The United States is an advanced technological society. It has the largest gross
domestic product (GDP, the total dollar value of all goods and services produced) of all of the world’s nations. It also has the largest portion of GDP that is devoted to health care, 16.4 %. Yet the U.S. infant mortality rate ranks 33rd of the 36 nations included in the Organization for Cooperation and Development (OECD—European Union, EU applicants and selected other developed countries). This low ranking is not a recent phenomenon—it has been observed for decades, ever since comparative infant mortality rates have been available. The reason for this low ranking is also clear, and has been stable for decades: the United States has a much higher rate of preterm births—infants delivered before their mothers’ pregnancies reach term (at least 37 weeks gestation) than other developed countries. The U.S. actually has a lower mortality rate per preterm birth age than other countries, but this high survival rate is not sufficient to compensate for the larger number of infants born before they reach term.

The persistence of high preterm birth rates in the U.S. population has been labeled an enigma by biomedical researchers, an issue of concern by clinicians, an indicator of the need for political and health sector reform by social advocates, the trigger for ethical dilemmas in health care and social policy, and a human tragedy for the families involved. It is a complex phenomenon that involves many participants, each of whom has a different view and set of experiences: the mothers who experience an early end to their pregnancies and the fathers of infants born early; their physicians, nurses and hospitals; those who finance the care of these mothers and infants and those who worry about maintaining resources for such expenditures; scientists responding to the challenge of explaining preterm birth; politicians who feel pressured to respond to preterm birth when it is framed as a social problem; and advocates who believe that their agendas offer solutions to the problem, to name just a few. Each group is able to describe the phenomenon from

\[1\text{Based on OECD data for 2013. The next highest portions of GDP devoted to health care are Switzerland and The Netherlands, each with 11.1 \%.}\]
its own perspective, and each often believes that its perspective represents the issue of preterm birth overall. The situation is reminiscent of the ancient Indian story of the six blind men encountering the elephant: the one touching its side believes it is a wall, the one touching its tusk believes it is a spear, the one touching its trunk believes it is a snake, the one touching its leg believes it is a tree, the one touching its ear believes it is a fan, and the one touching its tail believes it is a rope. The blind men argue vehemently about who has the most accurate view of the elephant, when in fact none of them has complete knowledge of what the elephant is like.

The many parties involved in the issue of preterm birth in the U.S. are not blind, but it is easy to find one’s vision narrowed by the emotions and high stakes—life and death, deeply held values and paradigms, resource commitments, revenue flows and life adjustments—that are challenged when an infant is born before it reaches full term. Also, with the demands of meeting the immediate challenges of preterm birth, it is easy to lose perspective on the historical circumstances that structure one’s current decisions, and to be unaware of the impact that a set of decisions made in one situation can have on the array of choices available in other situations. For example, legal precedents for suing physicians for malpractice when infants die at birth puts pressure on hospitals to maintain neonatal intensive care units (NICUs) along with their maternity services. Following the advice of their lawyers, doctors and hospitals believe that if newborns are moved immediately to NICUs, the providers will be following best practice guidelines, and thus will be less likely to lose malpractice cases. The expansion in the number of NICUs, in part caused by this reasoning and in part caused by the potential to earn revenue from the care of preterm infants, reduces the average number of infants treated in each hospital’s unit. This reduces the opportunities for staff to gain experience caring for high-risk newborns, and thus potentially lowers the quality of care available to the infants. At the same time, knowing that there are on-site NICUs with the capacity to care for preterm newborns shifts obstetricians’ decisions about whether to intervene and deliver an infant before term if a pregnant woman experiences pregnancy complications. The segment of infants born preterm because of physician intervention accounts for the overall increase in preterm births in the U.S. over the last two decades; the number of preterm births occurring spontaneously has actually declined. Each of these decisions or events is ostensibly distinct, but each one alters the circumstances under which the next decision is made or the next event occurs.

The primary objective of this book is to explore multiple overlapping dimensions of preterm birth in the U.S. simultaneously, so that the view of each dimension of the issue can be illuminated both by history and by an understanding of the view from the other dimensions. The secondary objective of this book is to use the various features of preterm births in the United States to shed light on some broader themes in U.S. culture and social organization. The fact that some features of the issue of preterm birth in the U.S. differ from features in otherwise similar places, such as Canada, Great Britain, and other Western European countries, provides an opportunity to explore those aspects of U.S. society that are both unique and pivotal in their impact on the health of the population.
Six dimensions of preterm birth are explored in this book: the clinical, epidemiological (population-based), cultural, political, healthcare system, and ethical dimensions. Chapter 1 examines the clinical dimension of preterm birth as it reflects guiding interpretative paradigms in Western medicine, in particular the expectation that biological events can be consistently measured and altered by effective interventions. This expectation leads to the belief that preterm birth is a type of medical problem that can be prevented or “cured” once the correct therapy is identified. The chapter examines current clinical beliefs about the triggers for two types of early delivery, the type that occurs when pregnant women spontaneously go into labor before their pregnancy reaches 37 weeks gestation, and the type that occurs when physicians intervene to deliver a baby early, in order to avoid complications anticipated if the pregnancy is allowed to continue. It also describes the therapies that have been tried to prevent preterm births, and notes that nearly all of them have failed. Treatment for newborns born preterm is more successful than preventive interventions, but still a significant portion of infants born very prematurely die or suffer serious long-term consequences. At the same time, another significant portion of these newborns survive with minimal long-term problems. It is not possible, at the point of delivery, to determine with certainty what the outcome will be for any given preterm infant. After a discussion of alternative ways to think about preterm birth besides as a single syndrome or disease-like phenomenon, this chapter concludes with a discussion of the clinical perspective on the reasons that the U.S. preterm birth and preterm survival rates are higher than those in Canada, Great Britain, and Western Europe.

Chapter 2 examines the second dimension, that of the distribution of preterm births across the population. While the early ending of any particular pregnancy is not predictable, preterm births do not occur randomly across the population. Rather, they occur more frequently in certain sub-populations and under certain circumstances of fertility. This chapter explores the reasons for high rates of preterm birth in sub-populations, identified by age, race, ethnicity, socioeconomic status and whether women intended to become pregnant, among other features. At the same time, the chapter examines critically the ways that data are gathered and the ways that the population is divided up in order to create knowledge about these patterns. For example, in the U.S. it is fairly easy to characterize rates of preterm birth by race or ethnicity because these data are regularly recorded. It is difficult to characterize rates by poverty or socioeconomic status, because relevant information is seldom recorded. Ethnicity and race are considered meaningful characteristics to monitor in population composition, but it is less socially acceptable to think of the U.S. as anything other than an egalitarian or “classless” society, so income, wealth, and social status of newborns are generally not recorded. In lieu of such socio-economic information, the differences in preterm birth rates by race and ethnicity are interpreted as meaning something about the relationship between poverty and preterm birth. This confounding of race and poverty obscures the understanding of the complex relationship between birth outcomes and both of these features of women’s lives.
This chapter also discusses the attention placed on the impact of stigmatized maternal behaviors and health statuses—smoking, alcohol, drug use, and obesity—on preterm birth. Although these impacts are not large relative to other factors associated with birth outcomes, they receive considerable attention because they fit an ideologically preferred narrative about individual versus social responsibility for health, and about women’s personal responsibility for their pregnancy outcomes.

The comparison section of this chapter examines, from an epidemiological perspective, the reasons why preterm birth rates in the U.S. are higher than those of Canada, Great Britain, and Western Europe. Each high-risk segment of the population: non-White women living in predominantly White societies, teens, low-income women, and women with unintentional pregnancies, have higher preterm birth rates both in the U.S. and in the comparison countries. However, women with these characteristics comprise a larger portion of the population of childbearing women in the U.S. than in other places.

The third dimension, explored in Chap. 3, is that of the cultural view of preterm birth. As the term is used here, culture refers to the sets of shared understandings that members of a society use to communicate and interact meaningfully with each other. Every culture shares a set of understandings about childbirth. In contemporary Western cultures, childbirth is understood to be a medical phenomenon, and all members of these societies are expected to defer to medical authorities for the interpretation of the experience and for interventions that are supposed to guarantee a successful birth. This framing is usually referred to as “medicalization”, and it contrasts with a framing that considers childbirth to be a natural, familial, or spiritual experience. Under the terms of a medicalized childbirth, attendants rely on pre-set algorithms such as the expected timing of labor and the definition of risk, rather than on observations, experience or the preferences of the laboring woman, to determine whether and when to initiate technological interventions such as drugs or surgery.

Medicalized childbirth itself is situated in the broader framework of social reproduction. Social reproduction refers to the ways a given society determines how it will continue across generations. Social reproduction is accomplished by laying out cultural rules for who becomes a parent, when and how, who claims responsibility for children, and how fetuses, infants and children are defined as independent and/or as intertwined with their families. Western cultures in general view fetuses as having an independent existence from early in pregnancy, and view pregnant women as primarily vessels for fetal development. This view is rooted in the patriarchal organization of these societies, in which a primary role for women is to continue a man’s bloodline and insure that he has heirs.

Mothers are thought to be responsible for the outcomes of their pregnancies and their children through adulthood. There is thus a sense in U.S. culture that a preterm birth is the result of a mistake—deliberate or unintentional—made by a mother. The “wrong” types of mothers—those whose reproduction is not preferred in the social scheme, including young, unmarried, low income, and minority women—are most likely to make mistakes and this is why, according to this cultural logic, they are more likely to deliver before term. This cultural logic also explains why preterm
births are popularly assumed to be preventable, even though, as discussed in Chap. 1, no clinical intervention to prevent preterm births has been identified. The worst mistake that a mother can make is to not follow the instructions of her physicians, so this set of beliefs both reinforces the authority of the medical system, and provides a rationale when the medical system fails to meet the expectation that it can guarantee a successful pregnancy outcome. That is, culturally based beliefs hold that any poor outcome is considered the mother’s fault, and probably occurred because she did not follow her physicians’ instructions.

The comparison section of Chap. 3 notes similarities in the medicalization of childbirth, but also some differences in the model of social reproduction in Canada, Great Britain, and Western Europe, compared to the U.S. The notion that some women should not have babies, and thus are probably at fault if their pregnancies have poor outcomes, is not as dominant in these other societies as it is in the U.S. In part this difference derives from the fact that historically these societies have been less racially and ethnically divided than the U.S.; healthy reproduction for all women has been considered to be a benefit to the society as a whole. Furthermore, these societies have long been concerned about low fertility rates in their populations, and the consequences of dwindling population size for their future viability. In the U.S. historically, low fertility rates in White middle- and upper-class women have been a concern, but public attention has been focused more on the supposedly high or too high fertility rates among Black, immigrant, and poor women. Concerns about low fertility rates are the basis for social policies that support pregnant women and new parents, for example, with paid pregnancy leave, family leave, and income subsidies, all of which are absent in the U.S. In addition, the regulation of abortion is framed differently, particularly in European countries, than it is in the U.S. In Europe, providing abortion under controlled circumstances is seen as a way to support families in difficult circumstances. In the U.S., abortion is framed as one manifestation of a presumed conflict between the interests of mothers and that of their future children. The ways that the relationship between mothers and fetuses is understood has an impact on several of the sociocultural dimensions of preterm birth.

Chapter 4 explores the political dimension of preterm birth, that is, how preterm birth plays into struggles over power and resources in U.S. Preterm birth is framed as a social problem—a social phenomenon that legitimately demands attention by political decision makers—in three political arenas in the U.S. The first is the arena of control over reproduction. The occurrence of preterm births is used to justify an argument for broader contraception availability, on the assumption that pregnancies that are planned and desired are less likely to end prematurely. At the same time, for those opposed to liberal abortion policies, the potential for preterm newborns to survive means that the distinction between fetuses and infants is arbitrary. This in turn bolsters the conviction that performing an abortion is equivalent to murdering a child. This chapter explores how the socially recognized problem of preterm births is used to justify proposals to limit access to abortion, and how policies promoted by opponents to abortion impact the care of preterm infants.
The second political arena where the social problem of preterm birth plays a role is in the efforts to ameliorate the effects of poverty. Ameliorating the effects of poverty has been contentious in the U.S. since the nation’s founding, because acknowledging and addressing poverty implies that there are structural flaws in the U.S. economic system which could be addressed by restricting some aspects of free market capitalism. In contrast to addressing poverty directly, providing care for innocent babies is a legitimate political enterprise, and “baby saving” (as it was termed at the turn of the twentieth century) has been used as a vehicle for a variety of social welfare reforms, including efforts to institute universal health insurance coverage.

The third political arena where preterm births have been important is in efforts to address racial inequality in the U.S. Large disparities by race in preterm birth and infant mortality rates in the U.S. are taken as concrete evidence that racial inequality persists and has damaging consequences. Programs and resources to address preterm births in the Black population are an acceptable and politically attractive way to help defuse this political challenge, when more radical proposals for addressing racial inequity face resistance from entrenched interests.

The dynamics of these three political arenas are unique to the tensions and circumstances present in the U.S. Therefore, the perceived social problem of preterm birth does not play the same political role in Canada, Great Britain and Western Europe as it does in the U.S. In Western Europe, contraceptive policies are about sexuality rather than infant health, and abortion policies are about family welfare. However, concerns about high-risk pregnancies and preterm births have played a role in political struggles over the extent and design of social welfare programs, and in the structure of labor laws in these countries. In contrast, in the U.S., advocates for gender equity in the workplace have downplayed the relationship between work exposures and pregnancy risks, and the prevention of preterm births has not figured prominently in efforts to modify employment policies for women.

Chapter 5 examines the medical care provided to pregnant women who are perceived to be at high risk for preterm birth, as well as the care provided to preterm newborns. This is the healthcare dimension of preterm birth. In the U.S., this care often involves technologically focused interventions, including some that are of questionable effectiveness. There is variation around which pregnant women receive which interventions and what types of medical specialists are involved in their care. Care for preterm newborns is more uniform than care for pregnant women, and tends to involve aggressive resuscitation at very early gestational ages. This chapter examines the drivers of the generally maximalist approach to treatment in the U.S. for high-risk pregnant women and preterm newborns: provider competition, an urge to action in response to cultural expectations for the success of medical care, and commercial interest in increasing revenue by providing more goods and services. The chapter also examines the consequences of this approach, in terms of system organization (over-capacity of NICUs and a fragmented referral system), and high healthcare expenditures.

Women’s experiences of high-risk pregnancies are conditioned by shared cultural understandings of preterm birth and affected by the dynamics of the healthcare
delivery system. When women shift from defining their pregnancies as normal to defining them as likely to end prematurely or involve other complications, they enter into social roles that involve a set of expectations that are sometimes difficult to fulfill, such as extreme activity restriction and the acceptance of painful interventions with negative side effects. This chapter examines these expectations, and also the social expectations that women and their families assume once their preterm infants are born and enter into neonatal intensive care. Interfacing with a system geared to maximal treatment limits the range of decisions women can make for themselves and that parents can make on behalf of their infants.

The U.S. healthcare system operates as a set of interconnected commercial enterprises. Federal and state governments play relatively weak roles in setting policy for the system, although governments do collect and redistribute tax revenue to subsidize health insurance, and do provide some regulatory approval for new drugs and devices. Instead, suppliers (medical care providers) and financiers (insurance companies) are the primary decision makers. This is quite different from the active role that governments play in the healthcare systems of Canada, Great Britain and Western Europe. In all of these countries, the costs of health care are publicly financed, and in several of them facilities are publicly owned and some or all medical professionals are public employees. Maternity care systems in these settings are more primary-care focused and more systematically organized than in the U.S. This limits the over-treatment that sometimes occurs in the U.S. system, reduces practice variation and orients care providers to pay more attention to the clinical value of treatments. However, it can also mean that infants born prematurely have less immediate access to NICU care, relative to the U.S. The experience of high-risk pregnant women and the families of preterm infants are relatively similar across national settings.

The final dimension of preterm birth, explored in this book in Chap. 6, is the ethical dimension. Ethics refers to those decisions and behaviors that a society considers to be moral, and in that sense ethics are another aspect of culture, as defined in Chap. 3. Chapter 6 focuses on the ways that morality is defined in the context of high-risk pregnancy and preterm birth in the U.S.: which values and principles are invoked, how authority and agency to make moral decisions are understood, and what types of ethical problems commonly occur. Ethical problems include conflicts between two moral principles held by the same individual, conflicts between the moral views of different parties, and conflicts over which parties have the standing to be involved in ethical decisions.

For example, in several situations in the course of caring for high-risk pregnant women and preterm newborns, clinicians must decide between their own principles of respecting patient and parental autonomy—to refuse treatments, to choose whether to resuscitate infants born extremely prematurely—and of acting in what they perceive to be the best interests of women, fetuses and newborns. How should decisions be made if clinicians believe that the choices of a pregnant woman are harmful to her fetus? In other situations, multiple parties have different views which must be negotiated before a decision can be made. For example, most clinicians reach a point in the care of some extremely preterm infants when further
interventions seem harmful rather than beneficial, but some parents believe that it is never ethical to stop treatment. In still other situations, there is disagreement about whether parties besides clinicians and families should have a role in ethical decision-making. For example, in some places in the U.S., legal authorities enforce mandates about the way pregnant women who use illicit drugs should be treated. These mandates conflict with clinical ethics guidelines concerning patient confidentiality and patient rights to refuse treatment, and also conflict with women’s attempts to adhere to their own definitions of moral parenting. What is the societal role in decision-making around the treatment of high-risk pregnant women and preterm newborns?

In a spillover from the political struggle over abortion policy, advocates in the U.S. have used the legal system to enforce a particular moral view that structures the decisions that clinicians and families can make about withholding and withdrawing neonatal care. While the societal view concerning the preservation of life of a fetus or newborn is relatively influential in ethical decision concerning preterm birth in the U.S., societal views related to the optimal use of resources for the care of preterm newborns are seldom strongly expressed. In the U.S., it is generally considered ethical to limit healthcare expenditures if they are useless or wasteful, but unethical to consider restricting expenditures when newborns who might otherwise survive are likely to die without care. The difficulty in having these conversations is related, in part, to the structure of the U.S. healthcare system, in which no party has overall responsibility for resource allocation decisions, so trade-offs between resources allocated to maternity and neonatal care and the way those resources could be allocated to other investments is obscured.

Discussion of ethical issues in Canada, Great Britain, and Western Europe reflect all of the same concerns seen in the U.S.; what to do when pregnant women make choices that are thought to be harmful to their fetuses, when to respect and when to restrict parental autonomy for the benefit of infants, what criteria to use in determining whether life support for marginally viable preterm newborns should be withheld or withdrawn, and what is the best use of societal resources? However, the view that the interests of mothers and fetuses are in conflict is not as widely or firmly held in these societies, so there is less social and legal support for efforts to over-ride patient autonomy for perceived fetal benefit. There is more variability in the extent to which the belief in preservation of newborn life at all costs is upheld, so quality of life and the concerns that caring for disabled newborns will pose a burden on parents are issues that are considered legitimate to raise when making neonatal treatment decisions. In addition, the publicly financed nature of healthcare systems in these countries supports the consideration of resource expenditures and trade-offs as allowable components of ethical decision-making, in ways that are seldom done in the U.S.

This book ends with a short epilogue, which describes the aspects of U.S. culture and society that are most clearly illuminated by the way preterm birth manifests and is treated here. The framing of preterm births as medical problems, despite the fact that the early ending of a pregnancy does not fit well into a disease framework, illustrates how deeply rooted the framework is into overall U.S. ideology.
As undesirable outcomes of pregnancy, preterm births help to reinforce the medicalization of all pregnancy and childbirth experiences; they are presented as a cautionary tale for what happens when women do not adhere to instructions and expected behaviors. In this way also, along with medicalization of pregnancy and childbirth in general, preterm births help to support principles of the U.S. system of social reproduction. The pattern of the occurrence of preterm birth, as it indicates the distinctive impacts of both poverty and race, illustrate that stratification in U.S. society occurs at the intersection of race and class. The role that preterm births play in the political conflicts around fertility control, poverty, and racial inequity indicates the persistence of resistance to broader social reforms in these arenas. The placement of medicine and the healthcare system as the institutions which are expected to solve the preterm birth problem, as a proxy for addressing these broader social conflicts, helps to depoliticize the issues and to rationalize the investment of public resources in essentially private sector activities within the healthcare system.

I am a cultural medical anthropologist by training. However, most of my research work has not involved the typical anthropological activity of participant observation, that is, becoming deeply familiar with small-scale settings and producing detailed descriptions of people’s modes of thinking and behaving, based on close observations and wide ranging conversations with natives in those settings. Rather, I have examined the U.S. healthcare system, focusing on the ways care is delivered to low-income populations, with a special emphasis on care for pregnant women and children. For the most part I have done this work by analyzing large data sets accumulated for other purposes, such as for paying insurance claims, recording births and deaths, or monitoring hospital use in particular states. In some cases I have been involved in fielding and analyzing the responses to telephone and mail surveys. My work has included evaluating innovative Medicaid payment systems and care arrangements for maternity care, examining the nonclinical factors associated with the transport of women in preterm labor to hospitals with the facilities to care for preterm infants, assessing the value of neonatal intensive care for the survival of preterm newborns and exploring the extent and reasons for practice variation among physicians providing care to high-risk women and preterm newborns. In the 1990s, I was part of a research team which received support from the federal Agency for Health Care Research and Quality to assess best practices for the care of low birth weight infants (the Low Birth Weight Patient Outcomes Research Team). Perhaps it could be said that I have been a participant observer in the community of researchers and clinicians involved in the care of high-risk pregnant women and preterm infants in the U.S.

However, three events piqued my interest in looking at the issue of preterm birth in the U.S. more broadly and more critically. The first was an offhand remark by a student taking a course I was teaching in public health ethics. She was a resident in Pediatrics, and she mentioned to me that she was surprised, during her rotation in the NICU, that no-one ever seemed to question whether it was worthwhile or appropriate to treat extremely preterm newborns with extensive invasive therapies. "It is as though that conversation is taboo" she said. Taboo is a word translated from Tongan, a Polynesian language, which refers to a behavior that is forbidden by
collective consensus because it is considered to be dangerous, for reasons that cannot be rationally explained. The word was first used in English by Captain James Cook in 1777, to describe why natives of Tonga refused to eat specific foods. British anthropologist Mary Douglas examined taboos closely in her work examining how and why certain objects or experiences come to be considered impure or dangerous. Given the emphasis in modern Western medicine on rationality, efficiency, effectiveness, and choice about therapies, it is striking that conversations about such topics in the context of the care of preterm newborns would be considered dangerous, in some way, by the physicians involved in such care. Could understanding this taboo lead to a better understanding of the amount and pattern of resource use allocated to the care of preterm infants in the U.S.?

The second event happened a short time later. At the time, the Schools of Medicine and Nursing at my university organized monthly sessions, called “Schwartz Rounds”, modeled after a program at Massachusetts General Hospital. Schwartz Rounds involve a multidisciplinary examination by care givers of the social and emotional aspects of a particular patient case. Often these sessions focus on cases where the care givers feel they have failed in some way. The case examined in the Schwartz Rounds that I attended focused on a Mexican woman, an immigrant with unknown legal status working in a poultry factory in a rural community about 2 hours from our city. She was hospitalized at our university hospital when she was 28 weeks pregnant because of dangerously high blood pressure.

Routine care in such cases is to attempt to lower the woman’s high blood pressure with medication. If that is not immediately successful, physicians perform a cesarean section to rescue the newborn. In this case the medication treatment was unsuccessful, but the woman refused to have a cesarean section. Several attempts were made, involving different Spanish translators and a priest, to convince her to undergo an interventional delivery, but she continued to refuse. Her husband was reached on the telephone; he could not leave the rural community to be with his wife because he would lose his job at the poultry factory if he were absent. To the surprise and chagrin of the hospital staff, the husband seemed to be very concerned about the health of his wife, but not particularly concerned about the threatened demise of the fetus. He was not willing to attempt to convince his wife to undergo the delivery. The woman left against medical advice and returned to her home and her job. She continued to be seen by her local physician, and her baby was stillborn a few weeks later.

The caregivers in this case felt that they had failed. They had been taught that in obstetrics they had two patients, a mother and a baby, and they had been unable to provide appropriate care for one of their patients. The story evoked descriptions of similar cases of pregnant women leaving care settings and having miscarriages, some tears, and a discussion about whether pregnancy loss is considered more acceptable in Mexican than in American culture. Finally, one member of the audience, another nurse, raised this question. What would have happened if the woman had actually delivered the 28 week old newborn? How would she have cared for it during the weeks or months it would be hospitalized in the city? How
would her family have survived financially if she was not able to work? Did she have other children, and what would happen to them? If the baby ended up with severe impairments, what resources would the family have to provide an ongoing care?

Of course, none of us in the audience or on the podium had any idea why the woman had refused to deliver her baby prematurely. This discussion highlighted for me the limitations of the clinical view of preterm birth for fully and accurately understanding this complex topic. It also showed how decisions are consistently being made, or at least attempted, in the clinical domain by participants who lacked the information to even speculate why patients or other parties might disagree with their approach.

The third event happened in the fall of 2009, during the intense and rancorous debate in the U.S. Congress over healthcare reform. In November, the well-respected National Center for Health Statistics (NCHS) released a brief examining the international ranking of the U.S. on infant mortality, and pointing out that the low rank—30th in the selection of nations used in the brief—was due to high preterm birth rates. The brief concluded simply that preventing preterm births is crucial to lowering the U.S. infant mortality rate. The brief made no mention of health care in the U.S. But the press coverage of the brief immediately drew the conclusion that flaws in the U.S. healthcare system were the cause of high infant mortality rates, and healthcare reform was the solution. The lead sentence from the Associated Press newswire report on the brief read as follows:

Premature births, often due to poor care of low-income pregnant women, are the main reason the U.S. infant mortality rate is higher than in most European countries, a government report said Tuesday. (AP 2009)

The New York Times coverage of the NCHS brief included a comment from Alan Fleischman, the medical director of the March of Dimes (a foundation devoted to promoting research and improved care for preterm infants) stating that the brief “was an indictment of the U.S. healthcare system” for the poor job that it does taking care of women and children.

As a participant in the community of scientists generating authoritative knowledge about preterm births, I was surprised at this public spin on the NCHS report. I thought that it was widely understood that contemporary medical care includes no interventions that consistently prevent preterm births. It then became clear to me that the issue of preterm births was playing a role in the broader political struggle over altering the U.S. system for financing health care, whether or not the actual facts about preterm birth supported the desired rhetorical purpose. I became curious about what other political functions preterm birth plays in the U.S., and how that compares to the roles it plays in other political systems. My intention to write this book came together at that point.

The content of this book is derived primarily from documents: published articles in the medical and social science literature, books, and government reports. These documents are used in two ways. In the first way, the content and conclusions drawn by the authors of this literature are taken at face value, and used, for example, to
understand the population-level correlates of preterm birth, or to understand the history of medicalized childbirth in Europe, Great Britain, and the U.S. Much excellent research has been done on the topic of preterm birth and related areas from a broad set of academic disciplines. It has been a pleasure to discover it, particularly older works which may have been forgotten but are still relevant, and it is a pleasure now to introduce readers of the literature on preterm birth in one discipline or focused on one dimension to good work conducted from other points of view or other dimensions. This multidimensional examination of preterm birth in the U.S. has been made possible only because of the wealth of research that has been conducted on this subject.

The second way these publications are used in this book is as artifacts, pieces of information that indicate the way preterm birth is being understood in a particular context. For example, an editorial published in a clinical journal in 2010 was titled "Every 30 Seconds a Baby Dies of Preterm Birth. What Are You Doing About It?" (Berghella 2010). The actual editorial simply describes the content of a paper published in that issue of the journal which suggested that measurements of a short cervix during pregnancy, as indicated by ultrasound, are a good predictor of imminent delivery. However, the title communicates the contemporary clinical attitude about preterm births: that they are abnormal, common and deadly, and that physicians should be taking actions to stop them. In many cases, I have provided the historical and social context under which a document was produced or a scientific manuscript was published. These are all ways in which the documents that provide the data for this book are treated as objects of analysis.

A second source of information for this book comes from media reports, popular books, Web sites, and blogs about preterm birth. The availability of the Internet has created an easily accessible forum where advocates can post their views and interpretations of preterm birth issues, and individuals can relate their personal experiences with the issue. This provides a rich source of primary data which broadens our understanding of the issue when it is put into perspective. Chapter 3 of this book includes a content analysis of nine popular childbirth advice books, conducted in order to assess the type of advice about preterm birth that is commonly provided to pregnant women. Chapter 3 also includes an analysis of the most common themes found in a media search of two years of newspaper articles on preterm birth and neonatal intensive care. Chapters 5 and 6 each include paraphrases of exchanges posted on online forums for pregnant women which illustrate how women sort out and decide which medical interventions they request or refuse.

A third source of information is original analysis of quantitative data, mostly gleaned from reports or posted on interactive web sites. For example, analyses of vital records over several timeframes have been combined to chart time trends in preterm birth overall and for various sub-groups. In Chap. 2, parallel data from a selection of Western European countries, Great Britain, Canada, and the U.S. have been compiled to assess whether and how the childbearing population in the U.S. differs from the population in these other nations. In Chap. 5 I have used several years of American Hospital Association survey data to track time trends in the expansion of NICU services.
Although this book does not rely on intensive first-hand observation or interviews with participants in the preterm birth arena in the U.S., it still views the issue of preterm birth through an anthropological lens. What does this imply? In broad terms, the anthropological approach has three characteristics. First, it consistently takes into account the meaning that a phenomenon or event has for its participants. The fabric of meanings that shape people’s understandings of their experience and shapes their responses is what is meant by the concept of “culture”, so it is often said that “culture” is anthropology’s master concept.

One example of the power of culture to frame the universal human experience of pregnancy loss or infant death is the contrast between anthropologists Nancy Scheper-Hughes’ account of infant mortality in deeply impoverished Brazilian communities, and Linda Layne’s account of the ways miscarriage is understood in the U.S. In the Brazilian context, infant death was so common that it was anticipated, and Scheper-Hughes found that maternal attachment to infants was relatively minimalized because of this expectation (Scheper-Hughes 1992). In Layne’s account, many U.S. women with pregnancy losses constructed elaborate mourning rituals, giving names and purchasing gifts for children who were never born (Layne 2003). Each situation seems “unnatural” when viewed by an outsider, yet each seems inevitable or imperative for cultural participants. Although I have labeled Chap. 3 of this book an exploration of the cultural dimension of preterm birth, because it focuses on popular understandings of the issue and how they intersect with the more general way childbirth is interpreted in the U.S., it should be clear that an examination of cultural meanings threads through every dimension explored here.

A second aspect of the anthropological approach is that it includes the physical or biological components of a social phenomenon as objects of inquiry, rather than as the truth upon which the social dimensions of experience are based. This allows anthropologists to examine the range of ways that social organization and cultural interpretations impact biological circumstances, and to consider how the ability to notice and accumulate information about biological phenomena is structured by social interpretations.

For example, anthropologist Brigitte Jordan’s study of childbirth in four cultures compared, among other aspects, the approach to pain in labor in the Yucatan, the U.S., Sweden, and Holland. As she described it, the experience of pain varied, depending both on culturally conditioned expectations of pain, and on whether childbirth was organized in such a way that women in labor had to negotiate with their care givers for anesthesia (the U.S.), could choose for themselves when and whether to use anesthesia (Sweden), or did not anticipate using pain relief (Holland and the Yucatan). Use of anesthesia in childbirth in turn affects the progress of labor which, depending on culturally defined expectations for this process, has an impact on whether childbirth proceeds vaginally or is accomplished by cesarean section. Mode of delivery then has an impact on particular complications experienced by the newborn. Jordan also explored the dramatic variations in what is considered to be “authoritative knowledge” about childbirth in different cultures (Jordan 1993). Here I address the clinical and epidemiological aspects of preterm birth in the first
two chapters both by describing in detail what is currently known about the phenomenon while offering a cultural interpretation of how this knowledge is constructed. Chapter 5, on the healthcare system dimension, explores in more detail the way the clinical paradigm shapes obstetrical and neonatal interventions, which in turn shape prevalence and consequences of preterm birth.

Third, the anthropological approach often includes, implicitly if not explicitly, comparisons of phenomena across human cultures and societies. By identifying commonalities and contrasts in the way common experiences are understood and responded to in different societal contexts, the cross-cultural perspective helps us to notice which facts that we take for granted are actually contingent on particular cultural and social arrangements, and which core cultural and social principles are shared across societies.

Jordan’s work on childbirth is an example of this, as is anthropologist Tsipy Ivry’s own experiences with pregnancy when she was conducting fieldwork in Japan and when she was pregnant at home in Israel (Ivry 2010). The social context of each of her pregnancies was deeply conditioned by beliefs about the impact of the environment on fetal development and about responsible reproduction which led to differences, for example, in the use of prenatal genetic testing and the healthcare system’s expectations about parental responses to abnormal test results in the two cultural settings. Here, as noted earlier in this introduction, I provide a comparison section at the end of each chapter that explores the ways that preterm birth in the U.S. are similar and different from preterm births in Canada, Great Britain, and Western Europe on the dimension discussed in the chapter.

Although the history of anthropology is rooted in research conducted by British, Western European, and American scholars in unfamiliar settings, there is an ample contemporary literature that reflects anthropological work done in one’s home setting, as I have done here. Commenting on this body of work, Jessica Cattelino acknowledges that the anthropology of the United States is challenging because this society is so complex and diverse. She finds that knowledgeable scholars strive to avoid either focusing on exotic sub-populations as though they were not living in the broader U.S. contemporary context, or focusing on White “heartland” or middle-class populations and misrepresenting them as standing for all of the U.S. social experiences. Successful anthropological work in the U.S. by natives of the U.S. often selects themes such as gender relations or domains of activity such as medicine or social activism. Even in these focused studies though, anthropologists must be conscious of aspects of U.S. society that they take for granted as “natural”, since they do not have the advantage working in their nonnative setting where everything seems unfamiliar (Cattelino 2010). I believe that the approach I have taken here, using the six dimensions of clinical care, epidemiology, culture, politics, medical care, and ethics to focus on the same phenomenon, preterm birth, has been helpful as a way to challenge what we take for granted.

Finally, issues related the phenomenon we call “race” play out in all six of the dimensions of preterm birth discussed in this book. After all, individuals identifying as Black or African-American comprised 13.2 % of the U.S. population in 2014, according to the U.S. census. They comprised 14.8 % of the women who gave birth
in 2014, but their newborns comprised 20.4% of all infants born preterm in that year. In 2014, the preterm birth rate for Black women in the U.S. was one and a half times the rate for White women.

Race is an identity people choose for themselves and also a way that U.S. society itself distinguishes and divides the population. Race refers to people who have a common ancestry but, distinct from the category of ethnicity, the use of the term race also implies that the group shares physical or biologically based characteristics which distinguish them from others. In the U.S., the term race is most commonly used to distinguish individuals with ancestry that traces to sub-Saharan Africa from individuals who trace their ancestry to other places. The term African-American is sometimes used for these individuals, to contradict the assumption that they share a unique biology and to equate race more closely to ethnicity. The term Black is used to emphasize the way U.S. society has differentiated Americans of sub-Saharan African descent from those with other ancestry. Critics of the use of the term African-American point out that Italian-Americans tend to lose their ethnic identity after living in the U.S. for several generations, while one’s identity as an African-American is not subject to attenuation over generations.

It is not a coincidence that Black Americans are thought to share distinct biological traits, while such an assumption is not always made about individuals who trace their ancestry, for example, to Japan or Mexico. It is also not a coincidence that the designation “Black” is applied to individuals whose ancestry includes a mix of people from various continents, if any one of those continents was sub-Saharan Africa. Individuals who identify themselves or are identified by others as Black in the U.S. are, for the most part, descendants of people brought to the U.S. from Africa as slaves between 1619 and 1866. Laws put in place at the time defined anyone descended from African slaves as belonging to that race. A belief in the unique and inferior basic nature of Black people is part of the ideology that rationalized slavery. These beliefs continue to be used to rationalize Black peoples’ generally marginalized position in the economic, social, and political structure of the U.S., their poorer health status and higher mortality rates. The belief system that ascribes unique and inferior traits uniformly to individuals identified as Black is called racism. Racism renders the persistent social structures which disadvantage Black people as though their results were natural phenomena, and this makes these structures more difficult to identify and critique.

Beliefs about race are an important part of U.S. cultural understandings of reproduction. As noted above, birth rates in the U.S. are easily tracked by race, and stereotypes about Black women in a reproductive context have a profound effect on how they are treated and on the outcomes of their pregnancies. These issues are discussed in this book, particularly in Chaps. 2–4. Although it is typical in much of the literature cited here to treat racial categories as though they were objective phenomena that meaningfully describe segments of the population, readers of this book should keep in mind racial categories are really social conventions that point to a complex and loaded sociocultural phenomenon.

I am happy to have the opportunity to introduce a multidimensional sociocultural perspective on preterm births to the many different audiences with interests in this
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I hope my work will be of benefit to everyone involved in the care of pregnant women and their newborns.

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