



# *Inclusive* **CARE**

## **GENDER IDENTITY AND THE MEDICAL LAB**

**Understanding Challenges:  
The First Step to Ensuring Inclusive Care**

B Adair lives in the small rural town of Stettler, Alberta. He works as a health care aide in long-term care facilities and as a primary care paramedic for oil and gas companies. As an openly gay and transgender man who changed his gender identity about five years ago, Adair takes hormone therapy. He requires frequent lab tests to ensure that his levels are appropriate and to monitor his health. >>

**B**efore his gender marker changed and before his appearance presented as masculine, he was treated disrespectfully at lab collection sites. He has been called by his female birth name and questioned about why his doctor requested a testosterone level test when his health card indicated female. “Each time I’ve had to come out to health care professionals, sometimes multiple times at the same visit, it’s like a stab in the heart,” says Adair. “It can be very hurtful to hear your birth name when that is not who you are. Even worse, outing people in a public setting may put them in danger.”

In Canada, there are an estimated 200,000 gender-diverse individuals over the age of 18.<sup>1</sup> The term “gender diverse” refers to those whose gender identities do not match their assigned sex at birth. But that estimate is low since it only reflects those who have self-identified. They face many challenges when trying to access care from health-care providers who lack knowledge, treat them disrespectfully or fail to approve hormone therapy or gender-affirming surgeries. The result of this marginalization is that many gender-diverse individuals avoid seeking health care. For example, an Ontario study found that 44 per cent of transgender individuals surveyed reported an unmet health need in the past year.<sup>1</sup>

Adair has avoided seeking health care, too. Early in his gender transition journey, he sought mental health services to address his distress about the mismatch between his gender identity and his sex at birth, a condition called gender dysphoria.<sup>2</sup> “They literally laughed at me and refused to let me skip some of the questions that made me uncomfortable, so I left,” Adair says. “It took years before I felt comfortable seeking help again because the trust was just demolished.”

When gender-diverse individuals access medical lab services, they face obstacles at every step, starting with when they present their health cards and requisition forms, to providing specimens and interpreting test results with their physicians to inform medical decisions. Medical lab professionals need to be aware of these challenges so that they can look for ways to make improvements to ensure that all gender-diverse individuals receive helpful, respectful health care.

Most Canadian provinces now allow individuals to apply to change their gender designation on their government-issued identification, such as health cards, birth certificates and driver’s licenses. When Adair received his revised birth certificate reflecting his change in gender marker, he says, “I felt like I was allowed to be me for the first time. It was the first tangible proof that I was able to change into the person I have always been on the inside.”

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The application forms for provincial government identification have added an “X” as an additional category to the standard “male” or “female” binary gender choices. “X” is a catchall definition that includes people who do not identify as male or female, or who choose not to disclose their gender identity.<sup>3</sup> Heather Black, MLT, is a laboratory information systems (LIS) analyst at Sunnybrook Health Sciences Centre in Toronto. She is also a medical lab assessor, a member of the Whitchurch-Stouffville Gay Straight Alliance and an ally of the LGBTQ community. She says, “Adding another gender category is a start, but many individuals do not want to be referred to as an ‘X.’”

Black is the administrator for two of the three LISs at Sunnybrook. She is working with system vendors on ways to improve the flexibility of the database to include correct pronouns, sex at birth and gender identity, since the lab database and the LISs do not currently have those fields. She’s also keeping an eye on the changes implemented at the provincial government level. “Updating gender marker information in patient registration and lab systems is a big challenge,” says Black. “Once the Ministry system changes, the electronic patient record registration at each site changes, and then all of the ancillary systems including the lab, radiology and pharmacy should match.”

The problem is compounded by the fact that hospitals and labs use multiple systems made by different vendors. “Every time a patient is registered into another ancillary system, their information does not necessarily update across all platforms. There’s so much that needs to be aligned, and LIS vendors don’t necessarily build that flexibility in,” Black says.

Ideally, lab requisition forms and lab systems should be updated to accommodate information about sex at birth, legal gender and gender identity. Until they do, medical lab professionals need to be aware that discrepancies will arise when tests are ordered that do not match binary gender categories. Lab systems may have programming rules that automatically cancel tests based on gender mismatches. For example, the LIS may fail to accept a test for a Pap smear for an individual who identifies as male, or for a prostate-specific antigen test for an individual who identifies as female. But the tests were valid; the system’s rules failed to account for different gender identities. These situations may be further complicated by a lack of knowledge that individuals can change their gender marker without having gender-affirming surgeries or taking hormone therapy.

Reporting and interpreting lab results for gender-diverse individuals also are problematic. Not all reference intervals differ for males and females, but for those that do, the results must be interpreted carefully for transgender individuals. These include hematologic parameters, lipids, hormones – including sex, pituitary, prolactin and growth hormones – and liver enzymes. However, these tests must be interpreted carefully when testing transgender individuals.

Consider this case: Despite having a small stature, vegan diet and female sex at birth – factors known to influence the creatinine level used to calculate the estimated glomerular filtration (eGRF) rate – a transgender male’s eGFR results were compared to the reference range for males. As a result, his kidney transplant was delayed and he endured a long period of suffering.<sup>4</sup>

Like Adair, many transgender individuals take hormone therapy. Julie Coffey, MLT,



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is director of education at the Institute for Quality Management in Healthcare (IQMH), an organization that provides medical laboratory accreditation and proficiency testing services. She says, “When a transgender individual takes hormone therapy, their test results do not necessarily convert to match the reference interval of their gender identity. Thinking that the biomarkers will convert is binary thinking right there.”

To address the paucity of resources on lab parameters for transgender individuals, Coffey participated in an IQMH working group that surveyed the available literature and published a white paper called “Care Considerations for Inclusion of Gender Diversity within Medical Laboratory Services.” The document provides helpful guidance for medical lab professionals who are caring for gender-diverse individuals. It includes a glossary of terms, phrases to avoid, ethical considerations and ensuring inclusive environments for patients at lab collection centres and hospitals. The authors also discuss clinical and scientific considerations for handling reference intervals. They recommend reporting the intervals that correspond to a patient’s sex at birth, with the addition of a comment to reflect that the results may not apply to all patients.<sup>3</sup>

While it is ideally the physician who will indicate sex and gender on patient requisitions for lab tests, most times that information is not specified, and questions could arise. For those cases, the medical lab professional may need to identify and verify the information with the ordering physician or with the patient. This communication needs to be handled professionally and respectfully, while protecting patients’ privacy.

Medical lab professionals need to become educated about the challenges gender-diverse individuals face at every step of their interaction with medical lab testing. Providing conscientious, compassionate, honest and equitable care to all patients is expected behaviour under the CSMLS Code of Ethics.<sup>5</sup> It’s also the law: Bill C-16, signed into Canadian law on June 19, 2017, amended the Canadian Human Rights Act and the Criminal Code to clarify and protect Canadians from discrimination based on gender identity or expression.<sup>6</sup>

Adair has considered moving from rural Alberta to a more urban setting to escape the lack of education and challenges he’s encountered since changing his gender identity. But he’s decided to stay put for now because Adair is committed to making a difference mentoring queer youth in his area. He knows firsthand how hard it is to come out in areas where knowledge and resources are greatly lacking. He also volunteers on the patient and advisory committee of the Health Quality Council of Alberta, which works to improve access to the health care system.

Adair is encouraged to see signs of positive change. “Thanks to increased discussion in the news and social media about inclusivity, gender identity is not such a taboo thing to talk about today as it was five years ago,” he says. “My true passion is to encourage people to ask questions and help them understand transgender issues. I didn’t learn the language myself until a few years ago. One day, hopefully soon, gender diversity and inclusion will be standard considerations in all health care interactions.”



*Care Considerations for Inclusion of Gender Diversity within Medical Laboratory Services* white paper, published by IQMH.

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### Get Educated and Get Involved

Find out what is happening in your lab to accommodate the challenges of providing medical testing services for gender-diverse individuals. Start a conversation with your colleagues about making changes to ensure all patients receive respectful care that meets their needs. Finally, recognize that respecting gender identity goes beyond providing care for patients; it is also a workplace issue that affects some of your colleagues.

Curious to learn more about how you can better support gender-diverse individuals in your lab? Tap into these resources:

- *Care Considerations for Inclusion of Gender Diversity within Medical Laboratory Services*, a white paper published by an IQMH working group. Download a PDF at: [iqmh.org](http://iqmh.org).
- Trans PULSE Project (Ontario): A community-based survey of the health and well-being of trans and non-binary people in Ontario. To read research results, visit: [transpulseproject.ca/research](http://transpulseproject.ca/research).
- Trans PULSE Canada: Building on the success of the Ontario project, this countrywide initiative is collecting more information on priority population groups across all regions starting July 2019. Visit: [transpulsecanada.ca](http://transpulsecanada.ca).
- Gupta S, Imborek KL, Krakowski MD. Challenges in Transgender Healthcare: The Pathology Perspective. *Lab Med.* 2016;47:180–8. Access at: [www.ncbi.nlm.nih.gov/pmc/articles/PMC4985769](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4985769). 

### Test Your Knowledge

Answer a short quiz on this article at [learn.csmls.org](http://learn.csmls.org). You'll earn Professional Enhancement Program (PEP) hours toward your professional development plan.

Listen to The Objective Lens, the official CSMLS podcast: **Episode 27 – Over the Rainbow: Gender Diversity and Health Care.**

Adair, Black and Coffey discuss how gender identity impacts patient care in the medical lab.

Find it at:

**[podcast.csmls.org](http://podcast.csmls.org)**

### REFERENCES

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- ▶ <sup>5</sup>CSMLS Code of Ethics. Accessed Sept. 23, 2019, at <https://csmls.org/About-Us/Our-Members/Code-of-Ethics.aspx/>.
- ▶ <sup>6</sup>Bill C-16. Parliament of Canada. Statutes of Canada 2017: Chapter 13. An Act to Amend the Canadian Human Rights Act and the Criminal Code. Assented to June 19, 2017. Accessed Sept. 23, 2019, at <https://www.parl.ca/DocumentViewer/en/42-1/bill/c-16/royal-assent/>.



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