Measuring Sex, Gender Identity, and **Sexual Orientation**

Measuring Gender Identity and Transgender Experience

This issue brief is based on the report Measuring Sex, Gender Identity, and Sexual Orientation, which recommends that the National Institutes of Health adopt new practices for collecting data on sex, gender, and sexual orientation. The report recommends standardized language to be used in survey questions that ask about a respondent's sex, gender identity, and sexual orientation. This issue brief discusses the committee's recommendations for measurement of gender identity and the identification of those with transgender experience in the U.S. adult population.

DEFINITIONS

Gender is a multidimensional construct that links gender identity, which is a core element of a person's individual identity; gender expression, which is how a person signals their gender to others through their behavior and appearance (such as hair style and clothing); and cultural expectations about social status, characteristics. and behavior that are associated with sex traits. Gender is often conceptualized in Western cultures as man/ male and woman/female, although it also includes categories that lie outside this binary, such as nonbinary (an umbrella term for identities outside of the binary), gender-fluid (does not identify with a fixed gender), or, for Indigenous populations, Two-Spirit (see below).

Transgender refers to a person whose gender identity is different from the sex they were assigned at birth; cisgender refers to a person whose gender identity corresponds to the sex they were assigned at birth or is sometimes used to describe someone who is not transgender. This definition of transgender encompasses a wide range of gender minority populations, such as those with nonbinary identities and some people with intersex traits. It is important to note, however, that not all individuals who are classified as transgender under this definition identify themselves as transgender. For this reason, the report makes a distinction between transgender experience or history—when someone currently identifies with a gender identity that is different from their sex assigned at birth—and transgender identity—when someone currently identifies as transgender.

THE IMPORTANCE OF MAINTAINING CONCEPTUAL CLARITY **BETWEEN SEX AND GENDER**

Gender encompasses identity, expression, and social position. A person's gender is associated with but cannot be reduced to either sex assigned at birth or specific sex traits. Therefore, data collection efforts should not conflate sex as a biological variable with gender or otherwise treat the respective concepts as interchangeable. In addition, in many contexts, including human subjects research and medical care, the collection of data on gender is more relevant than the collection of data on sex as a biological variable, particularly for the purposes of assessing inclusion and monitoring discrimination and other forms of disparate treatment. Based on these conclusions, the committee recommends the following:

RECOMMENDATION: The standard for the National Institutes of Health should be to collect data on gender and report it by default. Collection of data on sex as a biological variable should be limited to circumstances where information about sex traits is relevant, as in the provision of clinical preventive screenings or for research investigating specific genetic, anatomical, or physiological processes and their connections to patterns of health and disease. In human populations, collection of data on sex as a biological variable should be accompanied by collection of data on gender.

MEASURES OF GENDER IDENTITY AND TRANSGENDER **EXPERIENCE**

The committee focused on measures that could distinguish between transgender and cisgender people in order to provide representative estimates of the transgender population. Currently, there are two types of transgender-inclusive measures of gender: one-step measures that attempt to identify transgender people using a single question and two-step measures that include a broader measure of gender identity and try to enumerate transgender and cisgender people. There are two major challenges for enumerating transgender populations: (1) devising a measure that is inclusive not only of people who identify explicitly as transgender but also people with transgender experience; and (2) avoiding false positives from cisgender respondents who do not understand the question. The two-step design minimizes both types of measurement error and is thus preferable to single question measures.

Two-step measures consist of a two-question sequence that clearly distinguishes between two key constructs sex assigned at birth and gender identity. These measures may ask respondents to report each of them directly most commonly by asking for sex assigned at birth and

current gender, or indirectly by asking for either sex assigned at birth or gender identity and then whether the response to the alternate construct differs. The two questions are intended to be used as a pair. When crosstabulated, these two-step measures can provide counts of cisgender women and men, transgender women and men, and, depending on the response options provided, people who identify using terms outside of the gender binary (see below).

RECOMMENDED QUESTION WORDING

THE COMMITTEE RECOMMENDS THAT THE NATIONAL INSTITUTES OF HEALTH USE THE FOLLOWING PAIR OF QUESTIONS FOR ASSESSING SEX ASSIGNED AT BIRTH AND GENDER IDENTITY:

Q1: What sex were you assigned at birth, on your original birth certificate?

O Female

O Male

(Don't know)

(Prefer not to answer)

Q2: What is your current gender? [Mark only one]

○ Female

O Male

○ Transgender

O [If respondent is American Indian or Alaska Native] Two-Spirit

O I use a different term: [free text]

(Don't know)

(Prefer not to answer)

This measure is best included with other demographic measures, such as race, ethnicity, and age because similar two-step measures have demonstrated a high level of acceptability through low rates of item nonresponse and survey breakoffs. These measures have been tested in Spanish and English, within a wide age range (12-85+), within both LGBTQI+ and non-LGBTQI+ populations, within racially and ethnically diverse populations, and within rural and urban areas. This testing suggests that this two-step measure clearly distinguishes between sex assigned at birth and current gender and enables the enumeration of those with transgender experience.

This measure does have a number of weaknesses. These include the conceptual issue that being transgender is not mutually exclusive to identifying as male or female, and thus the measure presents a "forced choice" for transgender respondents; some respondents consider sex assigned at birth to be sensitive information and collecting this information may not be appropriate in some settings; and neither sex assigned at birth nor current gender identity includes a nonbinary response option. These limitations and potential improvements to the measures are discussed in greater detail in the issue brief on Research Recommendations.

A NOTE ABOUT THE USE OF "TWO-SPIRIT"

"Two-Spirit" is an intertribal umbrella term that serves as an English-language placeholder for triballyspecific gender and sexual orientation identities that are centered in tribal worldviews, practices, and knowledge. Two-Spirit is a way to reference Indigenous identities, practices, and traditions in the context of Western data collection practices and ensure that Indigenous sexual and gender minorities are represented and counted. Because Two-Spirit is a term by and for Indigenous peoples and is culturally anchored with particular meaning and, potentially, social status, it is not appropriate for use by non-Indigenous populations. For this reason, the committee recommends including

"Two-Spirit" as a response option only in automated data collection when information on race is collected prior to the collection of gender identity to ensure that it is displayed to only American Indian or Alaska Native respondents. See the issue brief on Gender Identity and Sexual Orientation in an Indigenous Context for more information.

IDENTIFICATION OF RESPONDENTS WITH TRANSGENDER

This two-step measure allows for both the identification of those who are cisgender (those who report the same gender identity as sex at birth) and those who have transgender experience (those whose gender identity differs from their sex at birth). By comparing responses to the two questions, data users can identity cisgender women (sex at birth and gender identity reported as "Female"), cisgender men (sex at birth and gender identity reported as "Male"), transgender women (sex at birth is "Male" and gender identity is "Female"), transgender men (sex at birth is "Female" and gender identity is "Male"), transgender-identified people (who report any sex at birth and expressly choose to identify using the term "Transgender") and people with other nonbinary gender identities who report any sex at birth and select either Two-Spirit or "I use a different term" to write in a gender identity that differs from their sex at birth.

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FOR MORE INFORMATION

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