QUALITY STANDARDS

Chronic Obstructive Pulmonary Disease

Race-Neutral Measurement of Lung Function Information for People Receiving Care

This document provides information for people with suspected or confirmed chronic obstructive pulmonary disease (COPD) and their care partners about the use of race-neutral equations for measuring lung function.

It is important to talk to your clinicians about how you can keep your lungs as healthy as possible.



How is lung function measured?

Clinicians use a test called spirometry to see how well your lungs are working. The lungs are part of the system that helps you breathe, called the respiratory system.

Spirometry is the most common test used to measure lung function and diagnose respiratory diseases such as asthma and COPD.

How was race factored into lung function testing?

In the past, the results of spirometry (or lung function testing) have been "corrected" or "adjusted" in racialized populations. A person's test results were altered using an adjustment factor or by applying race- or ethnicity-specific calculations.

This practice is rooted in racist beliefs dating back to the late 1700s. It was believed that the lungs of some racial or ethnic groups, especially Black people, were structurally and biologically different from the lungs of White people.^{1,2}

Because of this, it has often been mistakenly thought that racialized people have less severe COPD. This means that they might be diagnosed later and have more difficulty accessing appropriate care, benefits, and treatment.

What has changed in the 2023 Ontario Health COPD quality standard update to promote health equity?

In the <u>COPD quality standard</u>, the definitions of *spirometry* and *airflow limitation* have been updated to align with a recent <u>American Thoracic</u> <u>Society statement</u> on race and ethnicity in the interpretation of lung function tests.³

The updated definitions recommend using a raceand ethnicity-neutral approach when measuring lung function. This means that your race or ethnicity should not be factored in when you receive a spirometry test.

What does this change mean and why does it matter?

Using a race- and ethnicity-neutral approach when interpreting spirometry is an important step toward health equity. It can help ensure that people from racialized groups are not negatively affected when they have lung function testing.

Race-neutral measurement of lung function will promote more accurate and timely diagnosis of lung disease.

It will also help to ensure that people from racialized groups have equitable and appropriate access to care, benefits, and treatments (such as appropriate medications, specialized respiratory care, pulmonary rehabilitation, disability benefits, organ transplants, and other surgeries).



References

- (1) Braun L. Race, ethnicity and lung function: a brief history. Can J Respir Ther. 2015;51(4):99-101.
- Bhakta NR, Kaminsky DA, Bime C, Thakur N, Hall GL, McCormack MC, et al. Addressing race in pulmonary function testing by aligning intent and evidence with practice and perception. Chest. 2022;161(1):288-97.
- (3) Bhakta NR, Bime C, Kaminsky DA, McCormack MC, Thakur N, Stanojevic S, et al. Race and ethnicity in pulmonary function test interpretation: an official American Thoracic Society statement. Am J Respir Crit Care Med. 2023;207(8):978-95.

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