

and expression, as interpreted by the Supreme Court in *Bostock*. We believe that such legislation should apply to antidiscrimination law broadly, from health care to employment to jury duty. A new anti-

 An audio interview with Dr. Stroumsa is available at NEJM.org

discrimination law should require clear, affirmative coverage of transition-related care in all plans, including self-insured employer plans and the Veterans Health Administration's TriCare plans (which currently exclude gender-affirming surgeries).

Other legislative fixes to the ACA at large can render the ACA challenge in *California* moot. Major legislation will probably require

a Democratic Senate majority, however. Without it, administrative rulemaking and executive orders can protect transgender rights but in a more piecemeal fashion.

Either way, the medical profession has an ongoing obligation to act by expanding high-quality accessible care for transgender and nonbinary people. Our first steps toward that end include training, community-engaged care improvement and research, and a commitment to the creation of health care environments that are as welcoming for transgender and nonbinary patients as they are for cisgender people.

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From the Department of Obstetrics and Gynecology (D.S.), the Institute for Healthcare Policy and Innovation (D.S.), and the Institute for Research on Women and Gender (A.R.K.), University of Michigan, Ann Arbor.

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## Failed Assignments — Rethinking Sex Designations on Birth Certificates

Vadim M. Shteyler, M.D., Jessica A. Clarke, J.D., and Eli Y. Adashi, M.D.

In 1900, the year the U.S. Census Bureau created the first iteration of the U.S. birth certificate, nearly all births occurred at home, often attended by family members and midwives without specialized training. During the 20th century, as the medical profession assumed greater responsibility for managing childbirth, it also assumed responsibility for completing birth certificates, a process that includes a medical evaluation to categorize each newborn as male or female. We believe that it is now time to update the practice of designating sex on birth certificates, given the particularly harmful effects of such designations on intersex and transgender people.

The birth certificate's content has been changed several times over the decades, with the aim of collecting more useful public

health information. The current birth certificate, which underwent its most recent revision in 2003, collects nearly twice as much information as the original. A revision to the document in 1949 created a line of demarcation. The legally identifying fields above the line appear on certified copies of birth certificates, whereas information in the fields below the line, which is used for statistical purposes, is deidentified and reported in the aggregate. Race and parents' marital status, for example, were moved below the line of demarcation to permit self-identification and to avoid stigma, respectively.<sup>1</sup>

Recognizing that the birth certificate has been an evolving document, with revisions reflecting social change, public interest, and privacy requirements, we be-

lieve it is time for another update: sex designations should move below the line of demarcation.

Designating sex as male or female on birth certificates suggests that sex is simple and binary when, biologically, it is not. Sex is a function of multiple biologic processes with many resultant combinations. About 1 in 5000 people have intersex variations. As many as 1 in 100 people exhibit chimerism, mosaicism, or micromosaicism, conditions in which a person's cells may contain varying sex chromosomes, often unbeknownst to them.<sup>2</sup> The biologic processes responsible for sex are incompletely defined, and there is no universally accepted test for determining sex.

Assigning sex at birth also doesn't capture the diversity of people's experiences. About 6 in 1000 people identify as transgen-

der, meaning that their gender identity doesn't match the sex they were assigned at birth. Others are nonbinary, meaning they don't exclusively identify as a man or a woman, or gender nonconforming, meaning their behavior or appearance doesn't align with social expectations for their assigned sex.

Sex designations on birth certificates offer no clinical utility; they serve only legal — not medical — goals. Certainly, knowing a patient's sex is useful in many contexts, when it is appropriately interpreted. Sex modifies the clinical suspicion of a heart attack in the absence of classic symptoms and is a proxy for many undefined social, environmental, and biologic factors in research, for example. But, in each of these applications, sex is merely a stand-in for other variables and is not generally ascertained from a birth certificate.

Keeping statistical data on newborn sex may further public health interests. Moving information on sex below the line of demarcation wouldn't compromise the birth certificate's public health function.<sup>1</sup> But keeping sex designations above the line causes harm.

For people with intersex variations, the birth certificate's public sex designation invites scrutiny, shame, and pressure to undergo unnecessary and unwanted surgical and medical interventions.<sup>1</sup> Sex assignments at birth may be used to exclude transgender people from serving in appropriate military units, serving sentences in appropriate prisons, enrolling in health insurance, and, in states with strict identification laws, voting. Less visibly, assigning sex at birth perpetuates a view that sex as defined by a binary variable is natural, essential, and im-

mutable. Participation by the medical profession and the government in assigning sex is often used as evidence supporting this view. Imposing such a categorization system risks stifling self-expression and self-identification.

People with intersex variations may undergo surgeries before they are old enough to consent, often losing reproductive capacity and sexual sensation as a result. Transgender people receive worse health care and have worse outcomes than cisgender people.<sup>3</sup> Health care professionals have a particular duty to support vulnerable populations who have historically been harmed by clinicians and by the medical system in general.

Moving sex designations below the line would be in keeping with legal developments deemphasizing sex distinctions. Now that the U.S. Supreme Court has held, in *Obergefell v. Hodges*, that bans on same-sex marriage are unconstitutional, only a few legal contexts relying on sex designations remain.<sup>4</sup> In these contexts, using information from birth certificates is not the best way to categorize people.

One concern might be that without information from birth certificates, enforcing separate men's and women's restrooms or locker rooms would be difficult. But fears about privacy and safety violations in public accommodations aren't supported by evidence. A study examining the effects of a Massachusetts law protecting transgender people in public accommodations revealed no increase in violations.<sup>5</sup> Meanwhile, many intersex and transgender people avoid public spaces, including restrooms, for fear of mistreatment.<sup>3</sup> Many establishments are moving toward gender-neutral facilities with more non-shared areas to promote privacy

and respect modesty. Sex-specific sleeping quarters spark similar debates. After advocacy efforts, however, many correctional facilities have begun housing incarcerated people on the basis of gender identity.

Passports and state identification cards relying on sex assigned at birth for identification pose another challenge. These documents are usually issued or renewed when the holder is an adolescent or an adult, however, so moving sex designations below the line of demarcation on birth certificates would permit applicants to identify their gender without medical verification. Governments could also remove gender designations from identification cards altogether and focus more on identifiable physical features and updated photographs. This change would accommodate nonbinary people and reduce the burdens associated with amending documents.

Finally, governments can protect against sex discrimination in the absence of birth-certificate sex designations. Moving sex designations below the line of demarcation wouldn't imperil programs that support women or gender minorities, it would simply require that programs define sex in ways that are tailored to their goals. For example, the Wing, a women-focused workspace club, admits people who are committed to building a community to support women's advancement, regardless of their sex or gender identity. The International Association of Athletics Federations has defined "female" as a person with a testosterone level of 5 nmol per liter or lower, rather than relying on birth certificates. Although this definition is controversial, it has the benefit of making the goals and assumptions of

the policy transparent, thereby allowing for more effective public debate.

Moving sex designations below the line of demarcation may not solve many of the problems that transgender and intersex people face. Controversies regarding bathrooms, locker rooms, and sports participation will continue, regardless of legal sex designations. Still, updating the process for reporting sex on birth certificates could be an effective first step.<sup>1</sup> Even if the government retains a dichotomous sex-classification system, the system would be based on self-identification at an older age, rather than on a medical evaluation at birth.

Many states now permit changes to sex designations on birth certificates, and some allow a third sex designation, “X.” Since most people with intersex variations identify as a man or a woman, allowing a third option to be assigned at birth could prove problematic. In most states, amending a birth certificate is

very burdensome; only 9% of transgender people who want to update their gender on the document succeed in doing so.<sup>3</sup> Some states reissue birth certificates on which original sex designations remain discernible.

Some intersex and transgender people benefit from the validation that changing a sex marker offers, but people could still have this opportunity if governments permitted optional sex designations on various identification cards. Leaving any sex designation visible on birth certificates sacrifices privacy and exposes people to discrimination.

In 1903, the American Medical Association defined the health care profession’s duty to maintain the accuracy of vital statistics. Today, the medical community has a duty to ensure that policymakers don’t misinterpret the science regarding sex and that medical evaluations aren’t being misused in legal contexts. To protect all people, birth-certificate sex designations should

be moved below the line of demarcation.

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From the Division of Pulmonary, Critical Care, and Sleep Medicine (V.M.S.) and the Department of Medical Science (E.Y.A.), Warren Alpert Medical School, Brown University, Providence, RI; and Vanderbilt University Law School, Nashville (J.A.C.).

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## Interviewed while Black

Josh Ellis, M.D., Onyeka Otugo, M.D., M.P.H., Alden Landry, M.D., M.P.H., and Adaira Landry, M.D.

*I* Inside a conference room with a long wooden table, a Black residency applicant sat next to 12 other applicants on interview day. None of their peers were Black. Across the table hung photos of faculty members, including the program director, medical director, and department chair. None were Black. In the corner of the room, administrators and coordinators were monitoring the agenda. None were Black. Rosters with descriptions and headshots of the faculty interviewers were distributed. None were Black. Later, residents spoke to applicants over lunch, and nurses sat at their workstations during the tour. None were Black.

*During the course of the interview day, the Black applicant was asked whether they were lost and twice was assumed to be anyone but an applicant. They were told that they had an unusual name and that they were articulate. Their hair was critiqued.*

*At the end of the interview, the Black applicant wondered, “Do I fit in here?”*

We believe it is time to critically discuss the ways in which various aspects of the interview day affect Black applicants at the student, resident, fellow, and faculty level. Although the application process involves many components, the interview day is a

concrete opportunity to determine compatibility between the applicant and the program. According to the 2018 National Resident Matching Program survey, the factors considered by the most program directors to be important for ranking applicants were “interactions with faculty during interview and visit” (96%), “interpersonal skills” (95%), and “interactions with house staff during interview and visit” (91%). There are private consultants, textbooks, online resources, and workshops to help applicants improve their interviewing skills