

# 1 Someday, Now

## PRECONCEIVING RISK AND MATERNAL RESPONSIBILITY

Having a healthy pregnancy is no longer contingent on being pregnant in the first place. In February 2016, the federal Centers for Disease Control and Prevention (CDC) released a statement urging women of reproductive age to avoid alcohol if they were not using birth control, lest they harm a pregnancy that might or might not be present. The idea was vast: the CDC indicated that about 3 million American women were putting potential pregnancies at risk, but any woman between 15 and 44 years old was defined as “pre-pregnant,” thus targeting, in effect, about 61 million American women.<sup>1</sup> This measure attracted considerable social commentary and ridicule,<sup>2</sup> but it hardly represented a new idea in public health. In 1981, Surgeon General Edward Brandt issued a warning that women “considering pregnancy” should refrain from alcoholic beverages.<sup>3</sup> Since 1992, Kentucky has required bars to post warnings that drinking alcohol *prior to conception* can cause birth defects<sup>4</sup> when, in fact, it cannot. The idea of pre-pregnancy health promotion surged after 2006, when the CDC released a report recommending improvement of the pre-conception health and health care of U.S. women of childbearing age.<sup>5</sup> Alcohol was just one of many pre-pregnancy risk factors listed in this report, and public health warnings issued since 2006 have not been limited to drinking.

In late 2012, for instance, Texas initiated a public-awareness campaign, called *Someday Starts Now*, for improving the health of the state's babies. In television spots, young women performed everyday activities—chatting with friends, exercising—accompanied by a looming bubble box filled not with dialogue, but rather with numbers indicating a long-in-the-future baby's due date, sometimes years away. This approach had the visual effect of dangling future motherhood above the women's heads. The campaign's associated website stated, "your health today is important—and even more important to the baby you might have someday."<sup>6</sup> The text further offered: "If there's a baby in your future, even if it's months or years from now, today matters. Take control. Stop smoking, eat right and exercise and do something about your stress."<sup>7</sup> After seeing this television spot, one blogger wrote, "Texas is Reminding Me I'm Just a Baby Vessel Again."<sup>8</sup>

The CDC and Texas campaigns represent but two illustrations of a growing tendency in medicine and public health to mark the beginning of healthy and responsible motherhood not at the birth or adoption of a child, not during pregnancy or at conception, but rather at an earlier point in time: pre-pregnancy. Similarly, in its recommendations for healthy pregnancy behavior, the March of Dimes—a national organization committed to improving birth outcomes in America—points directly to the three months prior to conception, claiming that a proper pregnancy today should actually last twelve months.<sup>9</sup>

These public health statements are jarring. Perhaps because of the invariant biological fact that a typical human pregnancy lasts about nine months, it is disconcerting to read that it instead should be thought of as a lengthier process. Given feminist progress over the past half century, the thought of women of reproductive age as primarily mothers-in-waiting seems problematic.<sup>10</sup> Also given that the focus on pregnancy health for more than a century has been on pregnancy behaviors, the thought of focusing on health behaviors *prior to* pregnancy is astounding. At the same time, these public-health assertions are somewhat expected. The sentiment that healthy babies stem from fit, responsible women echoes age-old societal preoccupations with women's bodies, behaviors, and reproductive outcomes. Anticipating and hedging future risk is reflective of our contemporary age of risk aversion and individualized responsibility for health. Concerns about the health of future generations have long

manifested in cultural and political anxieties around family planning, fetal health, and women's roles in society.

Pre-pregnancy care is a framework that emerged as the new panacea for ensuring healthy pregnancies and healthy infants in the United States in the twenty-first century. It now is a dominant medical and cultural schema for reducing risks to healthy pregnancies, and it includes prescriptions for both health care and self-care. To have good pre-pregnancy health is to render pregnancy less risky, the thinking goes, and might improve the overall health of women, children, and society. What is emphasized, then, in contemporary health discourse is that for any woman of childbearing age, in the case of pregnancy health, someday *is* now.

Such messages are not coming only from health organizations. The notion of pre-pregnancy care has also entered the marketplace—touted as the fix for population health issues ranging from obesity to autism.<sup>11</sup> Women today can buy vitamins specially marketed for the pre-pregnancy period as well as advice books such as *Get Ready to Get Pregnant: Your Complete Prepregnancy Guide to Making a Smart and Healthy Baby*. Newspapers run headlines such as, “Start taking care of your baby before you get pregnant”<sup>12</sup> and “Don't focus on getting healthy while pregnant—do it before conceiving.”<sup>13</sup> Even tabloids have expanded their surveillance rhetoric and routinely conjecture about whether celebrities are *potentially planning* a pregnancy through monitoring their day-to-day behaviors (e.g., “She was seen avoiding alcohol! She might be *thinking* about getting pregnant!”).

What accounts for this current moment in which birth outcomes are defined in terms of a woman's whole adult life—well before she ever decided if and when to get pregnant and have a baby? What accounts for the contemporary reproductive landscape in which, as in the Texas health campaign, due dates are projected onto non-pregnant women and a healthy pregnancy is defined as lasting longer than nine months? How is it that now, in the twenty-first century, young women are essentially asked to act as responsible mothers before motherhood is their imminent reality?

This book confronts these questions by tracing the shifting boundaries of pregnancy health risk and maternal responsibility in America at the turn of the twenty-first century—by examining how and why the trend and task of perfecting pregnancies has extended at the front end of three trimesters. It proposes that this pre-pregnancy care model introduces a

“zero trimester”—a concerted focus on the months or years prior to conception in which women are urged to prepare their bodies for a healthy pregnancy. The term “zero trimester” has not been previously used in academic, popular, or medical parlance; it is my own neologism that reflects growing sentiments among health professionals and others that individual women should adopt an attitude of anticipation when it comes to pregnancy health.<sup>14</sup> The zero trimester concept, then, refers to the period when a woman is not pregnant but when she is supposed to act *as if* she is pregnant.<sup>15</sup> The notion of the zero trimester is easily marketed as the three months prior to pregnancy, for example when organizations such as the March of Dimes claim that a pregnancy lasts twelve months.<sup>16</sup> This line of thinking, however, assumes that a woman will know exactly when she will conceive. Thus, the onus of pre-pregnancy maternal responsibility could be vast, without temporal bounds.<sup>17</sup> Some health professionals even point to a woman’s lifetime of experiences as mattering to the health of a pregnancy. During my research for this book, one expert told me, without hyperbole, that “a woman is a mother from the time of her own conception.” All of women’s pre-reproductive years are in the zero trimester.

The idea of extended time for pregnancy has linguistic precedent, as the boundaries between discourses about fetuses and about newborns have become more fluid. The fetus has been represented and personified as childlike in popular and medical imaginations over the past several decades, parallel to both the work of pro-life activists as well as advances in medical technologies (such as sonograms) that render the contents of wombs visible.<sup>18</sup> Additionally, thanks to some popular infant-rearing and sleep books like *The Happiest Baby on the Block*, the concept of the “fourth trimester” has become part of many new parents’ lexicons in recent years.<sup>19</sup> The “fourth trimester” idea denotes the difficult first three months after a child is born<sup>20</sup> and reflects the sentiment that these three months are essentially an extension of fetal development. As medical writer Susan Brink’s book on the topic explains, “the fourth trimester has more in common with the nine months that came before than with the lifetime that follows.”<sup>21</sup> For instance, the popularity of swaddling newborns—mimicking, in a way, life in the womb—is part of this extended-trimester framework.<sup>22</sup>

Thus, it is this cultural moment—one that has seen the rising importance of the fetus and expanding notions of trimesters—in which the zero



Figure 1. The twenty-first century pregnancy

trimester has materialized and flourished, changing, as it has, medical and social conversations about reproductive risk. Extending the fetal stage *prior to* as well as *beyond* pregnancy has become more typical within twenty-first century health-risk discourse. The zero trimester and fourth trimester are modern inventions, flanking the clinical period of pregnancy (see Figure 1).<sup>23</sup> In explaining the social and medical contours of how current health messages targeting women of reproductive age emerged, this book centers on the conceptualization of the pre-pregnancy period as a constructed trimester within a particular social, cultural, and political context of shifting ideas about risk and reproduction.

#### WHAT THE “ZERO TRIMESTER” INCLUDES

As mentioned above, contemporary pre-pregnancy care messages are informed by the U.S. Centers for Disease Control and Prevention’s decision to begin promoting pre-pregnancy health and health care in the twenty-first century. In 2006, the CDC released a list of pre-conception health recommendations in the widely-circulated *Morbidity and Mortality Weekly Report* (MMWR), entitled “Recommendations to Improve Preconception Health and Health Care—United States.”<sup>24</sup> This public health report was central to the emergence and trajectory of the pre-pregnancy care model. Following the release of the *MMWR*, the CDC convened a set of expert workgroups (clinical, public health, consumer, and policy) to filter recommendations and follow through with the report’s goals. The result was numerous publications in the medical and public health literature about how to improve pre-pregnancy care among

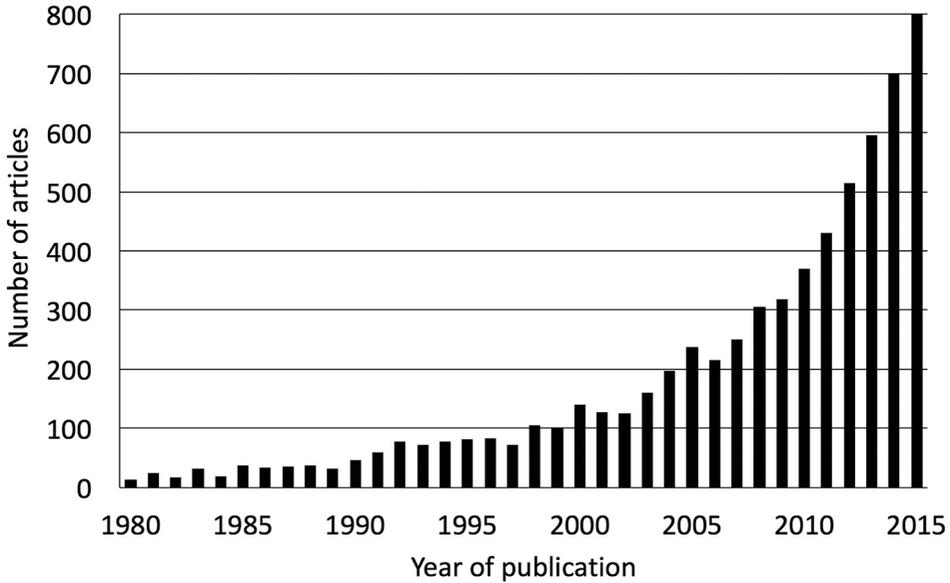


Figure 2. Number of publications on pre-pregnancy health or health care published in medical and health journals, 1980–2015

American women. More pre-pregnancy health promotion campaigns followed, and conversations within medicine and public health about pregnancy health quickly turned more squarely than ever before to the pre-pregnancy period (*see* Figure 2).<sup>25</sup>

With the manifest aims of reducing reproductive risk and improving birth outcomes—including infant mortality, maternal mortality, preterm birth and low birthweight—the basic idea of pre-pregnancy care is to advise and treat any negative health behaviors or conditions that might impact a reproductive-aged woman’s future pregnancy. The *MMWR* outlined a concrete, though abstract, definition of pre-conception care as “a set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a woman’s health or pregnancy outcome through prevention and management.”<sup>26</sup> According to the report, all providers who routinely see and treat women of reproductive age should be attuned to pre-pregnancy health and health care. They should be asking women—regardless of the nature of the clinical visit—what their reproductive plans

might be and giving advice in accordance. The report also called for systematic changes in health care provision to offer additional coverage to pre-pregnant women. Women themselves are generally encouraged to partake in self-care, seek out testing (for genetic or hereditary predispositions and for sexually transmitted infections), take multivitamins (especially with folic acid), stop smoking cigarettes and drinking alcoholic beverages, and get conditions such as diabetes or obesity under control prior to conceiving. To an uncritical observer, these interventions might sound reasonable and desirable. That is, these recommendations carry a valence that is hard to argue with: Who would be against healthier mothers and babies? What became exasperating to some commentators is that the new model appeared to be a reawakening, of sorts, of the sentiment that women's bodies are only vessels for someone else—that women are mothers-in-waiting, and that it is the job of public health and medicine to control women's bodies for the sake of the greater good. In this way, observers pointed early on to how pre-pregnancy care might be perilous for women.<sup>27</sup>

Following the release of the CDC's 2006 report, media headlines engaged in both fear mongering and skepticism. The *New York Times* published an article entitled, "That Prenatal Visit May Be Months Too Late," and indicated that the guidelines applied to women of childbearing age even if they are not planning for pregnancy.<sup>28</sup> The *Washington Post*, in its article "Forever Pregnant," explained that "new federal guidelines ask all females capable of conceiving a baby to treat themselves—and to be treated by the health-care system—as pre-pregnant, regardless of whether they plan to get pregnant anytime soon" and that "so much damage can be done to a fetus" if recommendations are not heeded.<sup>29</sup> *Ms. Magazine* more directly pointed to the contentious nature of the new guidelines with the mocking title "Warning: You Could be Pre-Pregnant."<sup>30</sup> Popular outlets cautioned of potential fetal damage if women were not mindful of the new pre-pregnancy care guidelines, but also undermined the idea to a degree by noting that some might see the idea as outlandish.

It became clear following the CDC's report that different understandings of pre-pregnancy care were operating simultaneously. In one interpretation, public health officials were offering a forward-looking agenda to improve maternal and child health in the United States—a laudable goal to be sure. In another, critics began lambasting the idea of pre-pregnancy

care as backward-looking and sexist. That such divergent viewpoints emerged shows that the idea of pre-pregnancy care struck a cultural and political nerve—something that I work to analyze and clarify throughout this book.

Indeed, the rise and meaning of pre-pregnancy care is much more complex and layered than critiques thus far have afforded. Intricacies abound in a close reading of pre-pregnancy care messages within medical and public-health discourse, revealing latent aims of the framework. For instance, proponents of this model situate it as an avenue for reproductive justice, a framework that includes improving women's reproductive opportunities and improving access to their reproductive needs. Yet, the contradictions are numerous and powerful. In one pre-pregnancy health webinar I tuned to in 2010, a renowned pre-pregnancy care expert expressed that if a woman chooses unprotected sex, she chooses a baby. This statement excludes various options women have once they conceive, and it also incorrectly assumes that unprotected sex is always a "choice" for women. When declarations like this one pepper discussions of pre-pregnancy care, it might be difficult for people to agree that it is a model for advancing reproductive autonomy. As argued in Chapter 4, the pre-pregnancy care approach does genuinely attempt to further reproductive justice, but of ongoing concern are unintended consequences that could stem from pursuing a model with a mindset that all pregnancies can be planned and that all women of reproductive age are potential mothers. Pre-pregnancy care might not simply be about improving birth outcomes, but also could be—as are most reproductive health agendas—wrapped up in the "longstanding societal ambivalence over the social roles of women."<sup>31</sup>

Furthermore, although some observers find pre-pregnancy care to focus on practical risk factors that might impact a woman's health and thus her future reproductive endeavors, such a seemingly straightforward risk-factor approach is accompanied by messaging that makes risk factors sound like *causes* of imperfect or adverse birth outcomes: if a woman engages in untoward behavior today, her future reproductive endeavors are at risk. The rhetoric of many pre-pregnancy health promotion materials mixes language of risk prevention with that of blame.<sup>32</sup> Take a CDC poster from 2009 that reads, "You just found out. You're pregnant! . . . It's too late to prevent some types of serious birth defects. . . . The time to prevent birth

defects is *before* you know you're pregnant." This particular poster aimed to relay information about the potential of pre-pregnancy folic acid intake to reduce the risk of birth defects. Even though taking folic acid indeed reduces risk, *not taking* folic acid does not *cause* a birth defect. Further, the guilt-inducing, moralized message in this poster is somewhat inexplicable in that it seems to be a prevention message after the fact. Such messaging is presumably intended to make women aware of risk for their future pregnancies, to perhaps exploit what psychologists call "anticipated guilt."<sup>33</sup> In this way, it stokes the fire of critiques that pre-pregnancy messages place an undue burden on women of childbearing age. As I have found, the pre-pregnancy reproductive risk discourse of the twenty-first century evokes particular mechanisms and potential consequences for women that can be quite divisive. Indeed, some think pre-pregnancy care is irrational and others think it is essential. As revealed in the tenor of public-health messages that directly tie pre-pregnancy health behaviors to the risk of birth defects, it is also clear that this discourse is laced with sometimes-strident moral undertones, something to which I return in Chapter 5 and Chapter 6.

Although the notion of pre-pregnancy care was enlightening to some and maddening to others as it emerged on the national policy scene in the 2000s, the idea was not novel to many individuals working in fields of public health and medicine. There was momentum leading up to the CDC's report among those steeped in professional discussions about persistent adverse birth outcomes (*see* Figure 3). As early as 1980, a British physician wrote about the need for "pre-pregnancy clinics."<sup>34</sup> The Institute of Medicine's 1985 landmark study *Preventing Low Birthweight* was the first major medical publication to advocate changing the traditional point of obstetric care to the pre-pregnancy period,<sup>35</sup> addressing risk factors at the pre-pregnancy stage and stating that "numerous opportunities exist before pregnancy to reduce the incidence of low birthweight."<sup>36</sup> The 1989 Public Health Service publication *Caring for Our Future: The Content of Prenatal Care* adopted and expanded the concept of pre-conception care to include risk assessment, health promotion, and intervention follow ups, explaining that "the preconception visit may be the single most important health care visit" in terms of pregnancy and health outcomes.<sup>37</sup> *Healthy People 2000*, which targeted the nation's top health goals for the approaching decade, also highlighted pre-pregnancy health as a priority.

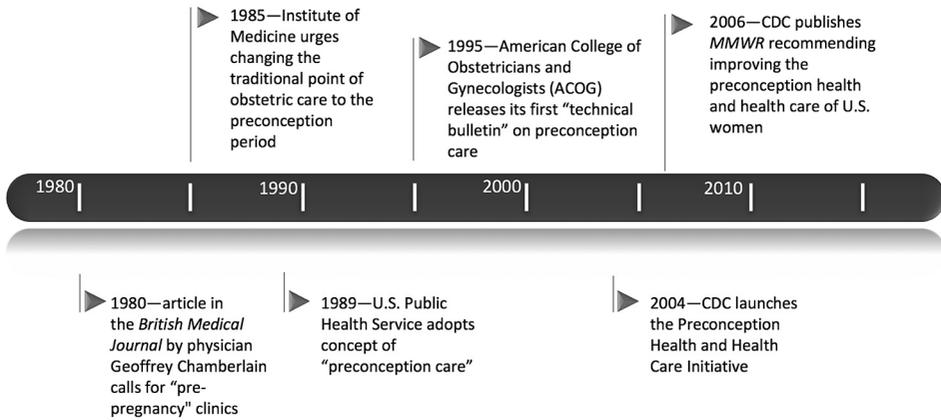


Figure 3. Key moments in the emergence of pre-pregnancy care, 1980–2006

As Chapter 2 discusses, physicians and public-health materials have emphasized the pre-pregnancy health of women for generations, albeit with different levels of intensity and specific concerns. Moreover, the idea of pre-pregnancy care is not new to those who might be proactive about pre-pregnancy genetic screening, such as those for whom genetic predispositions to certain diseases (e.g., Tay Sachs) are prevalent in their population group. Women and men who donate their genetic material to fertility clinics are often presented with a litany of health questions, and women and men who have faced infertility also might be acutely cognizant of pre-pregnancy care. For the vast majority of the population, however, health concerns around conception remain informal or nonexistent.

What is novel in the twenty-first century is the institutionalized nature of pre-pregnancy care as a model framework for reducing reproductive risk—an approach in which clinicians and public health officials now understand “proper” pregnancy care to include improving health behaviors, addressing risk factors, and pursuing treatments prior to pregnancy in a formalized way. As part of this framework, women are expected to care for their health prior to pregnancy. This includes planning their reproductive lives, improving lifestyle behavior, and seeking medical care. Moreover, clinicians are expected to assess women’s health status prior to pregnancy and offer appropriate care

interventions aimed at the woman as a pre-pregnant body. In practice today, this care framework serves as a main organizing principle for public-health campaigns, population health studies, and women's health care.

#### SITUATING THE ZERO TRIMESTER IN THE HISTORY OF PRENATAL CARE

It is impossible to understand the social creation of the “zero trimester” without understanding the historical rise and fall of the promise of prenatal care to improve U.S. birth outcomes. Prior to this century, most health professionals might have thought absurd the pre-pregnancy messages cited at the start of this chapter. The prevailing medical model for ensuring pregnancy health for almost one hundred years had been prenatal care—the idea being that if women engage in healthy behaviors and receive good clinical care *during* the nine months of pregnancy, then birth outcomes should be optimized and infant morbidity and mortality reduced.<sup>38</sup> The Children's Bureau first advocated clinical prenatal care in the early twentieth century,<sup>39</sup> but this concept did not take root as a universal expectation of pregnant women until the 1980s.<sup>40</sup> The '80s became known within the maternal and child health field as one of a “prenatal care revolution” because of the great increase in numbers of women seeking and accessing care.<sup>41</sup> Maternal and child health experts were hopeful that this surge in prenatal care utilization would reveal its “magic bullet” status, translating into vast improvements in population health. Quite surprisingly and contrary to the expectations of many, however, birth outcomes did not improve the more prenatal care American women sought and received. At the end of the twentieth century, infant health and survival in the United States ranked among the worst in the industrialized world and improvement in rates of adverse birth outcomes had stagnated.<sup>42</sup>

Such it was that a paradox had emerged—more and more women were accessing prenatal care services without parallel improvements in birth outcomes. When prenatal *care* seemed not to be doing enough, prenatal *education* was then pushed as the next big answer.<sup>43</sup> Sociologist Elizabeth Mitchell Armstrong writes that prenatal education, such as childbirth classes offered by hospitals, was “proposed as a solution to one of the most

troubling social facts of contemporary America: despite the billions of dollars lavished on health care, despite ever-higher concentrations of medical technology, babies continue to die in this country at a much higher rate than elsewhere in the industrialized world.”<sup>44</sup> Because many countries use infant and maternal mortality and morbidity rates as proxies for national health,<sup>45</sup> the United States did not distinguish itself as healthy or progressive in the 1980s. Experts began to question the evidence bolstering prenatal care. Maternal and child health scholar Lorraine V. Klerman wrote in 1990 that it was perhaps time to “question past orthodoxies” and “loosen the link between prenatal care and infant mortality” because “public health experts know that the reduction of infant mortality requires much more than prenatal care.”<sup>46</sup> In the interviews I conducted for this book, experts told me time and again that prenatal care basically does very little, if anything, to address the nation’s most pressing maternal and child health problems.

Although prenatal care might be very effective at diagnosing and treating problems that surface during a pregnancy, it does not prevent many of those issues from arising in the first place. It is especially ineffective at preventing the major causes of poor infant health outcomes: low birth-weight and preterm birth.<sup>47</sup> Moreover, health professionals are quick to note that almost half of U.S. pregnancies are unplanned, meaning that women often enter pregnancy without health care or healthy behaviors on their mind, and unintended pregnancies are often linked to a greater risk of an adverse birth outcome.<sup>48</sup> Many experts argue that U.S. women are just not healthy enough—and do not plan ahead well enough—and therefore are putting the health of the next generation at risk. In this vein, and as Chapter 4 discusses in more detail, health experts began to question policies that only provide comprehensive health care to women when they are pregnant, rather than before and beyond motherhood. Thus, around the turn of this century, many maternal and child health professionals considered prenatal care—the perceived panacea for improving the population’s birth outcomes—nothing more than a mere salve.<sup>49</sup> As one historian has written, “prenatal care is no magic bullet and never will be.”<sup>50</sup>

What was considered the best way forward? How do medical and public health experts tackle population health problems when the best idea to date has not worked? Near the turn of the twenty-first century, maternal

and child health experts began contending that the answer to improving birth outcomes and to reducing infant mortality and maternal mortality was both prenatal care and *pre-conception care*,<sup>51</sup> or medical and health attention before pregnancy ever begins, in addition to care during pregnancy itself<sup>52</sup>—that is, to construct a zero trimester. If prenatal care seemed to be the answer for the twentieth century, then pre-pregnancy care would be the answer for the twenty-first.

In 2004, the Centers for Disease Control and Prevention launched the Preconception Health and Health Care Initiative, signaling a formal swing in policy focus toward improving women's health status through a focus on both individual women's self-care and improvement in health-care services for women of reproductive age prior to pregnancy. But how far prior? The answer was to move the temporality of pregnancy health risk and maternal responsibility to actions taken in the months—or sometimes even years—before pregnancy, thus situating essentially any body of reproductive age as posing risk to healthy reproduction.

This book examines this redefinition of reproductive risk; it is about a knowledge shift in the field of maternal and child health—about a search for a panacea in pregnancy care. It looks at the collective response to pressing population health and social problems when the clinical “fix” has failed, and it is about how a somewhat ambiguous idea of “pre-pregnancy care” came to “make sense” in medical and public-health discourse today.

#### DOES THE ZERO TRIMESTER MATTER? EVIDENCE AND AMBIGUITY

Of course, prenatal care did not become obsolete and instead has been bolstered time and again by social policy initiatives.<sup>53</sup> Prenatal care remains an “article of faith” in our culture,<sup>54</sup> and individuals, couples, doctors, health policy, and insurance companies continue to highly value it. To repeat, prenatal care does have individual-level benefits such as addressing and diagnosing problems that arise during a pregnancy, and the central argument of this book in no way posits that women's access to prenatal care services should be curtailed. What is germane here is that prenatal care does little in the way of *primary prevention*—a point that

the medical experts I interviewed readily and repeatedly made. This means that prenatal care is reflective of our medical culture to treat rather than prevent.<sup>55</sup> It inscribes maternal responsibility as a “good” expectant mother seeking prenatal care throughout her pregnancy. Pre-pregnancy care, then, might seem an obvious next step for individuals and organizations immersed in the idea that seeking prenatal care marks responsible pregnancy behavior: if it is good, then the earlier the better. The added component of pre-pregnancy care was meant to complement, not supplant, the “old” prenatal model, and in so doing expand the sphere of medical and maternal responsibility for establishing healthy pregnancies.

Although the pre-pregnancy care model in some ways might be an empowering and smart way for women and physicians to approach family planning and reduce risk—and, indeed, the focus on pre-pregnancy care offers an important corrective to longstanding policies that have ignored the critical intersections between maternal health and reproductive health and that have in some ways impeded reproductive justice (a point explored at length in Chapter 4)—it in other ways might function as yet another attempt to control women and their behaviors, by placing their non-pregnant lives within new crosshairs of public scrutiny. To be sure, much of the criticism surrounding the pre-pregnancy care model has stemmed from the fact that pregnant women have long been construed as “public property” in America,<sup>56</sup> where, at an interactional level, strangers feel empowered to touch pregnant women’s bellies and, at a structural level, the criminal justice system targets pregnant women for their behaviors. Surveillance of, and anxiety around, women’s pregnant bodies remains typical. Imagine a visibly pregnant woman drinking at a bar in the United States; the social sanctioning that follows is perhaps inevitable. Then, imagine a non-pregnant woman drinking at a bar. Does anyone look at her and worry about her future fetus? Not likely. For a very long time, medicine, public health, and even the lay public have focused intently on policing a woman’s behaviors when she is clearly pregnant. Few people—and few physicians—would think of telling a non-pregnant woman who drinks alcohol that she is possibly harming her chances of having a healthy baby someday. Yet this message is part of the CDC’s 2016 public-health statements urging women of reproductive age to avoid alcohol. Even if the message might be well-intentioned in some respects, these types of directives run the risk of unintended consequences—namely of creating an

atmosphere that escalates not only individual guilt among women but also social policing and public retribution against women who deviate from customary norms.

But is the hypothetical non-pregnant woman drinking at a bar actually endangering her future fetus? Do everyday choices and behaviors matter for future reproductive outcomes? It might make intuitive sense to be at one's healthiest before reproducing, but the evidence is ambiguous regarding whether specific pre-pregnancy behaviors will impact fetal health. With respect to alcohol, for example, the CDC's 2006 report stated that at "no time during pregnancy is [it] safe to drink alcohol, and harm can occur early, before a woman has realized that she is or might be pregnant" and that "alcohol-related birth defects can be prevented if women cease intake of alcohol before conception." Nowhere in this recommendation was the claim that *pre*-pregnancy drinking will affect the future health of the fetus or child. Rather, the predominant worry was that a woman will continue drinking without knowing she is pregnant. The public-health recommendation is to discontinue drinking *prior to* pregnancy so as not to continue drinking someday *during* pregnancy.

Although pre-pregnancy alcohol messages reveal how pre-pregnancy recommendations can be patently misleading and disingenuous, other examples allow us to better grasp the pre-pregnancy model's reasoning. There is good evidence to suggest that controlling certain chronic conditions prior to pregnancy improves individual chances for positive birth outcomes. For example, medical researchers have found that women with diabetes (both type 1 and type 2) are at increased risk of miscarriage and adverse birth outcomes, and that these risks can be mitigated through pre-pregnancy planning.<sup>57</sup> Another good example is HIV status, in which women who are HIV-positive could benefit from pre-pregnancy counseling about ways to prevent transmission to a future infant.<sup>58</sup> Moreover, public health officials and physicians are increasingly worried about widespread chronic conditions among women, such as obesity. Obese women have elevated risks for complications during pregnancy and childbirth,<sup>59</sup> and thus it might be very beneficial for such women to lose weight prior to pregnancy, both for their own general health and for their pregnancy health. At the same time, obesity has multiple causes and might not be easily remedied in a pre-pregnancy care visit. Other "epidemics" are troubling