# Physical Accessibility of Routine Prenatal Care for Women with Mobility Disability

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# Abstract

**Background:** Routine prenatal care includes physical examinations and weight measurement. Little is known about whether access barriers to medical diagnostic equipment, such as examination tables and weight scales, affect prenatal care among pregnant women with physical disabilities.

Methods: We conducted 2-hour, in-depth telephone interviews with 22 women using a semistructured, openended interview protocol. All women had significant mobility difficulties before pregnancy and had delivered babies within the prior 10 years. We recruited most participants through social networks. We sorted interview transcript texts using used NVivo software and conducted conventional content analyses to identify major themes. **Results:** Interviewee's mean (standard deviation) age was 34.8 (5.3) years. Most were white, well-educated, and higher income; 8 women had spinal cord injuries, 4 cerebral palsy, and 10 had other conditions; 18 used wheeled mobility aids. Some women's obstetricians had height adjustable examination tables, which facilitated transfers for physical examinations. Other women had difficulty transferring onto fixed height examination tables and were examined while sitting in their wheelchairs. Family members and/or clinical staff sometimes assisted with transfers; some women reported concerns about transfer safety. No women reported being routinely weighed on an accessible weight scale by their prenatal care clinicians. A few were never weighed during their pregnancies. *Conclusions:* Inaccessible examination tables and weight scales impede some pregnant women with physical disabilities from getting routine prenatal physical examinations and weight measurement. This represents substandard care. Adjustable height examination tables and wheelchair accessible weight scales could significantly improve care and comfort for pregnant women with physical disabilities.

# Introduction

**D**URING EACH ROUTINE PRENATAL VISIT, well-established practice guidelines recommend evaluation of women's blood pressure, weight, uterine size (to assess progressive fetal growth and consistency with estimated delivery date), and fetal heart activity (at appropriate gestational ages).<sup>1</sup> Depending on their clinical circumstances and personal preferences, pregnant women may require other testing, such as ultrasound. However, all pregnant women should get basic assessments-requiring physical examination and weight measurement—at each prenatal visit.<sup>1</sup>

Pregnant women with significant mobility disability may confront substantial barriers to obtaining these routine prenatal evaluations. Inaccessible examination tables and weight scales sometimes prevent women with mobility disability from receiving routine screening and preventive services, such as complete physical examinations, Pap tests, and weight measurement.<sup>2–6</sup> In a "secret shopper"-type study, researchers called specialists to schedule an appointment for a fictional wheelchair-using patient; 44% of gynecologists refused to accept the patient, indicating they could not accommodate patients who cannot self-transfer onto examination tables.<sup>7</sup> The gynecologists' refusal rate was the highest of the eight specialties studied (overall refusal rate, 22%; although some gynecologists also provide prenatal care, those performing obstetric services were not specifically identified). All refusals were likely illegal under the 1990 Americans with Disabilities Act (ADA).<sup>8</sup>

The notion that women with significant mobility disability might desire pregnancy and motherhood upends longstanding social expectations.<sup>9, 10</sup> Attitudes about women with

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disabilities becoming mothers have become more accepting in the last several decades, spurred perhaps by the ADA, changing social mores, and advances in obstetrical and perinatal care.<sup>11–14</sup> Visibly pregnant women with mobility disabilities still can encounter uncomfortable reactions from strangers, ranging from confusion to curiosity to hostility.<sup>15</sup> Nonetheless, analyses of national survey data find that, after accounting for their older ages and other sociodemographic characteristics, women with significant mobility disability report being currently pregnant at similar rates as nondisabled women.<sup>16</sup> Currently, estimates suggest that every year 145,000 civilian, noninstitutionalized American women with severe mobility are currently pregnant.<sup>16</sup>

Relatively little is known about obstetrical care experi-ences of women with mobility disability,<sup>17–19</sup> in particular whether routine services, such as physical examinations and weight measurement, are physically accessible. Given this dearth of evidence about accessibility of prenatal care, we used descriptive qualitative analysis methods to gather preliminary information about experiences of women with mobility disability in accessing routine prenatal services. We use the World Health Organization's disability model, which holds that disability results from complex interactions among women's functional impairments (defined as "problems in body function or structure such as a significant deviation or loss"), health conditions, and barriers within the physical and social environments.<sup>20</sup> We report here on accessibility experiences during prenatal care relating to routine servicestransferring onto examination tables for complete physical evaluations and being weighed-of 22 women with significant mobility disability who have delivered babies in recent years.

#### Materials and Methods

The Massachusetts General Hospital (MGH)/Partners HealthCare Institutional Review Board (IRB) approved this study. Participants' agreeing to be interviewed after being informed of interview procedures and protections constituted implied informed consent. More details about this study are available elsewhere.<sup>6,15</sup>

#### Participant recruitment

To qualify for our research, at the time they became pregnant, women must have used an ambulation aid (cane, crutches, walker) or wheeled mobility aid (manual or power wheelchair or scooter) or have had significant difficulties using their arms or hands. Women must also have delivered their youngest child within the past 10 years. Our target enrollment was 20 participants, which is generally viewed as sufficient in qualitative research to reach thematic saturation.

Efforts to recruit participants from MGH obstetrical patients and greater Boston disability community groups yielded only 2 participants. We obtained IRB permission to solicit participants outside metropolitan Boston using social networks of women with disabilities. After posting an IRBapproved flyer on social media (Facebook groups), 45 women from around the United States contacted the project office within several days seeking participation. We screened 27 women by telephone first-come-first-serve, and 24 met study inclusion criteria; we scheduled 21 for interviews. One subsequently declined participation, explaining she was too busy with childcare. In the final sample of 22 women, 2 came from local sources and 20 from the nationwide social network.<sup>15</sup>

# Interview protocol and procedures

We created a semistructured, open-ended interview protocol for this study, drawing upon our prior research findings and available literature.<sup>4, 5, 21</sup> The protocol (available upon request) covers eight broad topics, including physical accessibility of the health care facility where participants received their prenatal care. We did not ask specific questions about blood pressure measurement, assessment of uterine size, or auscultation of fetal heart sounds. We did ask about being weighed and the physical accessibility of weight scales, examination tables, and ultrasound equipment.

After obtaining implied informed consent, L.I.I. conducted the 22 telephone interviews, asking each woman specifically about being weighed and transferring onto examination tables. Interviews averaged roughly two hours, but some interviews ranged far beyond protocol topics because of participants' open-ended responses. Due to concerns about interview length and respondent burden, L.I.I. did not ask every interviewee the specific protocol question about ultrasound; about one-third of women discussed this issue.

Interviews occurred from October 2013 to December 2013; for participating, women received a \$50 gift card. A professional transcription service typed transcripts verbatim from digital audio recordings. All names are pseudonyms; we have changed minor details to protect confidentiality.

# Data analysis

We used qualitative descriptive analysis methods to summarize interviewees' experiences. This approach draws explicitly from the data, without over-interpreting what their experiences meant to the participants.<sup>22,23</sup> For this descriptive qualitative analysis, topic areas were straightforward, representing participants' physical accessibility experiences, primarily transferring onto examination tables or being weighed. Therefore, key words for these topic areas were specific (e.g., "exam table," "being weighed"). A.J.W. used NVivo 10 (QSR International) qualitative analysis software and topic codes to sort transcript texts. We used conventional content analysis<sup>24</sup> to identify major accessibility themes involving being weighed, transferring to examination tables, and receiving ultrasounds. In conventional content analysis, results derive directly from text data without interpretation: here, we report simply what interviewees told us about their various examination experiences and reactions to those experiences. We include selected quotations exemplifying each topic.

In the results that follow, we sometimes present numbers of participants reporting specific accessibility experiences. We recognize that the interviewees do not represent the general population; we do not intend these numbers to imply the population prevalence of these accessibility experiences. We provide these numbers to indicate clearly how often interviewees reported specific experiences, rather than using general terms such as "many," "several," or "a few."

# Results

Table 1 presents characteristics of the 22 interviewees. Their mean (standard deviation) age was 34.8 (5.3) years.

TABLE 1. INTERVIEWEE CHARACTERISTICS AND PREGNANCY OUTCOMES

Interviewee characteristics	n
Age category at time of interview 25–29 years old 30–34 years old 3539 years old 40–49 years old	1 13 4 4
White race <sup>a</sup> Hispanic ethnicity	20 2
Geographic region at time of birth <sup>b</sup> Northeast Midwest South West	7 7 5 3
Education High school Some college College degree Graduate degree	2 5 7 8
Condition causing disability Cerebral palsy Spinal cord injury Other condition <sup>c</sup> More than one condition <sup>d</sup>	4 8 9 1
Mobility aid(s) or other assistive technology used at time of most recent pregnancy <sup>e</sup> Cane or crutches Walker Manual wheelchair <sup>f</sup> Scooter Power wheelchair Leg braces or ankle-foot orthotic Cesarean delivery Planned Cesarean Unplanned Cesarean	4 2 12 1 5 2 14 8 6

Total n = 22.

<sup>a</sup>Black = 1; Native American = 1.

<sup>b</sup>States include: Arizona, Georgia, Illinois, Maine, Massachusetts, Minnesota, Missouri, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Rhode Island, South Carolina, Texas, and Utah.

<sup>c</sup>Arthrogryposis (2 women); Charcot-Marie-Tooth (1); congenital myasthenia (1); missing all four limbs, congenital (1); multiple bone injuries from car crash many years ago (1); NARP (neuropathy, ataxia, and retinitis pigmentosa) (1); osteogenesis imperfecta (1); spina bifida (1).

<sup>d</sup>Incomplete spinal cord injury and mitochondrial disease.

<sup>e</sup>All women used at least one mobility aid or assistive technology, and some used different aids in different settings; some women started using mobility aids during their pregnancy and continued use postpartum.

<sup>f</sup>Two women used a manual wheelchair with power assist.

Most were white, non-Hispanic, and well educated; they came from 17 states nationwide. Sixteen women had at least one child 3 years old or younger. Eight women had spinal cord injuries (SCI), four had cerebral palsy, and ten had other conditions. Eighteen used manual or power wheelchairs.

# Getting onto examination tables

Eight participants' obstetricians had height adjustable (i.e., accessible) examination tables in their exam rooms. Two

additional women were sometimes taken by their obstetricians to nearby rooms (e.g., "surgical room") with height adjustable tables. These examination tables made transferring easy. As Nina (SCI) said, "It was great." The height adjustable exam table "was a huge help," observed Lauren (osteogenesis imperfecta). When searching for her obstetrician, Lauren had inquired about examination table accessibility: "Before I even made an appointment with that office, I asked about the tables. Because if they don't have tables, it's kind of pointless."

In contrast, four women said they sometimes could not get onto their obstetrician's fixed-height examination table and were therefore not examined, especially late in pregnancy, or were examined while sitting in their wheelchairs. "At the end [of my pregnancy]," said Angela (muscular dystrophy), "we didn't even get up on the table. They'd do everything from my chair." Francie (incomplete SCI and other health problems) reported that she could get onto stretchers for an ultrasound but not examination tables: "They kept not transferring me for exams because they told me I had to bring somebody to help transfer. I could do the stretchers because you could make it higher or lower when doing an ultrasound, but not the exam table. So they skipped several exams on me." Kayla (SCI) also reported difficulties "just trying to get me up on the table.... So that was a fiasco in itself. Most of the stuff we had to do from my chair, doing the ultrasound and things like that."

Between these two extremes, family members and/or clinicians assisted women in transferring onto fixed-height examination tables. No women described transfers using lift devices, such as Hoyer or ceiling-mounted lifts. Spouses, partners, or close family members most commonly performed these transfers, as did Becky's (SCI) husband:

My husband went with me to all of those appointments... so he would usually be there to help me transfer or transfer me.... Eventually, ... I had trained the nurses how to lift me.... You get up on those [fixed height] tables, and there's nothing to hold on to. They're slippery, and they're like ten feet high, and it's terrifying. And they say, "Scooch down more. Scooch down more." Well, pretty soon I'm going to be off the table.

Nurses or doctors assisted in transfers, often along with family members. "[My husband] went to just about every appointment, and so he'd just lift me up there," said Nicole (SCI). "But if not, ... maybe my mom, my mom and a nurse, would get on either side and kind of hoist me up. ... Being lifted towards the end wasn't the most comfortable thing." Gabriela's (SCI) obstetrician "was awesome. He's like a tall, Russian guy, and between him and my partner they would get me up on the table." But to ensure her safety, she felt she needed to direct them: "Hello! Do you really think that I want to be lifted up, especially when I'm pregnant? That's dangerous! Having already broken my tailbone"—during a transfer by a personal care assistant at home—"but there was nothing that I could do. All I could do was try to coordinate, "1, 2, 3, and let's all pick up at the same time.""

Other women also described safety concerns and wanting to direct transfer maneuvers. Adriana's (cerebral palsy) experiences confirmed these worries:

Unfortunately, I was dropped three times during my pregnancy.... Once by a doctor, and twice by the ultrasound technician.... They'd gotten me... on the table, and I was

fine.... I was about four months pregnant the first time I was dropped.... I didn't know that ... my center of gravity was off, because I'd never been pregnant before.... What happened was the doctor said she could help me, and then she lost her grip on me.... And I went vroom! And I hit right on my belly. About a week later, I started bleeding.... And they took me to the hospital.... They did the ultrasound and everything seemed to be okay ... but I was in the hospital for a week.

#### Being weighed

No women reported being routinely weighed on an accessible weight scale by their prenatal care providers. Table 2 presents examples of interviewees' prenatal weighing experiences. Four women reported never being weighed during their pregnancies. "I never got weighed," Becky (SCI) observed. "There was never a scale that I could use. I have no idea how much weight I gained in my pregnancy, and that's usually something that they monitor very closely." Instead, Becky reported:

They would measure me. I was measured, but I wasn't weighed. They were like, "Oh, you're not an overweight person, so it will be fine. Just as long as you don't gain too much weight." And I'm like, "Well, we don't even know what I weigh. What's too much weight? I don't even know." And I was eating extraordinarily healthy and doing everything I was supposed to be doing to be the incubator of a child. But everybody is like, "How much weight did you gain in pregnancy?" and I'm like, "I have no idea. None."

Three women reported having been weighed only once during their pregnancies, as a special one-time effort. Gabriela (SCI) reported her obstetrician told her, "You have to get weighed so we can monitor everything." But the obstetrician's office did not have an accessible scale.

They were like, "Well, you can go to the post office and get on the cargo scale." ... I was like, "Well, I'm not going to be doing that. You can just look at me and tell me what you think." ... The one time I was weighed, I guess when I was five months pregnant [was on a] hospital bed [with] a weight thing. ... [Gabriela had gone to the hospital for routine testing.] I passed my gestational diabetes test. ... So that was the only time that I was weighed, but my doctor seemed happy with everything.

The post office cargo scale recommendation "rubbed me slightly the wrong way," Gabriela said, "but I was... not going to dwell on it. ... I think they were trying to be helpful in a way."

Eight women reported standing on standard weight scales in their obstetrician's offices. However, because they needed to hold onto structures or persons while on the scale, few felt this produced accurate weights (Table 2). Some reported becoming afraid to try this later in pregnancy. "The further I get along with my pregnancy," said Cecilia (cerebral palsy), "the harder it got. But even the first couple of months, it was just harder because you're out of breath much more and you're tired. But you have to step onto a scale, so it's like stepping onto a step stool. … There was too much of a lip on

TABLE 2. EXAMPLES OF WEIGHING EXPERIENCES

Pseudonym	Condition	Experience
Lauren	Osteogenesis imperfecta	Could stand for 2–3 seconds but needed to hold on; Lauren questioned validity of weight.
Bethany	Partial SCI; paraplegic	Would get into "froglike position" on her home scale and bring that weight to OB as her "official weight."
Francie	Incomplete SCI and other health problems	When finally weighed in hospital's "metabolic department," she weighed much more than had been thought; Francie gained >50 pounds during pregnancy,
Samantha	Congenital myasthenia	"My husband got weighed. And then he held me. And then they weighed us together and deducted my weight." <sup>a</sup>
Angela	Muscular dystrophy	While holding onto someone, would try standing on scale to get weight; did not feel these weights were accurate and as too scared to do this late in pregnancy. Would sometimes bring weights from neurology visits (neurologist had accessible scale).
Nina	SCI	While buying a new wheelchair seat cushion in ninth month of pregnancy, was weighed for the first time. This happened at medical supply store, which had an accessible scale.
Maureen	Missing all four limbs	Weighed self on digital weight scale at home and gave that weight to OB.
Hannah	Multiple trauma (car crash)	Used walker to get onto scale but had to hold on constantly; did not believe weight was accurate.
Sara	Spina bifida	Weighed on accessible scale in cardiology suite every time before coming to OB appointment.
Christine	Cerebral palsy	Weighed on accessible scale in emergency department every time before coming to OB appointment.
Rachel	SCI	Went to rehabilitation facility to get weighed and brought weight from there to OB; OB actually had a wheelchair accessible scale but never weighed her using that scale.
Kayla	SCI	During first pregnancy was never weighed; during second pregnancy was weighed once using a Hoyer lift.

<sup>a</sup>Samantha weighs less than 110 pounds at baseline and gained 21 pounds during pregnancy. OB, obstetrician; SCI, spinal cord injury.

the scales.... A scale needs to be evenly on the floor [or] needs to have a raise or an incline." Table 2 shows weight experiences of 12 women, selected to show the range of responses. Five women were sent elsewhere in the facility (e.g., "metabolic unit," emergency department, cardiology) to accessible scales. Two women weighed themselves at home, bringing those weights to prenatal visits.

Not knowing their weights caused particular problems for some women, such as Francie (incomplete SCI) and Nan (SCI). Nan worried about not knowing her weight when anesthesiologists calculated epidural drug doses during labor:

I was not professionally weighed at any time during the pregnancy.... Not once did they have anyone to weigh me.... That was another reason why I was like, "You are not putting any drugs into my epidural line." ... They were just going to approximate my weight. I'm 6'2".... When I started this whole pregnancy... I was only 140 pounds at 6'2." I ate like crazy to keep weight on me.... I knew I'd put on weight. ... How much weight? I have no idea.

#### Reactions to accessibility difficulties

In addition to physical dangers and discomfort, some women described emotional distress from the transfer process, feeling vulnerable and humiliated. According to Nan (cerebral palsy), when she went for her ultrasound, furniture impeding her transit in her power wheelchair through the waiting room, the front desk staff asked her, "'Okay, can you transfer?' and I'm like, 'I need help.' ... It took three people to transfer me at nine months because I just couldn't do it. I was too top-heavy. ... It was humiliating. ... They'd get me a stool, and then someone would take my legs, and then someone would take my arms, but I dreaded that ..."

Inevitably, transferring requires intimate physical contact, during which women can feel exposed and vulnerable. "At my doctors' appointments," Kayla (SCI) recalled, "I had to have ... at least two people with me to help lift me. ... It's like your dignity is just not, you know... If I was able to do a transfer, that would have made it a more independent experience for me." Sometimes Kayla needed to bring her brother and cousin to help transfer her. "I remember they had never seen or known the fact that I wore Depends [disposable underwear] ... They had to see that because they had to be there to help ... I was vulnerable."

But Kayla would not allow the clinical staff to help her transfer "because they didn't really know how to." As Kayla said:

They would be so quick to grab my arms ... "Let my arms go!" I would have to use a lot of force in my voice to say, "You're going to make me fall if you grab my arms." You know the whole transfer thing, under your knees and 1, 2, 3, boom. If you grab my arms, you're going to make me tilt; you're going to make me fall. They were thinking they were helping by grabbing my arms. They don't know how, so the staff needs to have some training on that.

Maureen raised a different concern about clinicians' attitudes: failure to recognize their patients' desires for maximum independence. Maureen is missing all limbs except for 6" of one arm, which she described as "very strong.... Although I really like my obstetricians, they did not have an adjustable height table. It was really hard for me to get onto the table, especially late in my pregnancy." Maureen described her obstetrician as happy to assist with her transfer, but for Maureen that was not the point. "Even though the obstetrician seemed very welcoming to me, she also seemed to think that it was not such a big deal to help me onto the table that they should buy an adjustable table for their office. I don't think that's right. I think that they should have an adjustable table."

Cecilia underscored that point, noting that her height as well as her cerebral palsy posed impediments to accessing fixed height examination tables. "I'm 4'10", so generally speaking, pregnancy or not, I have a lot of trouble getting up on those tables.... So, at some point, my doctor started helping me up. Of course, they offered ... But I just feel like the whole medical establishment needs to come up with some user-friendly tables."

## Discussion

Routine prenatal care requires physical examinations and weight measurement.<sup>1</sup> However, the majority of the 22 interviewees either were not routinely weighed during prenatal care visits or their prenatal weights were of questionable accuracy. We did not ask specific questions about physical examinations. Nonetheless, interviewees described being examined in wheelchairs and significant difficulties getting onto examination tables. Family members and clinical personnel assisted with transfers onto fixed-height examination tables, but women reported concerns about safety and discomfort during transfers. Clearly, the women's experiences raise questions about their prenatal care quality although all women had successfully delivered their babies.

One interviewee described her obstetrician requiring her to bring her own helpers for transfers onto the examination table. This is illegal: the ADA prohibits providers from requiring patients to accommodate their own transfer needs. Under the ADA, health care delivery systems, facilities, and practitioners must provide full and equal access to all health care services to persons with disabilities. Clinical practices are legally required to provide supports needed for women to receive complete physical examinations. Examples of assistance include trained personnel, lifts (e.g., Hoyer lifts, which can include weight measuring devices), and height-adjustable examination tables.

Manufacturers have produced height-adjustable examination tables and wheelchair accessible weight scales for years, but no specific standards yet exist delineating accessibility requirements for medical equipment. Section 4203 of the 2010 Patient Protection and Affordable Care Act requires the U.S. Access Board, in consultation with the Food and Drug Administration, to produce technical standards by 2012 for accessibility of medical diagnostic equipment, including examination tables and weight scales. The statute explicitly envisions standards that will allow persons with disabilities to use equipment as independently as possible. An advisory committee, representing patient, provider, manufacturer, and other stakeholders, issued a report in 2013 with detailed recommendations for these standards.<sup>25</sup> Despite passing the 2012 target date, deliberations about these standards continue within the Access Board, which will post draft recommendations in the Federal Register seeking public comment before finalizing these standards.

Once standards are established, the question becomes how widely accessible equipment must be available in clinical settings. In all likelihood, it is not realistic to require all examination tables and weight scales to meet the new accessibility standards. The U.S. Department of Justice will have the responsibility for determining the extent to which practices, clinics, and other health care settings must have equipment meeting these standards. Draft regulations for these requirements will also be posted in the *Federal Register*, seeking comments before finalizing rules. Nonetheless, even if practices do not have accessible equipment, under ADA mandates they still remain responsible for providing equitable care to patients with disabilities.

Accessible equipment and lift devices are also critical to reducing common workplace injuries caused by transferring patients.<sup>26–29</sup> Evidence suggests that simply training clinical staff in the ergonomics of safe transfers does not prevent injuries. Instead, prevention requires combinations of training and equipment. In addition to improving employee morale, reducing staff injuries can lower practice costs (e.g., employee health care and disability insurance costs). The Internal Revenue Service makes tax credits available for qualifying practices to cover capital expenditures to improve disability access.

Our study has important limitations, particularly relating to our small, nongeneralizable sample of interviewees. We recruited participants through social networks, which yielded little racial and ethnic diversity. Although researchers increasingly recruit study subjects through social networks, especially when studying relatively rare conditions,<sup>30, 31</sup> this racial and ethnic homogeneity limits the generalizability of our findings. We did not validate women's assertions about their disabilities or prenatal care experiences. Nevertheless, women's reports were consistent and authentic throughout the 2-hour interviews, suggesting their statements accurately represented the women's own experiences. Sixteen women had had their youngest child within the prior 3 years; however, 9 or 10 years had passed since pregnancy for several women, raising questions about the accuracy of their memories. For clarity, we present numbers of women reporting specific situations, recognizing that these figures do not represent generalizable numbers.

Finally, we could not explicitly assess the quality of prenatal care provided to the 22 interviewees and the impact any omissions or limitations related to mobility disability had on their outcomes. Although physical examination and weight measurement at each prenatal visit are considered "standard of care,"<sup>1</sup> it is unclear what the impact would be of not performing these routine evaluations on women with disabilities—especially late in their pregnancies. One particular concern relates to calculating anesthesia dosages without an accurate body weight. More research is needed on prenatal care for women with significant physical disabilities. However, the ADA requires that women with disabilities receive prenatal care of equal quality as other women, which currently includes routine physical examination and weight measurement throughout pregnancy.

# Conclusions

Despite the limitations of our interview study, the 22 interviewees consistently highlighted potential problems with their prenatal care. The lack of routine and accurate weight measurement and questions about access to examination tables throughout women's pregnancies raise concerns. Obstetrical practices can expect to see many pregnant women with physical disabilities in coming years. Making accommodations to ensure the quality and safety of their care is not only ethically imperative, it also satisfies ADA equity requirements and can benefit practice staff by reducing their injury risks. Future research should develop effective methods for educating obstetrical practitioners about their ethical and legal obligations to provide accessible care, related patient and staff safety concerns, and tools to ensure that pregnant women with disabilities receive the prenatal care recommended for all women.

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#### **Author Disclosure Statement**

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