as a challenge to professional

discretion (Hafferty and Light 1995; Timmermans and Kolker 2004; Timmermans and Oh 2010).

However, research on evidence-based medicine in practice shows doctors resist its implementation and that it has failed to replace clinical judgment (Armstrong 2002, McGlynn et al. 2003; Timmermans and Angel 2001). Timmermans and Oh (2010) argue in their review of EBM as a threat to professional power that it has not eroded clinical autonomy. At the same time, studies of standardization in maternity care suggest that it has eroded clinical autonomy. In *The C-Section Epidemic* (2013), Theresa Morris argues that hospitals and health care organizations are under legal and economic pressure to reduce risks associated with malpractice litigation, and in response they set protocols for decision-making in labor and delivery that lead to an increase in cesarean births. Rather than cesareans occurring due to doctors' convenience or profit motivations, common layman's explanations for the rise of cesareans, Morris argues that obstetrician clinical discretion is constrained. She says "Their choices are determined by protocols, or rules for care of patients, put in place by hospital administrators, voted on by nurses and physicians, but based on organizational recommendations, typically ACOG and risk management departments of hospitals"(p. 55). She presents standardization amidst the backdrop of a "litigation crisis" in obstetrics that places additional pressure on physicians to follow the rules: "Maternity providers feel they must strictly follow protocols to protect themselves from a lawsuit in the case of a bad outcome" (p.55).

A possible explanation for these inconsistent findings about whether or not doctors maintain clinical discretion in the face of standardization is that obstetrics is a more standardized field of medicine than other specialties. In *Standardizing or*

Individualizing? A Critical Analysis of the "Discursive Imaginaries Shaping Maternity Reform (2012)*,* Reiger and Morton place EBM in the context of an already increasingly standardized model of maternity care in the late 20th century. They explain how the Friedman Curve, a bell shape chart used to track expected labor progress, led to rigid expectations of labor progress rather than accepting women's highly variable labor patterns. The efforts to standardize models of labor were intensified with the development of maternal fetal medicine specialists and ultrasounds. These brought increased focus on the fetus and led to increased use of interventions (Reiger & Morton 2012, p. 177). However, even if maternity care is more standardized than other fields, obstetricians have still voiced resistance to protocol-driven care (Reiger & Morton 2012). We need ongoing research on doctors' experiences with standardized medicine to clarify these inconsistent findings and understand how it is affecting everyday clinical practice.

Reiger and Morton (2012) importantly highlight that although evidence-based medicine may reduce physician's clinical discretion, it still frames knowledge as distinctly professional because access to evidence remains within the medical institution. In other words, payers and regulators may reduce physician power through requiring physicians follow protocols, but physicians maintain authority over patients in the clinical encounter. They explain that the standardization of medicine is in tension with an alternative paradigm: a patient-centered approach advocated by consumer and patient rights movements.

I draw on Vincon (2016) to label this movement "patient empowerment" and conceptualize it as a countervailing power. Vincon explains:

> As American health care has shifted to a buyer's market, patients have increased consumer power (Ebeling 2011), increased access to information technologies (Lemire et al. 2008), and participate in health social movements (Brown and Zavestoski 2004). But beyond consumer power and legal rights is a cultural expectation that patients should be treated as collaborators in their care. This cultural trend is referred to by many names, including patient-centered medicine (Bardes 2012), patient autonomy (Conrad 1987), and patient empowerment (Roberts 1999). In order to link this trend to its heritage in health social movements (Starkey 2003), I refer to these related concepts as patient empowerment (p.1365).

Like evidence-based medicine, patient empowerment has been defined as a measure of quality care and has been institutionalized in policy and medical education (Institute of Medicine 2001; Andreassen and Trondsen 2010). Patient empowerment seeks to change two aspects of medical care. One is to change the power dynamic between the doctor and patient in clinical decisions from a paternalistic model where the doctor maintained all power and told the patient what to do, to a model of decision-making where the patient participates in his/her health care decisions. Secondly, it seeks to change the content of the knowledge used in clinical decisions from exclusively disease-centered to a focus that includes psychosocial characteristics and preferences of the patient (Berwick 2009). Although these have been shown to be independent concepts (Bensing 2000), from a countervailing powers perspective they both challenge physicians' power.

While communication and health studies scholars have attempted to define and measure patient-centered care and shared-decision making (Charles, Gafni & Whelan 1997, 1999; Ishikawa et al. 2013; Epstein 2005), sociologists have been more focused on how these changes affect power in the clinical encounter. Conversation analysis has been a predominant method for examining how patient-centered care and shared decision-

making techniques are used by physicians. These studies cast doubt upon whether the knowledge and power asymmetry between doctor and patient can be remedied with such techniques, and show that physicians can strategically manipulate conversation to make it appear like power is shared when it remains in the hands of the physician (Gwyn & Elwyn 1999; Robertson et al. 2011). These studies show us what is happening in the clinical encounter, but they do not inform us about how doctors understand patient empowerment and their intentions for when and how they use it in their clinical decisions. We need studies that examine the meaning of patient empowerment to doctors to fully conceptualize how patient empowerment affects clinical practice (Vinson 2016).

Vinson (2016) examines patient empowerment discourse in medical school education to satisfy these aims. She finds medical school instructors teach students to appropriate empowerment discourse from health social movements and patient education to shape patient participation in order to exercise their own authority. She argues this is "a mechanism by which the medical profession resists the countervailing power of patient consumerism" (1376). This is an important contribution to unveiling the mechanisms of knowledge/power relations in the doctor-patient relationship as they are affected by the patient empowerment movement, but it leaves us wondering how actual doctors in practice, rather than medical school faculty, understand patient empowerment.

One weakness of studies of standardized medicine and patient empowerment is that they are rarely studied together. Empirical studies of evidence-based medicine and patient empowerment are useful for an in-depth understanding of how doctors accommodate, resist and negotiate specific infringes upon their practice, but they do not inform us on how such forces interact. For example, how does a doctor deal with the

pressure to follow evidence-based guidelines in relation to the increasing social expectations to honor patients' rights? In reality these factors are not experienced individually, but within a context of practice where multiple forces push and pull physicians to practice in particular ways.

Bensing (2000) and Reiger and Morton (2012) address this by examining the tensions between both movements as opposite ideals. Both articles draw distinctions between the locus of power in the clinical encounter and the content of decisions. Control is presented on a continuum from physician authority to patient autonomy, and content is presented on a continuum from biomedicine/standardization at one end, to psychosocial/individualized knowledge at the other end. They locate different theoretical models of decision-making around an axis of intersection of these two concepts. It is easy to identify where ideal models of practice are placed on this grid, but how do these concepts play out in actual practice? Both authors call for empirical studies that examine how clinicians operate in the real world under this environment of conflicting discourses. I answer their call in this paper by examining how obstetricians understand and negotiate standardized medicine and patient empowerment in their clinical practice.

Data Collection and Analysis

I interviewed 50 obstetrician-gynecologists about decision-making in childbirth between October 2013 and August 2015. My home institution's ethical review board approved this study. I sampled within Massachusetts, Louisiana and Vermont. These states were chosen to maximize diversity in terms of rural, suburban and urban settings, and by state figures of the following measures: cesarean section rate, maternal mortality, percent of births attended by certified nurse midwives, and average malpractice costs.

Within each state, I used purposive sampling to maximize variation by (a) type of hospital –academic or community - where the obstetrician had delivery privileges; (b) type of practice (i.e., private practice vs. managed care organization/ hospital group); (c) size of practice; (d) gender of physician; and (e) physician years in practice. This sampling strategy for physician, practice, and state context is not to provide specific factors for analysis as they would in a quantitative analysis (ie. I'm not analyzing the direct relationship between malpractice cost and physician decision-making), but rather to get data closer to a representative sample without doing a full random national sample. The only requirement for participation was that the physician practice obstetrics, as some obstetrician-gynecologists only practice gynecology. The final sample is described in Table 1 below.

Table 1

Years in Practice	**N**
Under 10	12
11-20yrs	13
Over 21 yrs	25

Gender	
Male	25
Female	25

Ownership	
Private Practice	15
Employee	35

Size of Group	
1-2 obs	15
3-5 obs	9
6-10 obs	5
11+ obs	20
*one dr worked both in a (11+) and (3-5ob)	

practice	

Hospital Type	
Academic Medical Center	19
Non-Academic Tertiary Care Center	4
Community Hospital	27

This data is part of a larger project on obstetric decision-making more broadly that began with asking: what factors do obstetricians take into account in their decision-making in childbirth, and how do they describe the decision-making process? Interviews are a suitable method because I aim to understand obstetricians lived experience of decision-making. The interviews were semi-structured, one hour in length, audio-recorded (one doctor declined to be taped), and fully transcribed. Sample interview questions include: What is it like to make decisions in labor and delivery? How do you make clinical decisions? What factors do you take into account? What are most difficult kinds of decisions in birth? I asked open-ended questions and probed for specific examples whenever possible.

I analyzed the data as I collected it so that emergent ideas informed my interview guide as I went along. I began with a grounded theory approach to analysis (Charmaz, 2006). I performed open thematic coding using hyperResearch, software designed for qualitative data analysis. I iteratively developed my codebook by continuously checking codes against previously coded transcripts, and used memos to refine the definition of codes by noting differences and similarities in their meaning across interviews. The initial grounded theory analysis produced a range of research concepts and questions, including the dominant discourses of clinical experience, standards and patient autonomy.

Using these three dominant discourses I identified in grounded theory, I next applied these concepts to a more focused template analysis. Template analysis is deductive as it begins with a defined codebook and codes each interview for these codes, while remaining open to refining them if necessary (Crabtree & Miller 1999). I went back to the data and coded all the interviews for clinical experience, standards and autonomy. As I did this I wrote memos to record emerging understandings of each theme. I reviewed memos in an ongoing process so that I was able to constantly compare the concepts I was observing in the data. When I was finished this data process produced the first part of the paper, the typology of discourses. I then moved on to using template analysis to code for the relationships between the discourses and the way physicians used them in practice. For each new relationship that emerged I created a code, such as *standards over patient autonomy* and coded it in Hyperresearch. I used the same process of writing memos to develop these ideas, and by the end of this analysis I was able to see the most common types of relationships among the discourses. This analysis produced the second half of the paper.

Typology of Countervailing Discourses

Doctors' explanations of how they made decisions in childbirth referenced a consistent set of competing values and conceptions of what is acceptable and good medical practice. I organized these into three primary discourses: clinical experience, standards, and patient autonomy and present the ideal type of each below. As doctors positively identified with one discourse they often disavowed the other competing discourses. This suggests the contested nature of the discourses as countervailing powers that compete for legitimacy in clinical decision-making. Following this pattern in the

interviews, in this typology I conceptualize each discourse by what it is, as well as what it is not.

Clinical Experience

Clinical experience is a classic foundation of medical professional authority. It is grounded in the clinical practice experience a physician brings to each case he or she treats. Clinical experience is a different kind of knowledge than probability-based scientific evidence or expert consensus provided by standards. Clinical experience is subjective and practice-based, it is often associated with how a doctor was trained, but it is also about what they have come to believe works best over time through trial and error. It is a doctor's collective experiential knowledge of his/her profession. Clinical experience allows the doctor to apply his/her cumulated knowledge of the field to each individual case he or she treast. The explanation of decision-making below represents clinical experience discourse. This is a mid-career male obstetrician who is a faculty member of a large academic practice in a tertiary care center in Boston, MA.

> Researcher: How do you make decisions in labor and delivery?
> Obstetrician: Based on experience, sort of pattern recognition, you know what I've been taught. I finished my fellowship in 2003, so I've been doing this as an attending for about 10 years, and it's become, um, there are a lot of recognizable clinical vignettes that happen. The human body doesn't suddenly have a disease in a new way, it's something that has happened before, and the more time you spend here, the more you start to recognize things, earlier, and at different stages of the process then I did years ago, and it's just a lot of pattern recognition, and just going back on experience.

The source of knowledge here comes from the physician, and the locus of control in the decision-making encounter is also the physician. To justify the role of clinical experience as grounds for decision-making, doctors rejected the idea of patient

participation in the decision. For example, the doctor quoted below is a male physician who has been practicing in private practice at a community hospital in the Boston area for over 20 years. In the following quote he frames patient autonomy as a barrier to him performing his work rather than a legitimate basis for decisions.

> The second point in the clinical decision-making is the patient, and I find that this is the decision area that absorbs the most time and most frequently comes up. Stated frankly, I know what the right thing is to do and the patient has to be convinced of that...And I find it amazing that a patient that I've had a wonderful relationship with for 7 months of prenatal care, will often still feel that they have to protect themselves against our mechanizations. That I find very discouraging, in fact sometimes in frustration I will say, "So let me think about this, I've had 35 years of experience doing this and you've been working with me for 7 months, but something that you read for 2 minutes on the web makes you think that your decision in this instance is going to be more likely correct than mine"? And they sometimes get the point and sometimes they don't. So that's the second big area. Um, working with patients, convincing them that what we're doing is in their best interest, based on our experience. And this is probably not politically correct, but in these instances we are better at deciding these things.

As an ideal type, clinical experience also includes rejecting the use of standards in clinical decision-making as evidenced by the following two examples. The first quote comes from a late-career female obstetrician who currently works in a hospital-owned practice at a small community hospital in Vermont. The second doctor is a mid-career woman who currently works in a hospital-owned practice at a community hospital in the greater Boston area.

> ACOG has all kinds of guidelines, we don't necessarily follow them...about certain things we feel fervently that we're correct and that ACOG is wrong.
>
> I mean we make, we have all these internal policies about everything. And I do call them laws, and I'm kind of sarcastic about them all the time, well what's the law, and um, and then you kind of look it up on the intra computer system to find out the law, and um, I hate the laws actually. I think they're useful and helpful, but mostly I hate them, because I think it makes...kind of like, rules make you dumb, and make you lazy or stupid...I think there can be this easy slide into kind of like cookbooky stuff and, really the true clinical acumen comes from when it's

> important to break the rules. I mean that's where like, I mean if you wanted a cookbook thing then you don't even need to see an OB, you just look it up on UpToDate and figure out what to do.

UpToDate is an evidence-based clinical decision support resource. Clinical experience discourse frames standards as loose guidelines not rules, and considers the skill of clinical acumen to be knowing how to apply them differently depending on the situation.

Patient Autonomy

Patient autonomy discourse is grounded in the dedication to patients' self-governance of health care decisions beyond the minimal requirements expected of informed consent. The patient's ability to direct her own health care is central in this discourse. Here doctors believe in educating patients of all choices and inviting the patient to be the decision-maker regardless of whether the patient takes initiative to demand this level of education and participation or not. These values may be articulated in terms of 'choice', 'rights', or 'patient autonomy'.

In the following quote a doctor uses patient autonomy discourse by emphasizing that the patient is the primary decision-maker. The doctor is a mid-career woman who currently works in a hospital-owned practice at a community hospital in the greater Boston area; it is actually the same physician from the last quote about disliking cookbook medicine. Below is her response to the following interview question: "What factors do you take into account when making a decision in labor and delivery"?

> Well in the world of OB and pregnancy, I see myself as more as an information deliverer, like here are your options and it's like a Chinese food menu, but ultimately it's not my body and it's not my baby, so I don't even know. I think I make decisions in terms of how to be like directive in my counseling, um, but I'm not doing anything under coercion...So in regards to decision making, it's not just my decision.

Here the patient is the locus of control in the decision-making encounter, and patient knowledge and preferences are considered a legitimate source of knowledge for the decision. The justification for patient autonomy as grounds for decision-making includes rejecting clinical experience as an exclusive basis for a decision. For example, in the narrative below, a mid-career female physician who works in private practice in the greater Boston area frames decision-making based exclusively on clinical experience as an unacceptable paternalistic practice from past.

> The only time I personally ever do an episiotomy is number one with the patients consent so I NEVER DO anything to someone without having them understand like why I am recommending this, and then them saying yes I agree. Which is a very big difference compared to like my mom's time when it was like, you know, the doctor just did whatever they were going to do to the woman and they didn't have a role. They'd like do all sorts of things to ladies 40-50 years ago, it's crazy if you think about it, without their permission without their consent, without their involvement.

Another late-career female physician who is in private practice in the Boston area defends patient autonomy as grounds for a decision by framing standards as secondary to patient autonomy:

> ACOG has a position saying that most experts would recommend inducing the labor right away, but patients always have the right to refuse that or decline. And doesn't it sound different if I say she declined induction versus she refused, you decline an offer, you refuse advice.

Standards

Standards discourse prioritizes standards of care in decision-making. Although various organizations create guidelines for labor and delivery, the most commonly used standards in my data were from the American College of Obstetrics and Gynecology (ACOG), which is the main professional organization for obstetrician-gynecologists in the United States. ACOG publishes practice bulletins to update physicians on the newest

'best practice' standards, and disseminates journals with research articles to inform physicians of the newest evidence for clinical decisions. ACOG's standards are generally accepted as the measuring stick for appropriate care in the US. These are standardized forms of knowledge and practice that originate from outside the doctor or patient's experience to guide decision-making. From this perspective the individuality of the patient or the doctor should not matter, because standards should be applied consistently to call cases. The following narrative reflects this discourse. This comes from a male late-career physician who works in a community hospital in the greater Boston area. Notice that immediately standards are framed in opposition to clinical experience:

> You know in medicine there's always been that way of thinking that there is a thousand ways to skin a cat. Everyone has their own style and art of medicine. But as time has gone on, and especially since I've been in practice since the early and mid-90s to now, things have really evolved to best practices…And there's not a thousand ways to skin a cat, there really is a best way to skin a cat and that's the way we are going to do it.

The same physician goes on to explain how this works in practice in his hospital where they developed a standardized protocol for deciding whether or not to do a cesarean section.

> You know we even have a checklist in labor and delivery. In order to do C-sections for certain reasons you got to make sure you had all of these things happen first. I mean, just that changed the way everyone thought. It's not just, you know, "Oh I think this is going to be a C-section". Now you KNOW, 'cause you've done all the appropriate steps and you haven't missed one…It really is that you want to make sure all your C-sections were done according to those that needed to be done, you know, not because you were afraid or the patient just demanded it, or all that that goes into it, how you make that decision of a C-section versus a vaginal delivery.

Here the physician maintains the locus of control over the clinical encounter because they have professional privileges to access standards, but the source of knowledge is external to the physician and the patient.

Justifying a decision with standards was often paired with the rejection of clinical experience as grounds for a decision. As the vignette above suggests, clinical judgment is subject to fear, personal convenience, and other questionable motivations. For similar reasons, an assertion of standards discourse was often accompanied with a critique of patient autonomy discourse. Like physician judgment, patients' preferences are framed as illegitimate, routinely explained as being ill informed, but also 'selfish' and misguided. Obstetricians also defended prioritizing standards of care over patient autonomy due to the threat of malpractice, as is represented in the quote below from a late-career male obstetrician in private practice at a community hospital in the greater Boston area.

> MD provided care is reasonably standardized because ACOG has reasonably extensive guidelines of what to do and how to do it. As in, if you have blood pressure issues, this is what we recommend you do, these are how patients should be seen, this is how patients should be delivered. If you have twins, these are your options. There is definitely variation amongst that, but it's reasonably standardized...So for example, there is a significant portion of OBGYNs who say this is the way we practice, you must do it this way or otherwise get lost. There is no leeway allowed, because I'm doing this because the ACOG tells me so. And then the unspoken part of it is, because otherwise I'm going to get sued and I don't want to get sued because I'm an obstetrician and I get sued all the time. So many OBs limit the choices of their patients out of what our standard guidelines are and out of fear of malpractice, which is rampant and universal.

The key categories of difference between these three dominant discourses are represented in Table 2.

Table 2

Categories of Difference	Clinical Experience	Autonomy	Standards
Basis of Decision (Knowledge)	Dr.'s Clinical Expertise	Patient Experience & Preferences	EBM/Protocols
Goal/Dr.'s Responsibility	Medically defined healthy mom & baby (usually biopysical health)	Meet patient's definition of healthy birth	Standardized Care 'best practices'
Source of Legitimacy	Professional Status/ Clinical Outcomes	Patient Rights	Standards of Care
Locus of Control over Clinical Encounter	Physician	Patient	Physician
Tools/Resources	experience & judgment, experience of partners, intuition, technical skill	communicating with patients, continuity of care, birth plans	practice guidelines, resea evidence, hospital protoc

In the next section of the paper I set out to understand how the countervailing powers represented in these discourses manifest in practice. It is beyond the scope of a single article to present the possibilities of power relations, so I offer a focused analysis on patient autonomy. I examine how and when obstetrician use patient autonomy in their decision-making, and how they negotiate the tensions between patient autonomy and the countervailing discourses of clinical experience and standardization.

Countervailing Discourses in Practice

A few doctors had one primary discourse that characterized their decision-making. When a physician has a clear dominant discourse his/her decisions are uncomplicated because they have a more black and white understanding of the world. They experience the practice of medicine from a reality where there is one true best way to practice medicine, and that is their way. However, the vast majority of doctors drew on all three countervailing discourses in their decision-making narratives. Instead of using a consistent discourse they skipped around from one discourse to the next depending upon the clinical situation. At one point in their narrative they may draw on patient autonomy and disavow standards to explain their decision-making, and at a later point in the interview draw on standards and disavow patient autonomy.

With respect to patient autonomy, the majority of obstetricians adopted a conditional approach, meaning there were certain situations in which the doctor drew on autonomy discourse and others where they did not. Most (but not all) doctors when speaking in generalities said patients *should* have the right to self-determination over their health care decisions. But when pressed to discuss specific examples of decision-making, the majority revealed the underlying belief that not all decisions are appropriate for this. Clear patterns emerged in the types of clinical scenarios where patient autonomy discourse was activated or rejected in favor of clinical experience and/or standards and these are described below.

Doctors commonly felt patient participation was appropriate in decisions characterized by medical uncertainty and where there are multiple treatment options to choose from that are medically neutral. Clinical uncertainty was described as a situation where neither standards nor clinical experience led to an obvious decision. This mirrors findings from other studies that show how patient-centered care is one way physicians deal with uncertainty in clinical decisions (Diamond-Brown 2016). However, doctors' understandings of which decisions are characterized by medical uncertainty and appropriate for patient input was highly subjective and varied dramatically. So did doctors' ideas about which decisions have multiple options appropriate for the patient to choose among. Take for example the following two vignettes. The first obstetrician is a mid-career male who is a faculty member for an academic hospital practice in Louisiana. He says IV access is not something he/she allows patients to decide, whereas the second obstetrician lists IV access as a decision "where there's more than one option" and appropriate for patient autonomy. The second obstetrician is a late-career female who

works for a large health care organization and delivers at a tertiary care center in the greater Boston area.

> Example 1) So a non-negotiable would be that they need to have IV access. Some women won't want any IVs but they need to have IV access in case there's something catastrophic.
>
> Example 2) I think if there's a situation where there's more than one option, I mean, having pain meds, using Pitocin, having an IV or not having an IV, I mean I think this is, I see my role is to tell the patient, what I think the assets and liabilities of the approach are, and then, they can decide.

In addition to medical uncertainty, another common condition for patient input in decision-making hinged upon the phrase repeated frequently: "if everything is going smoothly." For example, the following doctor explained that it is fine if a patient does not want Pitocin to speed up her labor *as long as* her and the baby's health status remain good. This doctor is a late-career male who works in a hospital owned solo practice in rural Louisiana.

> I have patients who don't want to be on Pitocin, and um, I mean I respect that, [she can give birth] in 6 hours or 8 hours, or we can have a baby in 20 hours… as long as you don't have any fever and the baby looks ok we'll go that route. I don't, I don't agree with that, but if the patient, you know, you have to respect what the patient wants.

In this example the doctor was clear that his preference was to use Pitocin to speed up the labor. However, he was willing to allow patient autonomy to govern this decision under the condition that there were no medical complications with the labor. This 'healthy mom healthy baby' caveat was almost universal among the doctors who articulated conditional autonomy. The health status of the mother and baby and the doctor's perception of risk are highly subjective and variable like the assessment of medical uncertainty. In both

cases the doctors' clinical experience is the arbiter for the legitimacy of patient autonomy in the decision-making process.

One of the more interesting patterns of situational autonomy was when it is conditional upon patient self-advocacy. This means when a patient presents preferences to the doctor, the doctor follows them, but if the patient does not have a birth plan or does not self-advocate for specific preferences, the doctor relies on clinical experience or standards rather than making an effort to educate the patient and/or draw out her preferences. This occurred even for doctors who showed a strong dedication to patient autonomy and spent a large chunk of the interview expounding upon autonomy and disavowing standards and clinical experience. Yet when I asked how they make decisions for a patient without articulated preferences, they said they do active management of labor and justified it with clinical experience discourse.

The interview segment below is an example of this phenomenon. This doctor is a late career obstetrician who has solo practice owned by a large health care organization in Louisiana. She speaks extensively in the interview about following patient preferences and being popular in her area for women who want natural birth because she supports their choices.

> As I said I'm a big believer in doing the personalized birth plans and I think it's very important to talk with them and not to assume that they all want medicated births and that they all want intervention, or continuous monitoring, or rupture, or Pitocin afterward. I think that's very important.

But see her response when I ask about a patient who does not articulate preferences:

> Researcher: And for patients who aren't necessarily seeking that out [natural birth] but are just like 'I want whatever you recommend' and don't have a set of expectations, what would be your standards for approaching labor?

> Obstetrician: Uh, for those patients I actually just try and get them delivered. So yes I would rupture them or when it's time, I would offer them an epidural and use Pitocin, active management of labor. That's how I was brought up and trained in Britain as well as here...we would just get the patients out. Plus we were in such a busy hospital… we would have to do active management.
>
> Researcher: So is there ever a time pressure here from there being not enough beds or?
>
> Obstetrician: No, not really. But I've found, I think the anesthesiologists, they sometimes put some pressure on me. And I think that's why I practice active management here. I think I have this reputation now, "Oh it's Dr. (name), so we'll have to stay in the hospital 'till about 8 or 10 this evening. She will make sure her patient delivers vaginally". But the other doctors by 5, 10 they would have done their delivery be it a section or vaginal delivery.

In this case patient preference for natural birth motivates the doctor to practice differently than she was trained and resist pressure from anesthesiologists to speed up the labor with active management. But if a patient does not specifically articulate this preference, then active management takes precedent, a practice grounded in both her own clinical experience (training in Britain and the U.S.) and the local professional norms of her colleagues. Thus the doctor's internal value system includes multiple approaches and they are activated differently depending upon the organizational environment and patient interaction.

This suggests that the activation of patient autonomy hinges in part upon a doctor's judgment of the patient's preferences. I also found it is sometimes conditional upon the doctor's judgment of the worthiness of the patient's preference. For example, the physician below is a late-career female obstetrician who works in a group private practice in the greater Boston area. Here she is explaining the conditionality of patient autonomy in her practice.

> Yeah, anything that violates the CDC guidelines, that is out of the guidelines of the hospital I won't care for those patients. We'll have some dialogue, like I have a patient right now who is very young, seems very educated, but almost to a fault, like she just thinks she is really really smart and every interaction we've had has been negative. Now I'm willing to sort of say ok, do you know that you're going outside the guidelines and right now it doesn't matter but it's going to matter later in pregnancy, so if you now say to me, at the end of your pregnancy you're going to refuse this, I can't care for you because I can't care for someone that won't do what the hospital requires... So um, I won't bend the rules. But I would for say a Jehovah's Witness. We have patients who are Jehovah's Witnesses and I would feel very very, it would make me very uncomfortable, but I would care for them, because I believe they have a strong belief and their ability to make that decision comes with a lot of education, and even though they might die having a baby and I couldn't give them a blood transfusion to save their life, as long as I had that dialogue with them, even though I disagree with it completely, I would absolutely think it's the stupidest thing in the world to die when all you need is a blood transfusion when you're having your baby, I would still do it.

In this case the young woman is framed as having illegitimate preferences and the doctor explains that she would not honor her requests to go outside the guidelines. Standards discourse is drawn on to defend this choice. Many physicians appealed to standards of care as a justification for not granting patients autonomy. However, the doctor is willing to "break the rules" for the Jehovah's Witness because she believes her preferences are legitimate.

Doctors were largely able to maintain clinical autonomy by offering patients this watered down version of conditional autonomy. However, conditional autonomy only worked when a patient accepted the doctor's conditions and follows the doctor's recommendations. When patients resisted, doctors described various tactics of persuasion that mirror findings from other research (Robertson et al.; Vincon 2016). If these failed and a patient rejected the doctor's recommendation, the physician was forced to make a choice between honoring patient autonomy or not. The narrative below is an example of this kind of situation. This OB is an early career male in a small hospital-owned practice

in rural southern Louisiana. At this point in the interview I had just asked about patients who prefer a less interventive or 'natural' approach to labor and birth.

> Obstetrician: Down here it's, it's a sizable portion, I'd say roughly 50%. Um, I've had very few that if I make a recommendation they refuse. If we identify a problem, if the baby has a few decels or if she has hypertension or something and I just want them to be on the monitor I've had very very few that just say no. I've had a couple, but very few...I've had a few people during their preadmit tell me, "Well I really want to do it this way and so on and so forth, no epidural, I want to be able to walk around and do things as natural as possible". And I just tell them, look, I'm good with that. As long as everything else is ok, as long as we don't have any reason to suspect that the baby is in trouble, as long as you're progressing and so on and so forth. Now, if something comes up and I always stress that sometimes things do. I would like to be able to, for us to be on the same page, and for you to be compliant with my recommendations. Um, everybody except for one patient has. She told me she would but when it came down to it, I thought she needed a C-section and I told her that many times, and she kept refusing, kept refusing, and we ended up having a vaginal baby, but, there were some issues.
>
> Researcher: I see, so she just refused?
>
> Obstetrician: She just flat out refused. That's a difficult situation for an OB to be in.
>
> Researcher: Yeah I bet, 'cause you think something could be happening with the baby?
>
> Obstetrician: And it was. But, again that's patient autonomy; they have the right to refuse treatment if they want it. And as a physician my feeling is, you are obligated to listen to her, you can thoroughly explain everything to 'em and if they still don't want it. There's not much you can do at that point.

These situations in which countervailing powers come to a face off can be dramatic. How doctors negotiated this conflict depended upon the relative strength of the countervailing discourses to their professional identity. One of the clearest ways to illustrate this is with a paired example. The two vignettes below show how two doctors respond differently to a similar situation, the first affirms patient autonomy and the

second rejects it. Both cases occurred in academic medical settings and the doctors telling the stories were women currently working in Boston, MA. The first is an early-career obstetrician, the second late career.

> Another thing that we sort of see a lot, especially as a sort of cultural difference is the willingness or not willingness to have a cesarean section. For instance, we have a doctor who cares for a lot of African patients and um, they never want to be induced, and they never want to have C-sections and that's because they come from a culture where a) that doesn't happen and they're not used to highly medicalized care, and b) they're sort of used to a world in which not all babies do survive, and what happens happens because nature and God wants it to happen. And if, if they decline a cesarean section and their baby dies, that might be okay with them in a way that's very different than our sort of American mentality of like, well we can save your baby. And that is an issue that has come up in my training several times and it's very very difficult. And, again that's where a physician's own sensitivity is important. Because the truth is our primary responsibility is to the woman, um, and, doing a surgery on someone without their consent is assault and not okay.

I interpret what this doctor refers to as "physician's own sensitivity" as the strength of patient autonomy discourse in their professional identity. The obstetrician above has a strong dedication to patient autonomy and thus believes forcing a woman to have a C-section is "assault." For comparison, consider the narrative below that has an opposite take on the same clinical scenario.

> We had a very high population from Somalia...The following pattern was very popular with the Somali patients, which is they would accept the evaluation, but they would not accept the intervention. Because they would explain that it was Allah's will, and also they had to accept the men in their family for permission. So when I was in [State] I accumulated lots of examples of this...There was another example where the baby was breech, she kept saying "Allah's will", so then she came in in labor and the baby was breech, one leg was out, and we would ask "Can we do a cesarean the leg is turning blue"? And she would ask the men and they'd say no, and we had to get a court order.

This doctor rejected patient autonomy in this case. She believes she should force a patient to do something if her clinical experience suggests the patient's directive will

cause physical harm to the woman or her baby. This means that the patient declines the doctor's recommendations, but that the doctor legally forces the woman to follow their clinical order by bringing a judge into the labor (For an analysis of court-ordered interventions in childbirth see Paltrow & Flavin 2013). These two physicians have fundamentally opposite perspectives on the right way to handle this situation, and they lead to dramatically different patient care outcomes.

This is a clear example of the implications for the way countervailing discourses are understood and used in practice. The second vignette also shows how the law can be used as a strong-arm extension of standards and/or clinical experience over patient autonomy. For doctors with a strong dedication to patient autonomy these situations were experienced as difficult ethical dilemmas between the value of patient autonomy and their medical oath to do no harm. Doctors described these as stressful situations and felt the decision was a double-edged sword where they had to sacrifice one of two ideals they felt committed to.

Discussion

To summarize my findings, I found that obstetrician's narratives about decision-making in childbirth were characterized by three competing discourses: clinical experience, standards, and patient autonomy. I offer a typology of these discourses that includes the positive characteristics of each, as well as the way each is defined by disavowing the other two. This illustrates the contested nature of the discourses as countervailing powers that compete for legitimacy in clinical decision-making. The prevalence of standards and patient autonomy discourse in the narratives suggests both

movements have successfully penetrated the medical profession and serve as challenges to physician power.

Building on Bensing (2000) and Reiger and Morton (2012) my description of each discourse includes identifying the locus of control over the clinical encounter and the legitimate source of knowledge for a clinical decision, this is represented in Table 3.

Table 3

	Clinical Experience	Standards	Patient Autonomy
Locus of Control over Clinical Encounter	Physician	Physician	Patient
Source of Knowledge for Decision	Physician	External Third Party	Patient

Bensing (2000) argues that control and content are independent elements of a decision. While this is true in theory, in practice there were strong relationships between the two. When doctors drew on clinical experience discourse to describe and justify a decision, the locus of control and the source of knowledge were almost always the physician. Bensing (2000) argues that physician control could be paired with patient-centered knowledge: "But there is also the empathetic paternalistic doctor who gives his patients plenty of room to tell their whole story, but who at the same time is firm in his decisions about the right medical treatment...(p.22). Doctors in my data may listen to patients tell their stories, but this does not mean that they are going to integrate patient's

knowledge or desires into their clinical judgments. Empathy did not translate into knowledge/power in decision-making unless the doctor was drawing on patient autonomy in conjunction with clinical experience.

In theory, the combination of patient autonomy and clinical experience reflects a shared decision-making model (Charles, Gafni & Whelan 1997; 1999). Shared decision-making from a countervailing powers perspective means the doctor concedes some decision-making authority to the patient. The obstetricians in this study felt patient participation was appropriate in certain but not all decisions, these included cases of medical uncertainty, where two medically neutral choices were present, when there were no medical complications, when the patient self-advocated, and when the physician approved of the patient's motivation for their choice. Furthermore it was only successful in cases where the doctor's clinical experience more or less agreed with what the patient wanted. When patient preferences and clinical experience contradicted, then one had to be ultimately prioritized over the other and it was not equally 'shared.' Power tilts in one way or the other. If it tilts in the direction of the doctor's clinical experience, then it is because they maintain power over the control and the content of the decision. If it tilts in the direction of the patient, it is because the doctor believes the patient should be the source of knowledge/power. In practice knowledge/power are best understood as interdependent.

With respect to the question of whether obstetricians maintain clinical discretion in the face of standardization, my findings complicate Morris's (2013) argument that obstetricians' decision-making power is constrained. It intervenes in this argument because I found that doctors have agency to resist political pressure and 'break the rules.'

However, it is up to a doctor to actively resist a number of pressures in order to protect their patient's autonomy. This raises a question about what patients doctors are willing to fight for. Since judgment of patient worth is well established in social studies of medicine (Jeffery 1979; Roth 1972; Vassy 2001), I would hypothesize that doctors are more likely to 'go out on a limb' and break standards to grant patient autonomy for privileged patients.

One of the conclusions we can draw when examining power/knowledge across the competing discourses of patient empowerment, standards and clinical experience, is that in the current environment of countervailing powers there are more legitimate justifications for denying patients autonomy than granting it. This is visually depicted in Table 3 where the physician has three knowledge/power squares and the patient only two. Nevertheless, there were multiple cases in my data where obstetricians willingly conceded power to patients. This conflicts with Vincon's (2016) findings that doctors resist the countervailing power of patient empowerment. My findings show a more varied picture and suggest that the field of obstetrics is characterized by contestation over the role of patient empowerment. While patient empowerment as a countervailing power has reduced some physicians' clinical autonomy, other physicians successfully resisted challenges to their autonomy, be it from standards and patient empowerment.

One of the mechanisms of resistance used by obstetricians in this study is to capitalize on tensions between standardization and patient empowerment to legitimize clinical experience and maintain professional authority. This reveals how countervailing power relations do not necessarily link to practice in ways that mirror power relations at the macro level. For example, we would expect standardization to reduce doctors' clinical

discretion by replacing clinical judgment, knowledge linked exclusively to physician power, with external forms of knowledge/power. However, I found obstetricians appealed to standards when a patient challenged their clinical recommendation. So here standards are actually being used to increase physician authority. Likewise, patient empowerment can be understood on the macro-level as a reduction of physician power. However I found multiple cases when doctors justified breaking standards of care with an appeal to patient autonomy, thus patient empowerment enables physicians to increase their power in the face of challenges by third parties via standardized guidelines.

This confirms other work that shows that physicians are highly adaptable to changes in the social structure of health care and their particular local environments of practice (Timmermans & Oh 2010; Vincon 2016). In this study doctors negotiate countervailing powers in their clinical work by drawing on discourses selectively to match the situation at hand in order to achieve the care decisions that best align with their professional identity and the expectations they face from management, colleagues, and patients. It is ultimately up to the physician to decide how to negotiate these boundaries. Physician authority grants a broad stroke of legitimacy so that they can find a way to justify a very wide ranging set of practices.

In conclusion theorizing standardization of medicine and patient empowerment as countervailing powers to physician authority allows us to examine the dynamic flow of power struggles as they are enacted in everyday clinical decisions. These forces have not brought change to obstetric decision-making in a blanketed way, but rather certain doctors have adopted these values into their professional identity and clinical style and others have not. With respect to patient empowerment, most doctors have adopted a

conditional approach, which ultimately maintains their discretion over clinical decisions. Medical authority is reproduced even in the face of challenges from countervailing powers as doctors capitalize on tensions between standardization and patient empowerment to legitimize clinical experience. For those obstetricians who are dedicated to autonomy, they experience intense ethical stress over decisions where in following patient preferences they believe they are doing the patient harm. One way this stress could be alleviated is through expanding 'do no harm' to include psychosocial elements of safety (Reiger & Morton 2012). Those obstetricians who are resentful of patient empowerment and reject patient participation in decision-making are a reminder that paternalism is not something relegated to the past. These findings are consequential and timely as women continue to voice opposition to obstetric dominance in childbirth, and as maternity care experts seek models of care that meet the needs of women, produce positive health outcomes, and lead to satisfying careers for medical professionals.

References

Abbott, Andrew. 1988. *The System of Professions*. Chicago, Ill: The University of Chicago Press.

Almeling, Rene. 2015. "Reproduction." *Annual Review of Sociology* 41(1):423–42.

Armstrong, David. 2002. "Clinical Autonomy, Individual and Collective: The Problem of Changing Doctors' Behaviour." *Social Science & Medicine* 55(10):1771–77.

Bensing, J. 2000. "Bridging the Gap.: The Separate Worlds of Evidence-Based Medicine and Patient-Centered Medicine." *Patient Education and Counseling* 39(1):17–25.

Berg, M. 1997. "Problems and Promises of the Protocol." *Social Science & Medicine* 44(8):1081–88.

Charles, C., A. Gafni, and T. Whelan. 1999. "Decision-Making in the Physician-Patient Encounter: Revisiting the Shared Treatment Decision-Making Model." *Social Science & Medicine (1982)* 49(5):651–61.

Charles, C., A. Gafni, and T. Whelan 1997. “Shared Decision-Making in the Medical Encounter: What Does It Mean? (Or It Takes at Least Two to Tango).” *Social Science & Medicine* 44(5):681–92.

Charmaz, K. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. 1 edition. Thousand Oaks, CA: SAGE Publications Ltd.

Crabtree, B. and Miller, W. 1999. “A Template Approach to Text Analysis: Developing and Using Codebooks.” Pp. 163–77 in *Doing Qualitative Research*, edited by Crabtree, B. and Miller, W. Newbury Park, CA: Sage Publications.

Davis-Floyd, R. 1992. *Birth as an American Rite of Passage*. Berkeley: University of California Press.

Eliot Freidson. 1970. *Professional Dominance: The Social Structure of Medical Care.* [1st ed.]. New York, Atherton Press.

Epstein, R. M. et al. 2005. “Measuring Patient-Centered Communication in Patient–Physician Consultations: Theoretical and Practical Issues.” *Social Science & Medicine* 61(7):1516–28.

Gwyn, R. and Elwyn, G. 1999. “When Is a Shared Decision Not (Quite) a Shared Decision? Negotiating Preferences in a General Practice Encounter.” *Social Science & Medicine* 49(4):437–47.

Hafferty, F.W. and Light, D. 1995. “Professional Dynamics and the Changing Nature of Medical Work.” *Journal of Health and Social Behavior* 35:132–53.

Haug, Marie R. 1988. “A Re-Examination of the Hypothesis of Physician Deprofessionalization.” *The Milbank Quarterly* 66:48–56.

Haug, M. and Lavin, B. 1983. *Consumerism in Medicine*. Beverly Hills, CA: Sage Publications.

Hilligoss, B. 2014. “Selling Patients and Other Metaphors: A Discourse Analysis of the Interpretive Frames That Shape Emergency Department Admission Handoffs.” *Social Science & Medicine* 102:119–28.

Horkheimer, M. 1972. *Critical Theory: Selected Essays*.
Ishikawa, H., Hashimoto, H. and T. Kiuchi. 2013. “The Evolving Concept of ‘patient-Centeredness’ in Patient–physician Communication Research.” *Social Science & Medicine* 96:147–53.

Jeffery, R. 1979. “Normal Rubbish: Deviant Patients in Casualty Departments.” *Sociology of Health & Illness* 1(1):90–107.

Jordan, B. and R. Davis-Floyd. 1993. *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States*. Prospect Heights, Ill.: Waveland Press.

Katz Rothman, B. 1982. *In Labor : Women and Power in the Birthplace*. 1st ed.. New York: Norton.

Kitchener, M., Caronna, C. and S.. Shortell. 2005. “From the Doctor’s Workshop to the Iron Cage? Evolving Modes of Physician Control in US Health Systems.” *Social Science & Medicine* 60(6):1311–22.

Lambert, H., E. J. Gordon, and E. A. Bogdan-Lovis. 2006. “Introduction: Gift Horse or Trojan Horse? Social Science Perspectives on Evidence-Based Health Care.” *Social Science & Medicine* 62(11).

Lambert, H. 2006. “Accounting for EBM: Notions of Evidence in Medicine.” *Social Science & Medicine* 62(11):2633–45.

Light, D. and S. Levine. 1988. “The Changing Character of the Medical Profession: A Theoretical Overview.” *The Milbank Quarterly* 66:10–32.

Light, D. 1991. “Professionalism as a Countervailing Power.” *Journal of Health Politics, Policy and Law* 16(3):499–506.

Mancini, M.A. 2011. “Understanding Change in Community Mental Health Practices through Critical Discourse Analysis.” *British Journal of Social Work* 41(4):645–67.

McDonald, R., Cheraghi-Sohi, S., Bayes, S., Morriss, R., and J. Kai. 2013. “Competing and Coexisting Logics in the Changing Field of English General Medical Practice.” *Social Science & Medicine* 93:47–54.

Mckinlay, J. and L. Marceau. 2002. “The End of the Golden Age of Doctoring.” *International Journal of Health Services : Planning, Administration, Evaluation* 32(2):379–416.

Mechanic, D. 1991. “Sources of Countervailing Power in Medicine.” *Journal of Health Politics, Policy and Law* 16(3):485–98.

Morris, T. 2013. *Cut It out: The C-Section Epidemic in America*.
Mykhalovskiy, E. and L. Weir. 2004. “The Problem of Evidence-Based Medicine: Directions for Social Science.” *Social Science & Medicine* 59(5):1059–1069.

Numerato, D., Salvatore, D., and G. Fattore. 2012. “The Impact of Management on Medical Professionalism: A Review.” *Sociology of Health & Illness* 34(4):626–44.

Paltrow, L. and J. Flavin. 2013. “Arrests of and Forced Interventions on Pregnant Women in the United States, 1973–2005: Implications for Women’s Legal Status and Public Health.” *Journal of Health Politics, Policy and Law* 38(2):299-343.

Pope, C. 2003. “Resisting Evidence: The Study of Evidence-Based Medicine as a Contemporary Social Movement.” *Health* 7(3):267–82.

Quadagno, J. 2004. “Physician Sovereignty and the Purchasers’ Revolt.” *Journal of Health Politics, Policy & Law* 29:815–34.

Reich, A. 2012. “Disciplined Doctors: The Electronic Medical Record and Physicians’ Changing Relationship to Medical Knowledge.” *Social Science & Medicine* 74(7):1021–28.

Reiger, K., C. Morton. 2012. “Standardizing or Individualizing? A Critical Analysis of the ‘Discursive Imaginaries’ Shaping Maternity Care Reform.” *International Journal of Childbirth* 2(3).

Roth, J. A. 1972. “Some Contingencies of the Moral Evaluation and Control of Clientele: The Case of the Hospital Emergency Service.” *American Journal of Sociology* 77(5):839–56.

Simonds, W. Katz Rothman, B. and B. Meltzer Norman. 2007. *Laboring on: Birth in Transition in the United States*. New York: Routledge.

Starr, P. 1982. *The Social Transformation of American Medicine*. New York: Basic Books.

Timmermans, S. and A. Angell. 2001. “Evidence-Based Medicine, Clinical Uncertainty, and Learning to Doctor.” *Journal of Health and Social Behavior* 42(4):342–59.

Timmermans, S. and H. Oh. 2010. “The Continued Social Transformation of the Medical Profession.” *Journal of Health and Social Behavior* 51:S94–106.

Vassy, C. 2001. “Categorisation and Micro-Rationing: Access to Care in a French Emergency Department.” *Sociology of Health and Illness* 23(5):615–32.

Vinson, A. 2016. “‘Constrained Collaboration’: Patient Empowerment Discourse as Resource for Countervailing Power.” *Sociology of Health & Illness* 38(8):1364–78.

Chapter Four: Obstetric Culture and Births of Convenience

Introduction

"This is not a Pollyanna World": Introducing Births of Convenience

In the cafeteria of a community hospital in rural Vermont in 2015, I sat with an obstetrician as he explained his process of decision-making in childbirth. In the context of discussing how his style of practice compares to other obstetricians, he said the following:

> This facility has a very low C-section rate...which is a testament to the providers, you know the OB providers, specifically the docs I would say. But there are, there are factors that are always going to come into play that, it's, it's you know, how much time is a doctor going to spend here at 2 o'clock in the morning playing around with the strip[1] before they say "I'm tired let's just get this shit over with". Um, and that, you're never, you're not going to know about that. The public's not going to know about that. Because surgeons in general no matter what specialty can justify a lot of things depending upon how they're feeling at that moment. I mean it's not, this is not a Pollyanna world where everything is just and perfect and everyone is doing the right, quote un quote, right thing.

While the public may not know for certain that a doctor's decision is driven by convenience, convenience-driven decisions in childbirth are part of the public imagination. The 2014 *New York Times* article "In Delivery Rooms, Reducing Births of

[1] "The strip" refers to the output from an electronic fetal monitor that is placed on the laboring woman to monitor the heart rate of the baby. A dip in the baby's heart rate on this strip is a common indication for a cesarean section. The output of the monitor is notoriously inconclusive and produces lots of false positives, but it has become a standard diagnostic requirement from a medical legal perspective. See X for an extensive discussion of this. "Playing around with the strip" refers to the doctor trying to figure out if there is an indication for cesarean or not. In this quote the doctor suggests that the doctor's own convenience can play a role in this decision.

Convenience," the investigative journalism book *Pushed* (Block 2007), and the documentary *The Business of Being Born* (2008), all critique obstetricians for doing unnecessary interventions for their own convenience. Feminists and women's health advocates have argued for decades that obstetricians do not always make decisions based on what is best for the childbearing woman (Kitzinger 1990; Reiger, 2001). In this study I use in-depth interviews with obstetricians about decision-making in childbirth to examine how obstetricians understand convenience as a motivation.

I did not intend to study convenience. As part of a larger project on obstetric decision-making more broadly, I performed 50 in-depth interviews with obstetricians in the United States about the factors that shape their patient care decisions in childbirth. The topic of convenience emerged spontaneously. As doctors talked with me about decision-making in birth, they discussed convenience as they described their philosophies and styles of practice. Convenience in this context means using medical interventions in order to plan a birth according to a time that is convenient for the physician, or to speed up a birth so that the doctor can finish the delivery sooner rather than later. There is an absence of scholarly work on how convenience affects obstetricians' decisions in birth, but the ethical and public health implications for a doctor performing unnecessary medical interventions are serious, and thus this became a critically important thread for me to follow.

The more recent attention given to convenience-motivated decisions in birth by the mainstream press comes in parallel of an ongoing "crisis" in American maternity care (Corry, 2011). Between 1990 and 2013, maternal mortality more than doubled in the United States, and is higher than most other high-income countries (WHO 2014). As

authors from a 2013 article in the *New England Journal of Medicine* explain, "An increase in maternal mortality within the United States has become a troubling trend over the last decade. Furthermore, the increase in maternal mortality is only a small fraction of the problem as maternal morbidity is 50 times more prevalent" (Iriye et al.). Medical experts argue that half of all maternal deaths in the US are preventable (Main & Menard 2013). There is concern that convenience is driving unnecessary interventions such as C-sections (Johnson 2010, Rosenburg 2014), which are a key risk factor for maternal mortality and morbidity (Main & Menard 2013). Furthermore, activists continue to highlight women's accounts of doctors manipulating or forcing them into unnecessary cesarean sections (International Cesarean Awareness Network, icanonline.org; Improving Birth, improvingbirth.org).

Literature Review

To suggest that a doctor decides to do an unnecessary surgery for their own convenience is a serious accusation that flies in the face of medical ethics. While we do not have a great deal of scholarly research on convenience as a motivation in obstetric decision-making, there are many ways research has focused on what *seems like* an issue of convenience, that is unnecessary cesarean sections. Indeed the little anecdotal evidence we do have about convenience in obstetric decision-making suggests that cesareans are a sometimes done for the doctor's convenience. For example, in an article in *Kaiser Health New*s (2010) obstetricians say that they feel pressure to perform a C-section when a birth is taking a long time and they want to go home. Dr. Tracey Flanagan, director of women's health at Kaiser Permanente Northern California explains, "You are sitting in labor and delivery for 12 hours and she's barely making progress, and your family is

yelling at you wondering when you are going to come home...There's tremendous pressure."

This discussion of convenience as a motivation for an obstetrician to perform an otherwise medically unnecessary cesarean section emerges within the context of growing concern with an overall increase in cesarean sections in the US, as well as significant variation in the use of cesarean sections by obstetricians. The national C-section rate in the US in 2013 was 33%, which represents a 50% increase within a decade (Declercq 2015); but this rate is not consistent across all hospitals and or physicians. Hospital C-section rates have been shown to vary by up to 500% (Rosenburg 2014). Even doctors within the same hospital have tremendous variability; one study found C-section rates among 11 doctors in single hospital varied from 19.1 to 42.3 percent (Goyert et al. 1989). Cesarean sections are a life-saving surgery that play an important role in maternity care; however, experts argue that the current high rates of C-sections in the US and the tremendous variability of those rates (when controlling for patient level risk factors) indicate that some obstetricians are performing unnecessary cesarean sections (Declercq 2015; Main & Menard 2013; Morris 2013). Reducing unnecessary cesarean sections is now a primary focus of public health efforts to improve maternal fetal health (Healthy People 2020; Obstetric Care Consensus 2016). A large body of interdisciplinary research seeks to explain what non-medical factors lead an obstetrician to perform a cesarean section in a birth.

Much of this work is quantitative research that tests various patient, practice, and physician factors as predictors of cesarean section rates using practice data from live births. For example, Goyert and colleagues (1989) studied 1,533 low risk women cared

for by 11 different obstetricians in a single community hospital and found the primary (not repeat) cesarean section ranged from 19.1 to 42.3 percent. They statistically tested different factors as explanations for this variation and conclude that a doctor's cesarean section rate was "not attributable to the practice setting, the patient population, the degree of obstetrical risk, or the physician's recent medicolegal experience, and it was not accompanied by corresponding differences in neonatal outcome." Instead they suggest that the "physician factor" has a significant effect on predicting cesarean sections, but they do not examine what it is about the physician that leads to variation in their use of cesarean sections.

In 2003 Luthy and colleagues build on Goyert and colleagues (1989) work by testing the independent effect of the physician who managed the last two hours before the birth in a cesarean section risk delivery model on a larger and more diverse sample of patients and physicians. They examine 6563 deliveries at a large metropolitan hospital using a cesarean delivery risk model that controls for characteristics of the patient, physician, and birth; they conclude that adding the physician factor adds a significant independent effect to the likelihood of cesarean delivery. This study reconfirms that the attending physician managing the birth is a significant predictor of whether or not the woman will have a cesarean section, but what it is exactly about a physician is not defined. They suggest factors that are not suitable for statistical modeling such as attitude may be at play.

Public health research that examines obstetric uses of cesarean delivery on the larger national level draw similar conclusions. In an extensive analysis of national variation of C-section rates, the Birth by Numbers team at Boston University's School of

Public Health show that variation in the use of cesarean delivery in birth has to do with individual physician style rather than the health status of the patient or larger macro trends affecting the field of obstetrics as a whole (Declercq 2015). This work importantly rules out common false explanations for the national increase of cesareans such as maternal age or obesity, but it leaves us questioning what does drive these decisions. The undercurrent of this research for those concerned with unnecessary cesareans is that if some doctors perform more C-sections than others, some of these must be unnecessary, and one of the explanations for why a doctor would perform an unnecessary surgery is their own convenience.

An explanation for why some doctors would do an unnecessary cesarean section that has become popular recently in the press and scholarly research centers upon the difference between on-call and shift work models of obstetric work in labor and delivery. This research engages more directly with the topic of convenience as a motivator for cesarean sections. In on-call models obstetricians are available for their patients' births, meaning they have to leave office hours or come in to the hospital outside of 8-5 weekday hours. The thinking goes that if a doctor has to be at the hospital for a birth during office hours, on the weekend, or late at night, they may do a medically unnecessary cesarean section to expedite the delivery. On-call small practice models like this are increasingly being replaced in obstetrics by large group models where multiple doctors share call shifts for labor and delivery, and the use of laborists, obstetricians who remain in the hospital for set shifts and attend all labor and delivery patients admitted during their scheduled time (Rayburn 2011). When a doctor is working a set shift for labor and delivery they have scheduled their life around the shift already so it is not

inconvenient to be there. In some cases groups require doctors to be in the hospital for their entire time on call, like a laborist; in this case the doctor has to be there until the end of their shift anyway so they are not motivated to expedite a birth so they can leave.

The logic in this theory is that shift work will reduce unnecessary cesareans by reducing the motivation of convenience inherent in on-call models of work. This idea is popular in the mainstream press, (Rosenburg 2014; Johnson 2010) and it was also regularly repeated in my interviews. However, research on this explanation reveals inconclusive results. Iriye and colleagues (2013) studied C-section rates in one hospital at three different points in time as they transitioned from a traditional on-call model, to a model where doctors shared call in a group, to a full time laborist model. They found that the C-section rate dropped from 39.2%, to 38.7% to 33.2% respectively. Whereas Feldmen and colleagues (2015) found that the introduction of a laborist did not reduce cesarean deliveries in a different hospital. Metz and colleagues (2016) examined clinical decisions of 20 laborists within a single hospital and found significant variation among C-section rates. This suggests that individual laborists (who are all working shifts), not just laborists as compared to on-call obstetricians, are also more or less likely to perform interventions. Metz and colleagues (2016) conclude that more research on "physician practice style" is needed in order to understand this variation.

What all of this literature has in common is the conclusion that there is something about the way obstetricians make decisions in labor and delivery that make them more or less likely to perform a cesarean section, but we do not know what this something is. While convenience is alluded to in the shift work hypothesis presented with the research on organizational model of work, it is not meaningfully addressed. There is a clear need

for qualitative research on obstetric decision-making that can meaningfully explain obstetricians decision-making process and why doctors make the decisions they do within the context of their work experience.

In 2013 T. Morris published an organizational analysis of C-sections that uses interviews with obstetricians, as well as patients and other maternity health professionals to try to explain the national rise in cesarean rates. She frames obstetric decisions about cesareans within an organizational imperative of hospitals to reduce legal risk associated with malpractice. She argues that hospitals seek to avoid legal risk though increasing protocols of care in labor and delivery, and that these protocols lead to a systematic increase in cesareans. Morris discounts the role of convenience as an outdated phenomenon drawing on the shift-work reduces births of convenience theory: "It may be that some physicians are performing c-sections to go play golf or to go to dinner, but with most physicians operating in group practices this is not as much of a concern as it used to be with solo practices (51)." Instead she argues that C-sections of convenience are a symptom of larger organizational constraints obstetricians face with malpractice liability. While this may be the case, variability in obstetricians' use of C-sections suggests doctors understand and respond to these structural conditions differently. Her study offers important qualitative insights to the process of obstetric decision-making by highlighting doctors' experiences of the way malpractice weighs upon their decisions in birth. Like the public health research, this study offers an explanation for overall increase in cesarean rates, but it cannot explain variation in C-section rates between obstetricians facing the same structural constraints.

From this data on C-sections we can conclude that there is great variation in obstetric practice style and a wide range of statistical analyses have failed to consistently show organizational factors, physician demographics, patient-level factors, or characteristics of the birth process itself as determinants of this variation. Instead multiple studies point to the "physician factor" as a potential determinant- but this remains elusive. There appears to be something about the way an individual doctor makes their clinical decisions that shapes if they decide to do a cesarean. Anecdotal evidence suggests convenience may be a motivation in doctors' decision-making process. Therefore I seek to investigate doctors' understandings of convenience in decision-making to shed light on the meaning of convenience to their decision-making process as one potential explanation to what differentiates obstetric style of practice. Because so little is known about convenience-motivation in obstetric decision-making, I do not want to limit my investigation of convenience to C-sections; a more open ended exploratory approach is more appropriate. Therefore I ask: how do obstetricians talk about convenience? What are the clinical contexts in which it emerges as a theme in obstetricians' decisions in birth? Is there variation in how they understand convenience as a motivation in decision-making, and if so how do these differences affect their practice? Through answering these questions I seek to meaningfully examine doctors' decision-making processes to understand their perspective on the role of convenience in the context of their work in labor and delivery.

Methods

Data Collection and Sample

This paper is based on 24 interviews with obstetrician-gynecologists from the United States about decision-making in childbirth gathered between October 2013 and August 2015. My home institution's ethical review board approved this study. These 24 interviews are a subsample selected from a total of 50 interviews for a larger project. These 24 interviews were selected for this analysis because the topic of convenience spontaneously emerged in the interview. Of these 24 obstetricians, 14 are male and 10 female, 6 practice in Massachusetts, 13 in Louisiana, and 6 in Vermont. Seven practice in an academic medical center/tertiary care center, and 17 in community hospitals. Six work in large physician groups where they work scheduled shifts in labor and delivery, 5 work in medium sized groups where they share on-call responsibilities with 4-9 other obstetricians, and 13 work in solo practices or groups of 3 or less physicians where they are frequently on-call for patients.

These states were chosen to maximize diversity in terms of rural, suburban and urban settings, and by state figures of the following measures: cesarean section rate, maternal mortality, percent of births attended by certified nurse midwives, and average malpractice costs. Within each state, I used purposive sampling to maximize variation by (a) type of hospital –academic or community - where the obstetrician had delivery privileges; (b) type of practice (i.e., private practice vs. managed care organization/ hospital group); (c) size of practice; (d) gender of physician; and (e) physician years in practice. This sampling strategy for physician, practice, and state context is not to provide specific factors for analysis as they would in a quantitative analysis (ie. I'm not analyzing the direct relationship between malpractice cost and physician decision-making), but rather to get data closer to a representative sample without doing a full random national

sample. The only requirement for participation was that the physician practice obstetrics, as some obstetrician-gynecologists only practice gynecology.

My interview guide included questions such as: What is it like to make decisions in labor and delivery? How do you make clinical decisions? What factors do you take into account? Can you describe your style of practice? How might your style of practice be different than other obstetricians? I asked open-ended questions and probed for specific examples whenever possible. I did not ask any direct questions about convenience; instead it came up spontaneously in 24 doctors' descriptions of their decision-making processes in childbirth. The interviews were semi-structured, one hour in length, audio-recorded (one doctor declined to be taped), and fully transcribed.

Data Analysis

The topic of convenience emerged through my initial grounded theory analysis that included line-by-line coding of the interviews and memoing to conceptualize emerging themes (Charmaz 2006). To develop the theme of convenience I used thematic analysis; I returned to all the places where I had coded convenience in all 24 interviews and asked to the following questions: how do doctors talk about convenience, in what contexts does convenience emerge, and whether there is variation in how they understand convenience as a motivation in decision-making. This was an inductive analytic process as the codes for the dimensions of convenience emerged entirely from interview data. I iteratively developed my codebook by continuously checking codes against previously coded transcripts, and refining the definition of codes by noting differences and similarities in their meaning across interviews.

My final codebook for convenience included different subthemes: attitudinal descriptions of convenience as a phenomenon, practices of convenience, and explanations for practices of convenience. There were positive and negative attitudes about convenience, these attitudinal themes are presented as the first phase of analysis in this paper. The codes for obstetricians speaking negatively about convenience included codes such as: *other doctors doing 5 o'clock C-section*, or *convenience as a relic of the past*. Positive codes included codes like *makes doctors life easier* or *saves coworkers time*. The codes for practices of convenience included codes like: *induction for doctors schedule*, *C-section to save doctor time*, *induction for continuity of care*. Explanatory codes included codes such as: *induction doesn't increase risk of C-section*, and *a faster delivery is better for patient*.

To identify the salience of the different dimensions of convenience I went through the interviews and examined what codes were present in each interview. I then counted frequencies to get a sense for which codes were most commonly discussed. For example in practices of convenience there was only one case of "routine use of forceps to save time" but five cases of "induction for doctors schedule," thus induction became a central focus for comparison in my analysis and the use of forceps did not.

After this phase of descriptive coding I read through each interview to examine how the doctors spoke about convenience within the context of their entire interview and their broader ideas about labor and delivery. This phase of the analysis was based largely on understanding variation in how doctors understood convenience as a motivation in decision-making and the implications of these beliefs for patient care. This interpretive process led me to identify and create additional code categories about culture, as I

observed a pattern in the way understandings of convenience clustered around a set of two opposing clusters of ideas and practices, what I label a culture of convenience and an anti-convenience culture.

I then used thematic analysis to analyze these cultural patterns. I created a code list for each culture; convenience culture codes include dimensions such as: *routine induction, C-section for failure to progress, birth is risky, negative attitude about natural birth, the faster the better*. Anti-convenience culture codes include dimensions such as: *birth is natural, life guard approach, reduction of C-section good, judicious uses of interventions, no routine inductions, supports natural birth*. To test the validity of these culture categories I took two doctors I felt most strongly embodied each category and checked my codebook against their interview; in both cases each doctor's interview had almost all the culture codes for that category. Next I examined the other 22 interviews to see what dimensions from each culture were present in the interview. Some interviews contained dimensions of both cultures and other interviews were dominated by one type of cultural narrative. Accordingly the physicians were classified into three groups dependent upon which narrative was most prominent in their interview. I then analyzed the way each doctors understanding of convenience and use of convenience-motivated interventions connected to the cultural themes.

Findings

Themes of Convenience

The 24 doctors in this analysis spontaneously raised the topic of convenience in our interview about decision-making in labor and delivery. This indicates that convenience is part of obstetricians' imagination as much as the publics. The nature of

the convenience motivation in the way obstetricians talked about it matches the anecdotal evidence in mainstream press coverage: that interventions are sometimes used to make labor or delivery faster or are scheduled for the physician's self-interest. As one obstetrician explains:

> There's definitely been people that I've worked under, that you know, their decision is based on what their gain is going to be from it, as far as time gain, money gain, convenience gain.

A few doctors linked financial incentives to convenience, but the primary way doctors spoke about convenience was as an issue of time and a doctor's concern for their own schedule.

The topic of convenience emerged in the interviews when doctors were talking about their philosophy of birth and styles of practice. It was discussed as one among many things that doctors sometimes take into consideration when making decisions about clinical care in labor and delivery. Six doctors framed convenience-motivated decisions as a relic of the past, acknowledging that prior eras of obstetricians practiced based on self-interest, but argued that today doctors are more "pure" and that this would not be tolerated. This perspective is reflected in the following quote:

> You don't just say, let's do it now [a cesarean section] 'cause I got to be in my office at 8 o'clock, so before everyone comes in we gotta just get this done. So that kind of stuff doesn't fly anymore.

However, the majority of doctors talked about convenience in the present tense. Many doctors told stories of convenience-driven decisions as they described their practice by contrasting themselves to these 'other' doctors. Fifteen doctors said something along the lines of: "I'm not one of those physicians who just because it's 5pm that I'm going to go ahead and do a cesarean." The most common decision that was

discussed in this fashion was deciding to do a cesarean section rather than wait for a vaginal delivery, as referenced in the following doctor's description:

> There's some OBs that I'm sure if it's getting close to t-time, and I'm talking about t-e-e, and it's all of a sudden C-section (he laughs). I mean I'm just keeping it real. I don't process like that.

Despite the negative framing of convenience in the stories of many obstetricians, 10 obstetricians gave an example, or multiple examples, of cases where convenience *was* a factor in their decision-making in birth.

There were two clinical contexts where convenience was discussed: making the decision to induce labor and the making the decision to use an intervention during labor or delivery to speed up the process. Discussion of convenience centered upon these two kinds of decision-points, or moments in the birth process, and doctors revealed different understandings about

both clinical moments and the potential for convenience to affect their decision-making within them. In the next section I examine these differences.

Inducing Labor

To induce labor means to use drugs or other medical technology to artificially start labor rather than allowing labor to begin spontaneously. Inductions performed for a doctor's convenience are elective, meaning there is no medical reason the birth should be induced. Induction allows physicians and patients to plan the birth with more precision than if they were waiting for labor to begin spontaneously. Five out of 24 obstetricians in this study said they regularly induce patients for the convenience of their own schedule, such as the doctor below. He owns a private solo practice and attends most of his patients' births unless he is out of town.

> Obstetrician: we do a lot of inductions, I find that was one of the ways to survive when you're solo practice you know...
>
> Researcher: and the inductions in terms of surviving a solo practice, is that so you don't have a million births happening at one time?
>
> Obstetrician: and also, in the middle of the night, you know- um, so um, 'cause the next day I have to work, so I need to have sleep, so, and I kind of have it narrowed, so I break the water at 9 or 8 o'clock and a lot of them they delivery by 1, that's when I'm taking a break from here [the office].

This doctor has a specific system for actively managing his patients' births (which are otherwise by nature unpredictable) according to his office and sleep schedule. He did not discuss this in a negative light or even as controversial, but a matter of fact description of how he practices given the demanding call schedule of a solo practice. In fact, this was the first statement he gave following my question to describe his style of practice, suggesting that managing the timing of births in his busy practice is a primary aspect of his work.

Other obstetricians had very different understandings of induction. These doctors said inductions increase risks of complications in labor, and should thus be used judiciously rather than routinely, as explained by the following obstetrician.

> Induction, if you need it you should do it, if you don't you shouldn't...[induction] increases your risk of infection, bleeding, and cesarean section".

The first doctor who does routine inductions does not explicitly say that he believes there are no risks to inductions, but another obstetrician gives a more direct defense of this practice.

> When I first got into practice everybody had that idea that it [induction] caused more sections, but then after I had more experience practicing the way I practice it didn't change anything, it just made it more available for me to take care of the patients.

The comparison of these doctors' explanations of their induction practices reveals a fundamental difference in understandings of induction as a safe practice versus as one that brings health risks and thus should be avoided if possible. Those doctors who routinely induce for the benefit of their own schedule do not see any harm in the practice and they frame it as unproblematic and legitimate. Other doctors who are against routine inductions believe unnecessary inductions are bad because they increase health risks.

Another theme that emerged in obstetricians discussion of inductions of convenience are "social inductions", which are elective inductions by patient request for social reasons, such as their partner's work travel schedule or to schedule an induction at a time that would ensure the doctor could be there for their patient's birth. These doctors believe the trade off of continuity of care is worth the risks associated with induction (if they believe there are any risks at all), as is described by the obstetrician below.

> Most patients I induce these days, and I try to induce 'em when I know I'm here so I personally take care of them...And there's nothing wrong with getting patients delivered. I tease 'em, I say, "I like getting all patients delivered between 8-5 Monday through Thursday because I like to take Friday off", and they start laughing.

In the case of social inductions we see how the doctor's convenience overlaps with patient preference and/or the mutual desire for continuity of care. While patient choice is a dominant value in our health care system and obstetricians are expected to honor patient autonomy over their medical decisions, they do so selectively. Some doctors who said they would do inductions for patient request resisted the idea of patient choice when patients asked for things that were *inconvenient* for them, such as natural birth, which can take significantly longer and is unplanned. It is worth noting that the

explanation for an elective induction because of patient choice is a *convenient* justification for doctors, since it is a more socially accepted position than saying they are doing it for their own convenience, even though the two aims lead to the same outcome.

Furthermore, those doctors who expressed the idea that inductions were more risky than spontaneous labor explained that they try to talk their patients out of elective inductions. For those patients who nevertheless choose the induction, the doctor then justified the practice by stating that the patient was informed of the risks of induction and chose it anyway. Such is the case with the doctor below who says the following about social inductions:

> I'm willing to do some social inductions, but it's nice if they have a favorable cervix and a really good reason, and I try to explain, "Look what you're asking for increases your risk of infection, bleeding, and cesarean section".

"Favorable cervix" is the clinical language obstetricians use to describe a cervix that is likely to succeed if induced. Even with a 'favorable cervix' this obstetrician does not recommend elective inductions because of the risks she associates with it, but she will consider it. When obstetricians induce for their own convenience, the justification for this practice is embedded in a philosophy that supports elective induction. However this perspective is not held by all obstetricians; in contrast a number of obstetricians are against elective inductions and do not consider their own schedule in this decision.

Arrested Labor and Failure to Progress

The other clinical context in the birth process where doctors spoke about convenience was during a labor that was taking too long - "arrested" and "not progressing" - to use their language, so they use interventions to speed up the labor

and/or delivery. There were three different types of interventions that were discussed as being used to hasten the time of the birth: 1) to speed up the course of the labor with an intervention to augment insufficient contractions 2) to expedite a vaginal delivery with a vacuum or forceps if the pushing stage of the birth was taking too long, and/or 3) do a cesarean delivery instead of waiting for vaginal delivery. The physician below explains these time saving interventions:

> I think that, physicians may decide to expedite delivery either with cesarean section or with use of forceps or vacuum because of time considerations. And there are certainty situations meaning, it's the end of the day let's go ahead and get this done because I want to get home.

As with the case of induction of labor, obstetricians exhibited different understandings of these clinical contexts, the implications of interventions, and the legitimacy of convenience in these decisions. In part these differences center upon doctors different understandings of time in labor. All of the obstetricians discussed time as a factor they take into consideration in assessing the labor and the status of a mother and baby in labor. There is a shared understanding that labor progresses over time, and at some point a labor that has gone on too long without leading to delivery is problematic and requires interventions. However there is great variation in doctors' interpretations of what constitutes *too long*. Friedman's curve is a standardized chart for 'normal' labor that has been used in obstetrics since 1959, but not all doctors believed in a strict adherence to this expectation. They exhibited different definitions of a 'normal' and safe labor and how long labor should go without intervention. For example, in the two quotes below the obstetricians describe of their style of practice by comparing the amount of time they would give a patient in a labor compared to other obstetricians.

> I may say OK, this patient has labored for 4 hours, her cervix hasn't changed, but I feel like that baby's coming down...I feel like they're progressing. Whereas somebody else might say, "Ok it's been 4 hours, her cervix hasn't changed at all, it's not going to happen. We're going to do a C-section", whereas I might give 'em another hour or two.
>
> It's rare that I'd do a C-section for failure to progress... prior to 24 hours if there is nothing else going on. Some people give 12 hours, some people give 18, some people after 5 hours, or at 5 o'clock in the evening they are ready to be done with it.

In the second quote "failure to progress" is the medical diagnosis for a labor that is taking *too long*; this is an established justification to use interventions because the medical understanding is that there may be health risks for the mother or baby associated with a stalled labor. Here the doctor explains that obstetricians define "failure to progress" differently, *and* this doctor suggests other doctors may call "failure to progress" after only a short time for their own convenience. The doctor is suggesting that convenience may affect a doctor's highly subjective definition of "too long" in a given case.

The "I feel like" statements in the first quote capture the subjective nature of clinical judgment here. This obstetrician feels it is appropriate in the case she describes to give the woman another hour or two, but suggests another doctor might do an immediate cesarean delivery. The medical science in this clinical scenario is unclear and doctors are expected to use their clinical judgment based on experience in decision-making. This flexibility given to obstetricians' interpretations of time in labor allows them to piggyback their own convenience on a clinical assessment that the labor progress is insufficient. In other words the '5 oclock cesarean' could be labeled as a case of "failure to progress," *and* be motivated by the doctor's desire to be done with the birth. This is the

situation described in the opening vignette in the introduction where the obstetrician discusses the cesarean section at 2am and explains "nobody will ever know" the doctor made that decision for self-interest rather than for the patient. It is this possibility that gives skeptics pause for concern.

The subjective nature of time in labor and how quickly to call a cesarean section for failure to progress was a key dimension of variation in doctors self-described practice styles, and a central component to how doctors understood convenience. Those who spoke negatively about convenience and framed themselves in contrast to 'other' doctors who are motivated by convenience, explained that they give their patients more time in labor than other obstetricians. They emphasized the important quality of "waiting," "patience," or "sitting on your hands." They articulated the same approach to these interventions that they did with induction of labor: that interventions should be used judiciously not routinely, and so if there are no complications, it is better to give the patient ample time to labor and deliver before making a decision to intervene. Alternatively, other doctors had what can be described as a faster-the-better approach to time in labor as captured in following quote:

> I want things to be done quickly, you know I think she is in labor I want to break the water and augment the labor cause I think they, the, faster the better, the less chance for infection, and so that's how I do it.

In the course of an interview, obstetricians talked about these different perspectives on induction and interventions that reduce the time of labor and delivery in the context of broader understandings about the nature of birth and the use of interventions more generally. There were two competing concepts of birth and the use of

interventions as they related to convenience present in the interviews. In the next section I conceptualize these as cultures and compare two ideal types of each.

A Culture of Convenience and Anti-Convenience Culture

On one end of the obstetric cultural spectrum are obstetricians who view pregnancy and birth as inherently problematic, seek to reduce the time of labor, and favorably view interventions that accomplish this goal. Take the following doctor as an example of this end of the spectrum. He positively frames interventions of convenience. He performs routine elective induction on all his patients and explains that he believes induction does not increase health risks to the mother or baby. He gives his patients a limited window of time to achieve vaginal delivery, routinely uses forceps to expedite delivery, and is explicit about disregarding the public's concern with increasing C-section rates. He says "How it comes out, I really don't care."

. This doctor has been practicing obstetrics for 25 years in New Orleans, Louisiana. He had been in private practice for most of his career, but recently took a salaried position with a medical school. Although he has the option to share call with a large group of faculty obstetricians now, he still attends most of his own patients' deliveries by choice. In the following vignette he first illustrates an ideology of birth as inherently risky, and then goes on to explain how he actively manages birth to reduce the amount of time a woman is in labor.

> If it's a woman's first baby you have no idea how she's going to do in labor. You have no idea how the baby's going to do in labor...If she's going to be able to have the baby vaginally. If the baby, according to the woman's anatomy, how the baby has to twist itself out 180 degrees to come out...We don't know what a woman's going to do, 'cause she doesn't have a proven pelvis...What people don't

> understand is that obstetrics, even though it's a natural thing, is a dangerous thing, and bad things can happen very quickly.
> If it's my patient, and they're over there [in labor and delivery] now in early labor I would push Pitocin and get 'em going so that I could get 'em delivered... If I do a forceps delivery...patients save about 45 minutes of pushing. There's nothing wrong with that as far as I'm concerned 'cause I'm helping them, 'cause the biggest enemy a woman has in labor is time.

This doctor illustrates how those who view birth as inherently dangerous and see their ability to speed up a labor as an intrinsic good trust biomedical interventions more than they trust the natural process of birth. Thus the consequences of using interventions for convenience fit within a framework where speeding up the labor is a good thing anyway, so they do not interpret the overlap of self interest as a problem. I consequently label this way of thinking a culture of convenience.

On the other end of the spectrum are obstetricians who believe that pregnancy and birth are healthy normal life experiences for women, and that medical intervention is there for when problems arise but not to be used proactively. These doctors believe that interventions bring increased health risks and thus should not be used unless medically necessary. The doctor quoted below represents this end of the spectrum. He has been practicing obstetrics for ten years and has spent the last six in private practice with one other obstetrician in a southwestern town of Louisiana. He attends the majority of his patients' births. He gives this self-description as he introduces his style of practice in our interview:

> One of the things that I think makes my approach very unique um, aside from being supportive of natural childbirth...I have, what apparently is a pretty radical idea which um, you know seems funny to say that, but to view and appreciate a woman's fertility as a healthy condition is pretty radical. So the whole idea of a birth in a hospital, is somewhat tainted by a disease pathology approach...everything is a disease, we tend to always be looking for a problem

> and wanting to intervene. So, and that way, my philosophy is probably much more like a midwife. I see my role as a physician being like a lifeguard. And if you're at a beach or a pool, most people can swim, but it's good to have someone there to keep an eye on things so if someone does end up with a cramp or if something happens there is someone there looking who can jump in and help. So I think most women should be able to deliver without any intervention from the medical team, but it's good to have someone there who can intervene if the baby or the mother gets in trouble.

He does not routinely induce patients and says he has lots of patience with labor and will give women a long time to achieve a vaginal birth because vaginal birth is safer than cesarean section. He specifically articulates that he does not let his own convenience affect his practice and speaks negatively about convenience as a motivation in obstetric decision-making.

The reduction of unnecessary interventions is a stated goal from obstetricians who embody this cultural perspective, and have, as this doctor and others described a more "midwife" or "lifeguard" approach to the birth process. These obstetricians could not easily justify an unnecessary intervention for their own convenience because it would directly contrast with the reduction of unnecessary interventions as a key dimension to their philosophy. This perspective can be thought about as an anti-convenience culture.

Hybrid Ideologies

These two examples illustrate the opposing cultures of convenience and anti-convenience reflected across my interviews. The doctors in the last comparison appear as total opposites, but doctors' ideologies and practices were not necessarily split between these two cultures as mutually exclusive categories. Instead we can imagine a spectrum between these two poles with physicians spread across it, hedging closer to one side or the other with varying commitments to avoiding or using the interventions of interest. In

the table below I present the number of doctors who embody the anti-convenience culture, hybrids in the middle of the spectrum, and those who embody the convenience culture. They are organized into two categories: the ten who admitted to convenience-motivated decisions, and those who spoke negatively about convenience as a motivation for decision-making in birth. Although there are hybrids in both groups, there were not any doctors who spoke negatively about convenience and embodied a strong convenience culture, nor any doctors who admitted to convenience and embodied a strong anti-convenience culture.

Anti-Convenience Culture	**Hybrid**	**Convenience Culture**
Doctors who spoke negatively about convenience N=11*		
8	3	0
Doctors who admitted to decisions of convenience N=10		
0	7	3

*The doctors who spoke negatively about convenience included in this table are 11 out of the total 15. This is because four of the 15 who spoke negatively about convenience did not expand upon their style of practice in the interview enough for me to categorize them by culture, meaning they did not have dimensions of either cultural category in their interview.

Obstetricians that embodied aspects of both cultural categories did certain interventions of convenience and not others, such as doing routine inductions but saying they give their patients ample time in labor before doing a cesarean; or they exhibited inconsistent beliefs and approaches to the interventions of interest, using them in some cases and not others. For instance, the doctor in the following vignette took a convenience or anti-convenience approach depending upon the preferences of the patient. Unlike those on the strong convenience culture side who strongly push interventions for

all patients, she actively supports patients who prefer natural birth (with no time saving interventions). However, for patients who do not come to her asking for natural birth, her default practice style is to use time saving interventions because it is more convenient. This doctor works in a solo practice in Northern Louisiana. The following segment of the interview follows a discussion about how this doctor will do low or no intervention births for patients who seek natural birth and says she works very hard to achieve vaginal delivery for her patients.

> Researcher: And for patients who aren't necessarily seeking that [natural birth] out, but are just like, "I want whatever you recommend", and don't have a set of expectations, what would be your standards for approaching labor?
>
> Obstetrician: Uh, for those patients I actually just, try and get them delivered, so yes I would um, rupture them [break the amniotic sac to speed up labor] or when its time, I would offer them an epidural and use Pitocin, active management of labor, that's how I was brought up and trained in Britain as well as here...we would just get the patients out. Plus we were in such a busy hospital...
>
> Researcher: So is there ever a time pressure from there being not enough beds [here]?
>
> Obstetrician: No, not really but I've found, I think the anesthesiologists, they, they sometimes put some pressure on me, and I think that's why I practice active management here and I think I have this reputation now, oh its doctor (name), so we'll have to stay in the hospital till about 8 or 10 this evening, she will make sure her patient delivers vaginally, but the other doctors by 5, 10 they would have done their delivery be it a section or vaginal delivery.

She goes on to explain that pressure from her husband to come home is another factor that encourages her to use interventions to speed up the labor. For this doctor, if the patient is self advocating the doctor will prioritize patient choice over her own schedule and the convenience of her coworkers; however in the absence of a patient's birth plan, the doctor will practice what is most convenient for her and the staff, and this is framed

as legitimate because this is how she was trained in both the U.S. and U.K. This shows how it is possible that a physician's approach towards convenience can be flexible enough to accommodate a range of practices depending upon other factors of the situation.

Another doctor who falls in the middle of the spectrum is quoted below. He works in a two-person practice at a small community hospital in Northern Vermont. Consider the situation he describes below:

> The other tough decision is the patient who is term and laboring and whatever and just isn't moving and after you know 16 years of experience as an attending and 4 as a resident, I've got 20 years of experience and this just isn't going to happen... she's going to end up with a C-section. And the problem is that's hard because admittedly on the selfish side you think I'm tired, I want to get this done, and let's just go and I could have done this at 4pm and now its like midnight. And I have to call everybody else in, and that's a small place, we have limited resources, we're not, we're functioning 24/7 but it's not like we have a call team here. It's not like in Boston where they have residents who didn't come on until 5 or 6 o'clock, attendings who are laborists coming on at 6 o'clock. They know they're leaving at 6 or 7 in the morning. They get to go home and sleep. That's not us, we get done and we have to come back and see 25 patients in the office, so there's that whole idea. But there's also the idea that you know, it's this idea that patients, one is they want to feel like they did everything possible, so you need to give them that for the experience of that, but two is you also know that they are going to be totally fatigued afterwards, so you have to like work on this idea of saying to them, and it goes along with the idea of giving them choices, but kind of guiding them towards this thing of making the decision that its ok to have the C-section without damaging their whole sort of experience and say, you've done everything, but even after they deliver, sometimes once you've done the C-section it's the same idea, they feel like a failure and you have to say you didn't fail, everything is ok, you pushed for 4 hours or you were 6 cm or 7cm for 4 hours and nothing happened, so, those, I think that's a tough thing.

In this case the doctor justifies his decision by claiming that he "knows" based on his subjective clinical judgment that the woman is not going to make it to a successful delivery, but he also admits to the fact that he is not willing to fully give her the time to try. Here the physician's clinical judgment overlaps with convenience to lead him to do a

cesarean. The time pressure he faces himself and the time pressure her labor places on the rest of the on-call staff is prioritized in this case. He acknowledged that it is a "problem" and frames this as a "tough decision" indicating his admission that this may not the best thing for the patient.

Like the previous doctor, in other sections of the interview this doctor expresses support for natural birth and efforts to reduce cesarean sections and he does not express a commitment to the faster-the-better ideology, so he does not belong squarely within the culture of convenience. The fact that the doctor frames the cesarean as a "tough" decision illustrates that he does not believe it is inherently good for patients. This suggests that he partially identifies with anti-convenience cultural side by framing this in the negative, but not so much that he waits for the vaginal delivery. In the end he makes the decision for the cesarean because of time concerns for himself and his staff.

An additional observation in this case is that this doctor is sensitive to the woman's desire for a vaginal birth so he tells her she "did everything she could," and that the cesarean was inevitable, and thus a better 'choice' than putting it off and feeling even worse later. This is exactly the type of case we hear in accounts of women's experiences (Exposing the Silence Project; Improvingbirth.org; International Cesarean Awareness Network). Women feel like maybe they were rushed into a cesarean and not given a true chance at a vaginal birth, but the doctor said that it was not going to happen, and the doctor has been doing this for 20 years and knows when enough is enough. Women are instructed to trust this authority. This is the very authority that is grounded in the medical professionals' promise to put the patient's best interest above their own, and this promise is broken here.

These two stories illustrate that not all obstetricians are true believers in the culture of convenience or the anti-convenience culture, but move between them depending upon the situation at hand. The flexibility to easily adopt the culture of convenience makes it possible for a doctor to piggy back their convenience on the decision to induce or speed up the course of labor with an intervention.

Discussion

The spontaneous emergence of the topic of convenience in my interviews with obstetricians about decision-making in birth, and research on cesarean sections both point to the need for qualitative research on the process of obstetricians decision-making in labor and delivery. I set out in this paper to investigate how doctors talk about convenience, to study the clinical contexts in which convenience emerges as a theme in decision-making, and to examine variation in obstetricians' understandings of convenience in these contexts. I found the way doctors talked about convenience matches the anecdotal evidence in mainstream press coverage: that interventions are sometimes used to make labor or delivery faster or scheduled for the physician's self-interest. Doctors spoke negatively and positively about convenience in decision-making, and those who admitted to the role of convenience in their decision-making process had a different broader understanding about birth and the consequences of using the interventions of interest.

I found that there were two clinical contexts in which convenience was discussed; these are whether or not to induce labor and whether or not to use interventions to speed up the course of labor and/or delivery. Convenience plays a role in multiple obstetric decisions surrounding the birth process, not just cesarean delivery. In fact, if we focus

solely on cesarean delivery, we might not see the implications of convenience for practices like induction, which some research suggests increases the chances of a cesarean (Declercq 2015). These findings about convenience substantiate the voices of women who speak out about being pressured or forced into an unnecessary intervention and remain skeptical about obstetricians' motivations (Exposing the Silence Project; Improvingbirth.org; International Cesarean Awareness Network).

I suggest that behind a range of practices of convenience including induction, augmentation of labor, operative vaginal delivery, and surgical delivery, is a culture of convenience, meaning a philosophy that suggests the faster the birth the better, where interventions are viewed positively and used routinely. This culture stands in contrast to an alternative understanding expressed by other obstetricians, which I label an anti-convenience culture. This culture frames birth as healthy and normal and purports that women can in many cases accomplish vaginal birth without the use of technomedical interventions, and that some interventions bring health risks and thus should be used judiciously. Some doctors fully embody one of these competing cultures; however, many obstetricians are hybrids, meaning they belong somewhere along a spectrum between these two poles, and selectively draw on one culture or another depending upon the situation at hand.

If an obstetrician strongly identifies with anti-convenience culture this seems to deter convenience practices even when facing circumstances that sway hybrid doctors towards convenience, like deliveries in the middle of the night for those who work in small community hospitals where they have to be in the office the next day. If the doctor strongly identifies with the culture of convenience, then all patients will be subject to the

routine use of induction and time saving interventions in labor and delivery, which happen to also be highly convenient for physicians. If they identify with aspects of both cultures, then they may hedge towards convenience practices under certain conditions but not others.

Examining obstetricians' decision-making process at these two clinical moments and their differences in understanding convenience in these contexts shows the subjective nature of clinical judgment doctors have in these instances. In particular, the flexibility around doctors' interpretations of time in labor allowed doctors to lean towards their own convenience if they wanted to, and indeed some doctors told stories of doing this. Even if doctors are hybrids and do not fully subscribe to the culture of convenience, that culture can be drawn upon to justify convenience-motivated practices. However, there are doctors with a strong anti-convenience culture who frown upon such practices and exhibit reflexivity as they explain that they try hard to not allow convenience to affect their decision-making. These cultural differences that relate to doctors different approaches to interventions of convenience are one possible explanation for the differences in obstetric practice patterns observed in quantitative research. I suggest culture is part of what is contained within what quantitative studies refer to as "physician style." Doctors have different philosophies about birth and their clinical practices go along with it.

While convenience has been considered a side effect of malpractice (Morris 2013), or a consequence of the on-call nature of obstetric work (Feldman et al. 2015; Johnson 2010; Rosenburg 2015), my study suggests obstetricians have fundamentally different understandings of interventions of convenience, such as cesarean section. Emphasizing the importance of culture is important because of how strong the

assumption is that it is the traditional on-call nature of obstetric work that leads to interventions of convenience. This idea is repeated in the mainstream press (Rosenburg 2014), health care press (Johnson 2010), health sciences research (Feldman et al. 2015; Iriye et al. 2010; Metz et al. 2016), sociological research on C-sections (Morris 2013), and was frequently repeated across my interviews. This explanation seems to be so compelling that other explanations remain under examined. However, the inconclusive nature of statistical analyses on the effect of shift work design on rates of C-sections suggests that other factors, mainly "physician style," are indeed at play. Thus this examination of cultures of convenience as a part of "style" is an important contribution to the empirical puzzle about variation in C-section rates.

The concept that culture shapes medical practice is not new to medical sociology. With respect to maternity care specifically, a significant body of cultural anthropology and sociology study the ideologies and practices of the medical model of birth and its alternatives (Davis-Floyd 1994, 2001; Downe & Dykes 2009; Katz Rothman 1982; Lane 1995; Martin 1987; Murphy-Lawless, 1998 Reiger & Morton 2012; Simonds et al. 2007). The culture of convenience identified in this paper parallels dimensions of what Katz Rothman named the "medical" model of birth (1982), or what Davis-Floyd (1994, 2001) calls the "technocratic model;" and the anti-convenience culture parallels dimensions of what is labeled the "midwifery model" (Katz Rothman 1982; Simmonds et a. 2007), "holistic model" (Davis-Floyd 1994), and "natural" or "normal" birth (Reiger & Morton 2012). This body of work argues that the medical or technocratic model of birth is hegemonic within obstetrics in the United States, but that there is an ongoing contestation between the medical and alternative models in theory and policy (Reiger & Morton

2012). I show how this debate translates to everyday practice for obstetricians through their interpretations of induction of labor and interventions to speed up labor and delivery.

My findings support the premise within this work that ideology shapes practice. As Davis-Floyd (2011) argues, "Attitudes and behaviors stem from particular philosophies, or paradigms, that form the template for the caregivers beliefs about births. In other words, *it's the model behind the model of practice that most determines the kind of care a practitioner will provide*" (italics original p. 58). However, my findings do not indicate that culture is always the *strongest* determinant of practice, but rather one among many that interact in a highly complex decision-making process and context of labor and delivery. The fact that some doctors in my sample hedged towards different cultural approaches depending on the situation at hand shows that ideology can be flexible rather than a firm template that shapes action in one way or another. At the same time, some doctors were true believers in either the culture of convenience or anti-convenience culture, suggesting that different physicians take up these competing ideologies within obstetrics differently. These findings confirm Davis-Floyd's (2001, 2011) argument that some obstetricians have adopted aspects of the alternative "midwifery" or "natural" birth model and that there is a spectrum between the two extremes.

It is important to note that in this study I focus on one aspect of variation in obstetric culture, that is their approaches to interventions of convenience. In literature that uses Katz Rothman's (1982) "medical" and "midwifery" models of birth, or Davis-Floyd's (2001) "technocratic, humanistic, and holistic" paradigms, there are a number of tenets that vary between these models that are not addressed in this study, such as

different approaches to power in the doctor patient relationship. One of the areas for future research is to investigate what other dimensions of the alternative paradigms and practices are adopted into mainstream obstetrics and the implications of this adaptation for childbearing women.

Another obvious next question is: what shapes the cultural perspective of an obstetrician? I have two ideas from my experience in the fields that make great opportunities for future research. One idea is that it has to do with the fact that obstetricians who hedged closer to anti-convenience culture work with midwives. This suggests there may be some cultural sharing between midwives and obstetricians when they work together. The other idea is that there are dominant cultures within local areas. I found some geographical patterns to cultures of convenience and anti-convenience, but I do not have a large enough sample size to analyze this hypothesis, but it would be interesting to see if a large-scale statistical analysis could test this concept.

The findings in this study are limited by the fact that the data is based on what doctors say they do, rather than a direct observation of their practices. Because there is some level of stigma associated with a doctor making a decision based on their own convenience, we can expect that some doctors may not admit to doing this even if they actually do in reality. Thus the cases of convenience-driven decisions may be underrepresented. Nevertheless, I did find doctors who admitted to convenience-motivated decisions, and the contributions of the paper have more to do with the meaning and understandings of these motivations rather than counting how many doctors do or do not let convenience motivate their practices. The exclusive focus on obstetricians limits

the generalizability to other specialties that also practice maternity care such as midwives or family physicians.

Despite these limitations, the findings in this study are relevant to health services theory and policy efforts to improve maternity care. While other research suggests that shift work reduces unnecessary interventions and births of convenience (Iriye et al. 2013; Rosenburg 2014), I suggest an anti-convenience culture may also deter births of convenience. Health services research produces tangible, easy to measure results that translate well to the medical and policy world, but we must also acknowledge the role of culture. Furthermore, even if shift work models of care could reduce births of convenience, they are not without downsides. In particular the loss of continuity of care is a serious concern for the quality of trust in the doctor/midwife-patient relationship and the provider's ability to practice patient-centered care (Davis-Floyd 2009; Diamond-Brown 2016; Hunter et al. 2008). Outside of the context of obstetrics, these results speak to the importance of cultural foundations to medical practice. This suggests that research, as well as policies and interventions to improve health care, must account for variation in medical professional culture. Lastly, for those doctors who disavow women's accusations that convenience affects obstetricians' decision-making in birth this study demands that obstetricians' reckon with the fact that women's paranoia is grounded in modern day reality.

References

Block, J. 2007. *Pushed: The Painful Truth About Childbirth and Modern Maternity Care*. Cambridge, MA: De Campo Press.

Corry, M.P. 2011. *Blueprint for Action: Steps toward a High-Quality, High-Value Maternity Care System.* New Orleans, LA. Retrieved 4.1.2017.

(http://new.dhh.louisiana.gov/assets/docs/BirthOutcomes/summitpres10182011/Maureen_Corry).

Davis-Floyd, R. 1992. *Birth as an American Rite of Passage*. Berkeley: University of California Press.

Davis-Floyd, R. 2001. "The Technocratic, Humanistic, and Holistic Paradigms of Childbirth." *International Journal of Gynecology and Obstetrics* 75(Supplement 1):S5–23.

Declercq, E. 2015. *Myth and Reality of Cesareans*. Retrieved 2.10.2017. (http://www.birthbythenumbers.org/?page_id=16).

Declercq, E., Sakala, C, and H. Applebaum, 2013. *Listening to Mothers III: Pregnancy and Birth*. New York: Childbirth Connection. Retrieved 2.10.2017. (transform.childbirthconnection.org/reports/listeningtomothers/.).

Downe, S. 2010. "Towards Salutogenic Birth in the 21st Century." Pp. 289–95 in *Essential midwifery practice: Intrapartum care*, edited by Downe, S. Oxford, UK: Wiley-Blackwell.

Downe, S. and Dykes, F. 2009. "Counting Time in Pregnancy and Labour." Pp. 61–83 in *Childbirth, midwifery, and concepts of time*, edited by McCourt, C. New York, NY: Berghahn Books.

Downe, S. and McCourt C. 2009. "From Being to Becoming: Reconstructing Childbirth Knowledges." in *Normal childbirth: Evidence and debate*, edited by Downe, S. Oxford, UK: Elsevier.

Epstein, A. 2008. *The Business of Being Born*. Burbank, CA: New Line Home Entertainment.

"Exposing the Silence Project." *Exposing the Silence Project*. Retrieved May 26, 2017 (http://www.exposingthesilenceproject.com/).

Feldman, D. et al. 2015. "Do Laborists Improve Delivery Outcomes for Laboring Women in California Community Hospitals?" *American Journal of Obstetrics and Gynecology* 213(4):587.e1-587.e13.

Gabbay, John and Andrée le May. 2004. "Evidence Based Guidelines Or Collectively Constructed 'Mindlines?' Ethnographic Study Of Knowledge Management In Primary Care." *BMJ: British Medical Journal* 329(7473):1013–16.

Gaskin, Ina May. 2003. *Ina May's Guide to Childbirth*. New York: Bantam.

Goyert, G. L., Bottoms, S., Treadwell, M., and P. Nehra. 1989. "The Physician Factor in Cesarean Birth Rates." *New England Journal of Medicine* 320(11):706–9.

Hunter, B., M. Berg, I. Lundgren, O. A. Olafsdottir, and M. Kirkham. 2008. "Relationships: The Hidden Threads in the Tapestry of Maternity Care." *Midwifery* 24(2).

Iriye, B. et al. 2013. "Implementation of a Laborist Program and Evaluation of the Effect upon Cesarean Delivery." *American Journal of Obstetrics and Gynecology* 209(3):251.e1-251.e6.

Jordan, B. 1978. *Birth in Four Cultures : A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, and the United States*. Montreal; St. Albans, VT: Eden Press Women's Publications.

Katz Rothman, B. 1982. *In Labor : Women and Power in the Birthplace*. 1st ed.. New York: Norton.

Kennedy, H.P., Grant, J., Walton, C., Shaw-Battista, J., and Sandall, J. 2010. "The Problem of Normal Birth." *Journal of Midwifery & Women's Health* 55(3):262–68.

Kitzinger, J. 1987. "Strategies of the Early Childbirth Movement: A Case-Study of the National Childbirth Trust." Pp. 61–91 in *The Politics of Maternity Care*, edited by Garcia, R. & Richards Martin. Oxford, UK: Clarendon Press.

Lane, K. 1995. "The Medical Model of the Body as a Site of Risk: A Case Study in Childbirth." Pp. 53–77 in *Medicine, health and risk: Sociological approaches, sociology of health and illness monograph series*, edited by J. Gabe. Oxford, UK: Blackwell.

Main, E. and K. Menard. 2013. "Maternal Mortality: Time for National Action." *Obstetrics & Gynecology* 122(4):735–36.

Martin, Karin A. 2003. "Giving Birth like a Girl." *Gender & Society* 17(1).

Metz, Torri D. et al. 2016. "Variation in Primary Cesarean Delivery Rates by Individual Physician within a Single-Hospital Laborist Model." *American Journal of Obstetrics and Gynecology* 214(4):531.e1-531.e6.

Murphy-Lawless, J. 1998. *Reading Birth and Death: A History of Obsteric Thinking*. Bloomington, IN: Indiana University Press.

Reiger, K. 2001. *Our Bodies, Our Babies: The Forgotten Women's Movement*. Australia: Melbourne University Press.

Reiger, K., & C. Morton. 2012. “Standardizing or Individualizing? A Critical Analysis of the ‘Discursive Imaginaries’ Shaping Maternity Care Reform.” *International Journal of Childbirth* 2(3).

Rosenberg, T. 2014a. “In Delivery Rooms, Reducing Births of Convenience.” *New York Times*.

Simonds, W., Katz Rothman, B. and B. Meltzer Norman. 2007. *Laboring on: Birth in Transition in the United States*. New York: Routledge.

Walsh, D. 2009. “‘Waiting on Birth’: Management of Time and Place in a Birth Centre.” in *Childbirth, midwifery, and concepts of time*, edited by McCourt C. New York, NY: Berghahn Books.

WHO (2014). Trends in Maternal Mortality: 1990 to 2013.” *WHO*. Retrieved February 8, 2017 (http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2013/en/).

Chapter Five: Conclusion

This dissertation explores the messy complexity of decision-making for obstetricians working in labor and delivery. Though listening closely to obstetricians' stories of decision-making in birth, a range of social forces emerge as relevant objects of sociological analysis. Each chapter problematizes different social forces and interconnections among them. The articles offer individual contributions to a range of debates about medical practice, health care delivery, and maternity care. However I believe the richest contribution of the work comes through the presentation of the articles together. Taken together this work does not provide a neat causal model of decision-making and outcomes. I cannot say that if a doctor has x philosophy, and is working in x context, and comes across a patient who is like x, they will do y. There are too many moving pieces, but that is the point. We need to understand the lived experience of obstetricians and the contingent nature of their decision making, which is inconsistent, highly contextual, interactional, and evolving.

So what did I learn about what shapes obstetric decision-making? The (a) degree of medical certainty or uncertainty experienced by the physician in the clinical moment, (b) the culturally infused subjectivity of clinical experience, and (c) the competition for discretional power between said clinical experience, standardization and patient empowerment in a doctor's individual style of practice. That style is then combined with knowledge that is subject to organizational structures, and the doctor's interpretations of social interactions in the particular situation at hand. And all of this is only capturing the perspective the doctor brings to the decision-making encounter. The nuance and

complexity is the nature of reality here. Attending to the contingencies of obstetric decision-making is important for the development of social theory on medical decision-making and is critical for informing policy. Policy changes can have unexpected and unintended consequences. My study enriches our understandings of the ways these social forces layer upon each other and interact to inform how changing one piece of the puzzle may affect the rest.

The diversity of obstetric culture and doctors' varied responses to structural dynamics of their work is also a contribution to literature on the medicalization of childbirth. My study shows how obstetricians do not uniformly abide by the medical model of birth and suggests there may be a spectrum of medicalization within the profession of obstetrics. Other scholars have been thinking in similar directions (Davis-Floyd 2009), and this dissertation is a contribution towards an evolving understanding of obstetricians' as they exist in the turbulent context of maternity care.

Implications for Improving Maternity Care

On a practical level I acquired knowledge to assist pregnant women in choosing a place of birth and maternity care provider. In many educational materials for pregnant women about choosing a birthplace and professional, there is great attention placed on the hospital. Many news sources now publish hospital rates of C-sections and maternal and fetal health outcomes to help women choose a place of birth. I do not want to understate the significance of institutional and organizational forces that shape hospital birth. However, this dissertation shows the power of the obstetrician to respond to these environments differently, thus I would also emphasize the importance of the individual doctor or midwife. A doctor's approach to practice does not necessarily match their

hospital's institutional culture and protocol for birth. In general there are cultures of practice, but there are outliers, so it is not necessarily a good idea to pick a hospital first and then a doctor second. Unless a woman lacks continuity of care, than one's doctor's environment may count more heavily than his/her personal approach.

Hospitals like to advertise that they practice "standards of care" and "patient/women/family-centered care." Consider this study to be a warning about the subjectivity of these phrases: be highly skeptical. Ask lots of questions about the specifics because these kinds of phrases can mean dramatically different things to different physicians. While "standards of care" was a regular phrase in my interviews, standards are open to interpretation, and obstetricians have great flexibility to use them in ways that match their philosophy and contextual needs. So ultimately the doctor's own values and cultural style is critically important because a) they are still quite authoritative, and b) their practice is not set by firm rules. Doctors are crafty at maintaining power, and they can play countervailing powers against each other.

Because my dissertation takes an in-depth look at the social context for how obstetricians make decisions in birth, it can inform women about the forces that shape how a doctor may interpret and react to their birth. The medical uncertainty in birth makes an obstetrician's highly subjective style of practice a significant determinant to what clinical options the woman is offered in birth and what level of power she will be granted in decision-making. Thus I would emphasize the importance of women educating themselves about the physiological and social dynamics of childbirth and thinking about what they desire in the context of their health needs and personal values. Then I recommend they learn about variation in maternity care philosophy and practice, and

select a provider whose approach matches their own philosophy and expectations of childbearing.

At the same time, I would like to acknowledge my frustration with the fact that many recommendations for improving maternity care involve things *women* should be doing. Instead of placing responsibility on women, I envision a model of maternity care that helps women understand their options in the context of their value system. Currently this kind of information is available in self-help books designed for pregnant women, but access to this information is subject to the effects of social inequality and differences in health social capital. Instead I would like to see this universally build into a systematic process where health care providers offer this to women at first contact of pregnancy.

In this current climate where women cannot count on an obstetrician to have their best interests in mind, women need to be informed about their power. I ran into many cases where doctors talked about bending the rules or practicing outside of their comfort zone for a persistent patient. Many doctors will ultimately empower a patient who is self-advocating, but a patient who simply says "Whatever you say, Doc" or easily accepts "I'm sorry, we don't do that here," is going to get whatever care is routine or convenient for that physician. Patients who fight are more likely to get what they want. Patients need education and advocacy until we reach a place where we can assume physicians are patient advocates.

I believe part of the reason why obstetricians are not always patient advocates is because there is a lack of understanding from many obstetricians about the significance of a woman's experience of decision-making in birth to her holistic health as a woman, and particularly as a mother. If I had a dollar for every time I heard an obstetrician say

their job is “Safe mom safe baby” I would be rich, but we need to expand doctors concepts of safety to include psychosocial safety. They understand that women have choices and preferences, but these are routinely framed as superficial and not an essential responsibility of the physician to honor these. I believe obstetricians need exposure to the fact the way they approach decision-making in birth affects women’s health outcomes. For example see Benoit and colleagues (2007) for a discussion of how women’s experiences of decision-making in birth relate to post-partum depression. When many women feel traumatized by their births, we have not accomplished “Safe mom safe baby”, and this is really absent in the majority of the obstetrician narratives. Education and outreach about these issues to the obstetric community would be helpful here.

In the same way that women can benefit from reflecting upon birth choices in the context of their value system, I believe doctors would benefit from similar reflexivity. This study highlights the subjective nature of obstetric decision-making in birth, where there are significant differences in philosophies and where clinical uncertainty has created space for a wide array of practices to be considered legitimate. From a bird’s eye view the diversity of obstetricians’ philosophies and values is obvious, but many obstetricians practice in their own worlds and are unaware of how other obstetricians think and practice, or are surrounded mostly by people who think like them. I believe obstetricians would also benefit from reflexive practices on their own positionality relative to the field of maternity care. This would enable them to more clearly understand and communicate their position to patients, and see the importance in the positive alignment of doctor-patient philosophy and expectations of birth.

To reduce the likelihood of conflict between doctor and patient and facilitate harmony in decision-making between a patient and her birth professionals, I emphasize the significance of continuity of care. If a woman does all the work to educate herself about birth and chosses a maternity care professional who matches her philosophy and expectations, it is in the interest of both parties to ensure that this synergy is supported through the entire birth process. This can be achieved with a small sized practice in which all the obstetricians or other birth professionals in the group share a similar philosophy and skill set in case there is a transfer of care in the birth.

Shift work in big groups is not ideal because of the fragmentation of the doctor-patient relationship and opportunities for conflict and difficulties with hand-offs. Doctors spoke extensively about their frustrations over conflict with patients and described this as one of the worst parts of their work. They also spoke about the tremendous joy they felt when they attend their own patients' deliveries.

There are presently two main arguments in support of shift work in labor and delivery. One is a matter of work-life balance: Today obstetricians do not want to be on call all the time. The second is a matter of safety: Some experts believe the traditional on-call structure of work leads to doctors being over-tired which could lead to medical error (Feldmen et al. 2015). I understand the importance of work-life balance and safety in this context, but do we have to throw the baby out with the bathwater?

I suggest that we do not give up on the goal of continuity of care while we seek a better work-life balance for obstetricians, and that continuity of care is an important part of patient safety. We need to search for a sweet spot in a small sized practice intimate enough for the doctors to share the same philosophy, adequately communicate patient

information, and establish trusting relationships with patients before birth, while also allowing the doctors to have some predictability in their schedule and time for rest. If given the opportunity I see the potential for obstetricians to be change agents in their field in these regards as they stand to benefit from improvements in the doctor-patient relationship and structures of care that support it.

Future Directions

One of the things I feel is missing from this dissertation is an explicit analysis of gender. My next article or book chapter is tentatively titled *selfish mothers and control freaks: gendered tropes in obstetricians' justifications for resisting patient choice in childbirth*. In this paper I will examine the way doctors drew on negative gender tropes to classify women's preferences in births as illegitimate. This is a discursive achievement in an era where patient-centered care is the politically appropriate approach to medical decision-making. Even doctors who said they practiced patient-centered care limited the scope of women's power with these oppressive ideas about women. Women as control freaks, women as misinformed, and women as selfish emerged as three dominant tropes doctors used in their descriptions of difficult patients. I analyze these in this paper through a feminist lens and suggest that sexism continues to underpin obstetricians' interpretations of their patients and their approach to dealing with self-advocating patients in childbirth decision-making. I believe this is a barrier to physicians' ability to understand patient needs.

Another paper is tentatively titled: *reversals in stratified health care: upper class white women as bad patients and doctors preferences for 'grateful' poor women.* In

research on inequality in health care, patients who are from social groups who face systematic oppression in society in general such as people of color, immigrants, and the poor are judged negatively by health care providers, which can result in suboptimal care. I discovered an interesting reversal of this in this research. Obstetricians framed upper class white women as overly privileged, 'difficult,' and 'high maintenance' because they had specific preferences about their births, while immigrant and poor women were framed as 'good' patients because they were grateful for whatever care they received in their births. In this article I will unpack the relations between the medicalization of birth, socioeconomic privilege, and patient-empowerment from the physicians' point of view, and the implications of doctors' judgments of patients in in birth for social inequality in health care.

A third topic I envision as a book is an extended analysis of culture as alluded to in my discussion of how I came to write article three. Article three covers diversity in obstetric culture with regard to interventions of convenience, but there is a wide breadth of dimensions of culture that are worthy of in-depth analysis. This would be a broader analysis that would include an inductive approach to cultural variation in my data, as well as a deductive analysis that examines the core ideas from my interviews in comparison to the dominant cultural models in social theory of birth today, Davis-Floyd's technocratic, humanistic, and holistic paradigms (2001, 1994) and Katz Rothman's medical and midwifery models (1982; Simmonds et al 2007).

I envision a future research program that continues to investigate the social context of clinical decision-making in birth with an aim of improving people's

experiences of giving and receiving maternity care. I would like to do participatory action research in my next project. I foresee two trajectories: one is creating a birth ambassador program where volunteers do education/outreach about birth and politics of women's bodies to women from vulnerable populations in maternal health, and then do a longitudinal study of these women's reproductive experiences. The second is a program to do outreach to the obstetric community aimed at improving the doctor-patient relationship in birth. This would include educating obstetricians about the range of philosophies and practices in their field in order to encourage reflexivity about their own approach, and education about the importance of women's psychosocial experience in birth and how the doctor-patient relationship can best support this.

Limitations

This study focuses entirely on obstetricians' standpoints of labor and delivery, leaving out the perspectives of other actors like patients and nurses. This limits the ability of this study to speak to the sociology of birth as a whole, but I believe the lack of empirical data on obstetricians lived experience of decision-making in labor and delivery warrants this particular focus. This study does not use representative sample and I cannot generalize to the entire obstetric population in the U.S. from my findings, but the sampling design does attempt to maximize variation by maternity care context.

With respect to the study's contributions to medical decision-making more broadly, the exclusive focus on obstetricians limits the generalizability to other specialties, but the social forces analyzed here are present in a variety of other clinical scenarios. Medical uncertainty, standardization of medical knowledge, patient

empowerment, and even the growth of fragmented care are not limited to obstetrics. Certainly the emphasis on the doctor-patient relationship is transferable to a wide spectrum of medical encounters.

This study is limited in its reliance on what doctors say about their practice as opposed to observing what they actually do in practice. However, because my aim is to understand practice from the standpoint of the physician, the way they frame their decision-making is data in and of itself, which I hope will shed light upon understanding the practices that have been recorded in observational studies and give contextual meaning to the variables in statistical analysis.

Becoming a Mother: Researcher Reflexivity

As explained in the introduction my interest in obstetric decision-making stemmed from feminist concerns for women in birth and a critical perspective on over-medicalization of birth. My own biases lean heavily towards a concern with patient experience. When I was interviewing obstetricians I was often imagining myself as a patient of their practice rather than imagining myself as the doctor. When I analyzed physician decision-making it was always with an interest in how it would affect the patient. I had not been pregnant or given birth when I performed the interviews, so my understandings of the patient perspective came from a large body of work on patient experiences of reproduction (see Almeling 2015 for a review) and the experiences of my peers. My best friend is a homebirth midwife, and my two closest friends had given birth at home. My social world was critical of the medical model of birth and skeptical of

obstetricians. However as I spent more time with obstetricians and grew to empathize with the difficulties and joys of their work, my perspective changed.

The feminist critique of obstetricians as paternalistic, highly medicalized technocrats was challenged rather quickly. Within the first 10 interviews I had met an obstetrician who had her own children at home with a lay midwife and had a view of birth that totally contrasted with the characterizations of obstetricians from social science literature. I met doctors who went out of their way to empower women in birth, who broke 'rules,' and sacrificed much of their personal lives and time to create positive experiences for women. I also interviewed doctors who were so outrageously misogynistic I had to do some serious debriefing with family and friends to cope with the way they talked about women. My understandings became more and more complex. I saw increasing diversity among obstetricians, more nuance, more layers to the puzzle.

While I began to see greater diversity within the field of obstetrics, in the end I did still see obstetricians partially bound within the hospital as a medical institution, and their own profession as distinctly more medical and paternalistic than alternatives like homebirth midwives. And this is why when I became pregnant in the late stages of writing I chose homebirth with a midwife. This choice illustrates my own bias towards a "natural" approach to birth that seeks to minimize technomedical interventions, and towards a model of shared decision-making where I would be empowered to direct my care. Researchers' own subjectivities are central to qualitative research and interpretive analysis (Harding 1987). Attending to my own values and feelings about birth was part of my process, and I worked to avoid letting them bias my interpretations (see Ahern 1999 for a discussion of reflexive practices used to minimize researcher bias).

As I reflect upon this research from my personal perspective, the opening lines from the *Tale of Two Cities* comes to mind: *It was the best of times, it was the worst of times*. Some obstetricians are training with midwives to reverse problems related to over-medicalization, embracing patient-centered care, and fighting to empower women in their birth experiences; at the same time our maternal mortality and morbidity rates are getting worse, women's bodily integrity is routinely trampled on, and in many cases women DO NOT have the right to choose whether or not to have major abdominal surgery (cesarean delivery). Understanding how obstetricians think and the meanings they ascribe to decision-making and practice in birth gives us needed understanding of obstetrics as a field in transition, and how to direct its progress toward the benefit of women and maternity care professionals.

References

Ahern, K. J. 1999. "Ten Tips for Reflexive Bracketing." *Qualitative Health Research* 9(3):407–411.

Agrawal, P. 2015. "WHO | Maternal Mortality and Morbidity in the United States of America." *WHO*. Retrieved February 8, 2017 (http://www.who.int/bulletin/volumes/93/3/14-148627/en/).

Almeling, R. 2015. "Reproduction." *Annual Review of Sociology* 41(1):423–42.

American Congress of Obstetricians and Gynecologists. 2003. *Profile of OB-GYN Practice.* Retrieved on 1/2/2015. http://www.acog.org/-/media/Departments/Practice/ProfileofOb-gynPractice1991-2003.pdf?dmc=1&ts=20150102T1250088954.

Amnesty International Publications. 2010. *Deadly Delivery: The Maternal Health Care Crisis in the US*. London, UK.

Annandale, E., & Clark, J. 1996. "What is gender? Feminist theory and the sociology of human reproduction." *Sociology of Health & Illness*, *18*(1).

Anspach, R. 1993. *Deciding Who Lives: Fateful Choices in the Intensive-Care Nursery*. Berkeley: University of California Press.

Arms, S. 1975. *Immaculate Deception : A New Look at Women and Childbirth in America*. Boston: Houghton Mifflin.

Atkinson, P. 1984. "Training for Uncertainty." *Social Science & Medicine,* 19(9):949–56.

Becker, H.S., B. Geer, E.C. Hughes, and A. Strauss. 1961. *Boys in White: Student Culture in Medical School.* Chicago: University of Chicago Press.

Bensing, J. 2000. "Bridging the Gap: The Separate Worlds of Evidence-Based Medicine and Patient-Centered Medicine." *Patient Education and Counseling,* 39(1):17–25.

Benoit, C., Westfall, R. Treloar, A., Phillips, R. and S. Jansson. 2007. "Social Factors Linked to Postpartum Depression: A Mixed-Methods Longitudinal Study." *Journal of Mental Health* 16(6):719–30.

Berg, M. 1997. "Problems and Promises of the Protocol." *Social Science & Medicine, 44*(8), 1081-1088.

Berger, P. & Luckmann, T. 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Anchor Books.

Birth by the Numbers: http://www.birthbythenumbers.org.

Block, Jennifer. 2007. *Pushed: The Painful Truth About Childbirth and Modern Maternity Care*. Cambridge, MA: De Campo Press.

Bosk, C.A. 1980. *Forgive and Remember: Managing Medical Failure*. Chicago: University of Chicago Press.

Boston Women's Health Book Collective. 2011. *Our Bodies Ourselves.* New York, NY: Touchstone.

Brown, P. 1995. "Naming and Framing: The Social Construction of Diagnosis and Illness." *Journal of Health and Social Behavior, 35*, 34-52.

Centers for Disease Control and Prevention. 2012. National Center for Health Statistics, Data Brief Number 84, "Home Births in the United States, 1990-2009." January 2012: http://www.cdc.gov/nchs/data/databriefs/db84.htm.

Charles, C., A. Gafni, and T. Whelan 1997. "Shared Decision-Making in the Medical Encounter: What Does It Mean? (Or It Takes at Least Two to Tango)." *Social Science & Medicine* 44(5):681–92.

Charles, C., Gafni, A. and T. Whelan. 1999. "Decision-Making in the Physician-Patient Encounter: Revisiting the Shared Treatment Decision-Making Model." *Social Science & Medicine, (1982)* 49(5):651–61.

Charmaz, K. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. 1 edition. London; Thousand Oaks, CA: Sage Publications Ltd.

Chiarello, Elizabeth. 2013. "How Organizational Context Affects Bioethical Decision-Making: Pharmacists' Management of Gatekeeping Processes in Retail and Hospital Settings." *Social Science & Medicine* 98:319–29.

Clark, J.A., Potter, D.A., & McKinlay, J.B. 1991. "Bringing Social Structure Back into Clinical Decision Making." *Social Science & Medicine, 32*(8), 853-866.

Coburn, D., Rappolt, S. & Bourgeault, I. 1997. "Decline vs. Retention of Medical Power Through Restratification: An Examination of the Ontario Case." *Sociology of Health & Illness, 19*(1), 1-22.

Collins, S., Drew, P., Watt, I. and V. Entwistle. 2005. "'Unilateral' and 'Bilateral' Practitioner Approaches in Decision-Making about Treatment." *Social Science & Medicine* 61(12):2611–27.

Cohen-Cole S.A. 1991. ed. *The Medical interview: The Three Function Approach*. St. Louis, MO: Mosby Year Book.

Conrad, P. 1988. "Learning to Doctor: Reflections on Recent Accounts of the Medical School Years." *Journal of Health and Social Behavior 29*(4): 323-332.

Crabtree, B. and Miller, W. 1999. "A Template Approach to Text Analysis: Developing and Using Codebooks." Pp. 163–77 in *Doing Qualitative Research*, edited by Crabtree, B. and Miller, W. Newbury Park, CA: Sage Publications.

Conrad, P. 2007. *The Medicalization of Society: On the Transformation of Human Conditions into Treatable Disorders*. Baltimore: John Hopkins University Press.

Conrad, P. & Schneider, J.W. 1992. *Deviance and Medicalization*. Philadelphia, PA: Temple University Press.

Corry, M.P. 2011. *Blueprint for Action: Steps toward a High-Quality, High-Value Maternity Care System.* New Orleans, LA. (http://new.dhh.louisiana.gov/assets/docs/BirthOutcomes/summitpres10182011/Maureen_Corry).

Davis-Floyd, R. 1992. *Birth as an American Rite of Passage*. Berkeley: University of California Press.

Davis-Floyd, Robbie E. 1994. "The Technocratic Body: American Childbirth as Cultural Expression." *Social Science & Medicine* 38(8):1125–40.

Davis-Floyd. 2001. "The Technocratic, Humanistic, and Holistic Paradigms of Childbirth." *International Journal Fo Gynecology and Obstetrics* 75(Supplement 1):S5–23.

Davis-Floyd, Robbie and Christine Barbara Johnson. 2006. *Mainstreaming Midwives: The Politics of Change*. CRC Press.

Davis-Floyd, R., Barclay, L., Tritten, J., & Daviss, B. 2009. *Birth Models That Work*. Berkeley and Los Angeles, CA: University of CA Press.

Declercq, E. 2015. *Myth and Reality of Cesareans*. (http://www.birthbythenumbers.org/?page_id=16).

Declercq, E. (2011)."Trends in Midwife-Attended Births, 1989 to 2007." *Journal of Midwifery & Women's Health. 56* (2).

Declercq, Eugene, Sakala, C, Corry, M., Applebaum, S., and Risher, P. 2002. *Listening to Mothers Survey: Report of the First National U.S. Survey of Women's Childbearing Experiences*. New York: Maternity Center Association.

Declercq, E., Sakala, C., Corry, M.P., Applebaum, S. & Herrlich, A. 2013. *Listening to Mothers SMIII: Pregnancy and Birth.* New York: Childbirth Connection.

DelVecchio Good, M. 1995. *American Medicine, The Quest for Competence*. Berkeley, CA: University of California Press.

De Vries, R., Benoit, C., Van Teijlingen, E., Wrede, S. 2002. *Birth By Design: Pregnancy, Maternity Care and Midwifery in North America and Europe*. NJ: Routledge University Press.

Epstein, Abby et al. 2008. *The Business of Being Born*. Burbank, Calif.]: New Line Home Entertainment.

"Exposing the Silence Project." *Exposing the Silence Project*. Retrieved May 26, 2017a (http://www.exposingthesilenceproject.com/).

Freidson, E. 1970. *Professional Dominance: The Social Structure of Medical Care.* New York: Atherton Press.

Foucault, M. 1994. *The Birth of the Clinic.* New York: Vintage Books.

Foucault, M. 1986. *The History of Sexuality. Volume 3: The Care of the Self.* New York: Vintage Books

Fox, R. 1957. "Training for Uncertainty." Pp. 207-241 in *The Student Physician*. edited by R. Merton, G. Reader, and P. Kendall. Cambridge: Harvard University Press.

Fox, Renee C. 1980. "The Evolution of Medical Uncertainty." *Milbank Memorial Fund Quarterly* 58:1–49.

Fox, B., & D. Worts. 1999. "Revisiting the Critique of Medicalized Childbirth: A Contribution to the Sociology of Birth." *Gender & Society* 13(3):326–46.

Frankford, D. 1994. "Scientism and Economics in the Regulation of Health Care." *Journal of Health Politics, Policy, & Law, 19*(4), 773-799.

Gabbay, J. & May, A. 2004. "Evidence Based Guidelines or Collectively Constructed "Mindlines" Ethnographic Study of Knowledge Management in Primary Care." *BMJ: British Medical Journal, 329* (7473), 1013-1016.

Gaskin, I.M.. 2003. *Ina May's Guide to Childbirth*. New York: Bantam.

Gerrity, M.S., Earp, J., DeVellis, R. and D.W. Light. 1992. "Uncertainty and Professional Work: Perceptions of Physicians in Clinical Practice." *American Journal of Sociology* 97(4):1022–51.

Gilligan, C., Spencer, R., Katherine, M., & Bertsch, T. 2003."On the Listening Guide: A Voice-Centered Relational Method." Pp.157–72 in *Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design*, edited by P. M. Camic, J. E. Rhodes, and L. Yardley. Washington DC, US: American Psychological Association.

Good, B J. & DelVecchio Good, M. 1993. "Learning Medicine: The Construction of Medical Knowledge at Harvard Medical School." Pp. 81-107 in *Knowledge, Power, and Practice: The Anthropology of Medicine and Everyday Life* edited by S. Lindenbaum and M. Lock. Berkeley: University of California Press.

Gordon, D. 1988. "Clinical Science and Clinical Experience: Changing Boundaries Between Art and Science in Medicine." Pp. 57-295 in *Biomedicine Examined* edited by M. Lock and D.R. Gordon.

Goyert, G.L., Bottoms, S. F., Treadwell, M.C., and Nehra, P.C.1989. "The Physician Factor in Cesarean Birth Rates." *New England Journal of Medicine 320*(11): 706–9.

Hafferty, F. W. 1988. "Cadaver Stories and the Emotional Socialization of Medical Students." *Journal of Health and Social Behavior 29*(4): 344-356.

Hafferty, F.W. 2000. "Reconfiguring the Sociology of Medical Education: Emerging Topics and Pressing Issues." Pp. 238-257 in *Handbook of Medical Sociology* edited by C.E. Bird, P. Conrad and A.M. Fremont. Upper Saddle River, NJ: Prentice Hall.

Hahn, R. & Kleinman, A. 1983. "Biomedical Practice and Anthropological Theory: Frameworks and Directions." *Annual Review of Anthropology* 12: 305-333.

Han, Paul K. J., William M. P. Klein, and Neeraj K. Arora. 2011. "Varieties of Uncertainty in Health Care A Conceptual Taxonomy." *Medical Decision Making* 31(6):828–38.

Heritage, J. & Maynard, D.W. 2006. "Problems and Prospects in the Study of Physician-Patient Interaction: 30 Years of Research. *Annual Review of Sociology, 32*(1), 351-374.

Hesse-Biber, S. 2014. "Conclusion Putting Together Your Research Project". Pp. 389-411 in *Feminist Research Practice A Primer.* Second edition. Edited by S. Hesse-Biber. Sage Publications: Thousand Oaks, CA.

Hitlin, Steven and Stephen Vaisey. 2013. "The New Sociology of Morality." *Annual Review of Sociology 39*(1):51–68.

Holmes, S. M., Jenks, A.C., & Stonington, S. 2011. "Clinical Subjectivation: Anthropologies of Contemporary Biomedical Training." *Culture Medicine & Psychiatry*, 35:105-112.

International Cesarean Awareness Network. Retrieved June 1, 2017 (http://www.ican-online.org/).

ImprovingBirth. Retrieved June 1, 217. https://improvingbirth.org.

Jenkins, Tania M. 2015a. "'It's Time She Stopped Torturing Herself': Structural Constraints to Decision-Making about Life-Sustaining Treatment by Medical Trainees." *Social Science & Medicine* 132:132–40.

Jordan, B. 1978. *Birth in Four Cultures: A Crosscultural Investigation of Childbirth in Yucatan, Holland, Sweden, an the United States.* St.Albans, VT: Eden Press Women's Publications.

Katz Rothman. 1982. *In labor : Women and Power in the Birthplace* (1st ed..). New York: Norton.

Kitzinger, J. 1987. "Strategies of the Early Childbirth Movement: A Case-Study of the National Childbirth Trust." Pp. 61–91 in *The Politics of Maternity Care*, edited by Garcia, R. & Richards Martin. Oxford, UK: Clarendon Press.

Lambert, H., E. J. Gordon, and E. A. Bogdan-Lovis. 2006. "Introduction: Gift Horse or Trojan Horse? Social Science Perspectives on Evidence-Based Health Care." *Social Science & Medicine* 62(11).

Lane, K. 1995. "The Medical Model of the Body as a Site of Risk: A Case Study in Childbirth." Pp. 53–77 in *Medicine, health and risk: Sociological approaches, sociology of health and illness monograph series*, edited by J. Gabe. Oxford, UK: Blackwell.

Light, Donald, Jr. 1979. "Uncertainty and Control in Professional Training." *Journal of Health and Social Behavior* 20(4):310–22.

Light, D. 2001. "Comparative Institutional Response to Economic Policy Managed Competition and Governmentality." *Social Science & Medicine, 52*(8), 1151-1166.

Luthy, D.A., Malmgren, J.A, Zingheim, R.W., and Leininger, C.J. 2003. "Physician Contribution to a Cesarean Delivery Risk Model." *American Journal of Obstetrics and Gynecology 188*(6) 1579–87.

Main, Elliot and Menard, Kathryn. 2013. "Maternal Mortality: Time for National Action." *Obstetrics & Gynecology* 122(4):735–36.

Markus, A.R., Andres, E., West, K.D., Garro, N., & Pellegrini, C. 2013."Medicaid Covered Births, 2008 Through 2010, in the Context of the Implementation of Health Reform." *Women's Health Issues 23* (5) 273–80.

Martin, E.1987. *The Woman in the Body: A Cultural Analysis of Reproduction*. Boston: Beacon Press.

McKinlay, J.B. & Marceau, L.D. 2002. "The End of the Golden Age of Doctoring." *International Journal of Health Services: Planning, Administration, Evaluation, 32*(2), 379-416.

Miller, A. C., & Shriver, T. E. 2012. "Women's childbirth preferences and practices in the United States." *Social Science & Medicine, 75*(4), 709–716.

Mishler E. 1984. *The Discourse of Medicine: Dialectics of Medical Interviews*. Norwood, NJ: Ablex.

Morris, T. 2013. *Cut It out: The C-Section Epidemic in America*.

Mykhalovskiy, E., & Weir, L. 2004. "The Problem of Evidence-Based Medicine: Directions for Social Science." *Social Science & Medicine, 59*(5), 1059–1069.

Plechner, D. 2000. "Women, Medicine, and Sociology: Thoughts on the Need for a Critical Feminist Perspective." *Research in the Sociology of Health Care*, *18*, 69–94.

Rayburn, W. F. 2011. *The Obstetrician-Gynecologist Workforce in the United States*. USA: American Congress of Obstetricians and Gynecologists.

Reich, A. 2012. "Disciplined Doctors: The Electronic Medical Record and Physicians' Changing Relationship to Medical Knowledge." *Social Science & Medicine* 74(7):1021–28.

Reiger, K. 2001. *Our Bodies, Our Babies: The Forgotten Women's Movement*. Australia: Melbourne University Press.

Reiger, K., & Morton, C. 2012. "Standardizing or Individualizing? A Critical Analysis of the 'Discursive Imaginaries' Shaping Maternity Care Reform." *International Journal of Childbirth* 2(3).

Ritzer, G., & Walczak, D. 1988. "Rationalization and the Deprofessionalization of Physicians." *Social Forces*, *67*(1), 1–22.

Rothman, David J. 2001. "The Origins and Consequences of Patient Autonomy: A 25-Year Retrospective." *Health Care Analysis* 9(3):255–64.

Scott, W. Richard, ed. 2000. *Institutional Change and Healthcare Organizations: From Professional Dominance to Managed Care*. Chicago: University of Chicago Press.

Simonds, W., Rothman, B. K., & Norman, B. M. 2007. *Laboring On: Birth in Transition in the United States*. New York: Routledge.

Smith-Oka, V. 2012. "Bodies of risk: Constructing motherhood in a Mexican public hospital." *Social Science & Medicine, 75*(12), 2275–2282.

Smith-Oka, V. 2015. "Microaggressions and the Reproduction of Social Inequalities in Medical Encounters in Mexico." *Social Science & Medicine* 143:9–16.

Starr, P. 1982. *The Social Transformation of American Medicine*. New York: Basic Books.

Sorsoli, L. & Tolman, D. 2010. "Hearing Voices: Listening for Multiplicity and Movement in Interview Data." Pp. 495-516 in *Handbook of Emergent Methods* edited by S. Hesse-Biber and P. Leavy. New York, NY: Guilford University Press.

Timmermans, S., & Angell, A. 2001. "Evidence-Based Medicine, Clinical uncertainty, and Learning to Doctor." *Journal of Health and Social Behavior*, *42*(4), 342–59.

Timmermans, S., & Epstein, S. 2010. "A World of Standards but not a Standard World: Toward a Sociology of Standards and Standardization." *Annual Review of Sociology, 36*:69-89.

WHO. 2014. "WHO | Trends in Maternal Mortality: 1990 to 2013." *WHO*. Retrieved February 8, 2017 (http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2013/en/).

Zussman, R. 1997. "Sociological Perspectives on Medical Ethics and Decision-Making." *Annual Review of Sociology, 23*(1), 171–190.

Zussman, R. 1992. *Intensive Care: Medical Ethics and the Medical Profession*. Chicago, IL: University of Chicago Press.

Appendix
Birth Context by State

State	% Births Covered by Medicaid 2010	Maternal Mortality Rate per 100,000 live births 2010	Average Malpractice Ins.	C-section rate 2011
Massachusetts	26.7	4.8	105,812	32.5
Vermont	46.61	2.6	51,061	27.8
Louisiana	69.02	17.9	40,174	39.9
Average	**47.75**		**61,658**	**31.4**
Highest	69.02	38.2	147,595	39.9
Lowest	24.04	1.2	20,628	22

State	Legal Standing of Midwives	Insurance Coverage for midwives	% births with midwives 2007	% births outside of hospital
Massachusetts	illegal, active legislation	third party mandate	13.4%	0.67
Vermont	CPMs legal since 2000	no mandate, Medicaid reimburses at 100% of physician rate	18.3%	2.4
Louisiana	CPMs legal since 1985	third party mandate	1.4%	0.25
Average			**8%**	**1.11**
Highest			33%	5.35
Lowest			1.40%	0.23