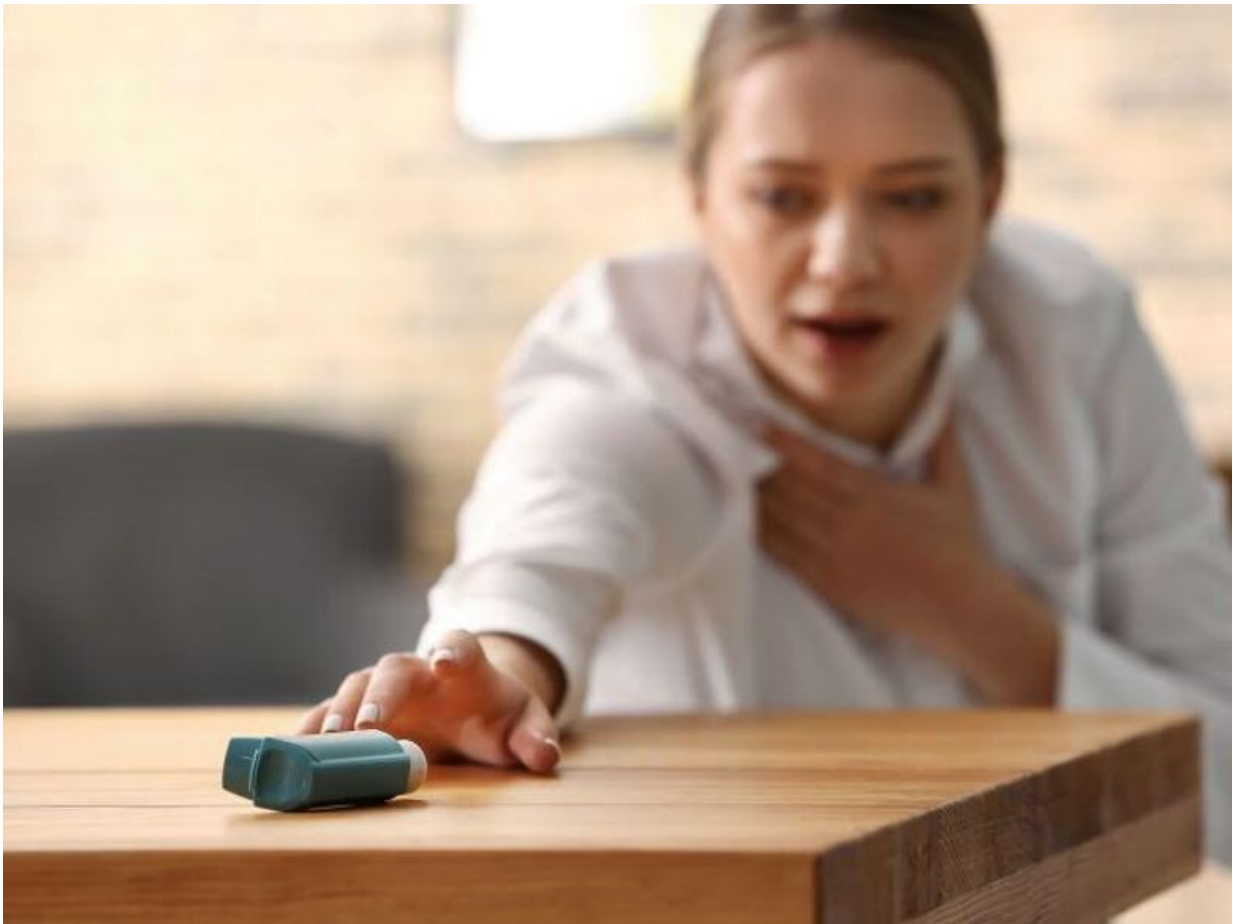


# Spirometry may aid diagnosis of asthma versus COPD in primary care

September 15 2022

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The ability of physicians to differentiate between asthma and chronic

obstructive pulmonary disease (COPD) in the primary care setting may be improved with the addition of spirometry testing, according to a study published online Sept. 5 in *npj Primary Care Respiratory Medicine*.

Jelle D.M. Bouwens, from Radboud University Medical Center in Nijmegen, Netherlands, and colleagues conducted a cross-sectional study in 10 Dutch general practices involving 532 individuals who were extensively screened on respiratory symptoms and lung function. Two [chest physicians](#) assessed the presence of asthma or COPD. The ability of three scenarios (only patient history; diagnostics available to primary care; and diagnostics available only to secondary care) for differentiating between asthma and COPD was examined. For each scenario, receiver operating characteristic curves and area under the curve (AUC) were calculated, with chest physician assessment as the gold standard.

Of the participants, 84, 138, and 310 had asthma, COPD, and no chronic respiratory disease, respectively. The researchers found that receiver operating characteristic curves of the model in the scenario including only patient history showed an AUC of 0.84 for differentiating between asthma and COPD. The AUC increased to 0.89 when adding diagnostics available to primary care (pre- and postbronchodilator spirometry). AUC remained at 0.89 when adding more advanced secondary care [diagnostic tests](#).

"Given the important additional role of postbronchodilator spirometry in this process of differentiating, the implementation of quality-assured spirometry testing and sufficient training should be mandatory in [primary care](#) practices," the authors write.

**More information:** Jelle D. M. Bouwens et al, Diagnostic differentiation between asthma and COPD in primary care using lung function testing, *npj Primary Care Respiratory Medicine* (2022). [DOI: 10.1038/s41533-022-00298-4](https://doi.org/10.1038/s41533-022-00298-4)

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