# Rebuttal: Must family physicians use spirometry in managing asthma patients?

## YES

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All patients suspected of having asthma must have the diagnosis confirmed with spirometry—at minimum. If necessary, they should also be referred for more specialized testing, such as the methacholine challenge test.[1] This is level I evidence[2] and the standard of care according to all international guidelines. The clinical diagnosis of asthma is incorrect in about one-third of patients,[3] as asthma symptoms are not unique to asthma. Primary care physicians must ensure the diagnosis is accurate, especially as asthma is a chronic disease often requiring lifelong therapy. Nearly half of patients with physician-diagnosed asthma, however, have never undergone spirometry.[4]

To provide proper care for a patient's disease, a physician must make an accurate diagnosis using whatever means necessary and feasible. We regard this professional standard to be self-evident. Regrettably, it does not appear to be evident to Dr D'Urzo, who argues that spirometry cannot be the standard of care for asthma because there have been no large, long-term randomized trials comparing primary care asthma management using spirometry with alternate diagnostic strategies. This argument is specious and empirically false. If randomized trials were truly required, we would have few standards of care in any area of medicine. For example, no randomized trial has tested whether it is necessary to measure temperature using a thermometer, yet few would consider physicians who diagnosed fever by placing their hand on the patient's forehead to be meeting a standard of care. Indeed, the definition of fever is based on thermometric measurements. We define asthma based on spirometric measurements.

We do not treat hypertension until 3 blood pressure readings confirm the diagnosis, unless there is target organ damage. We perform tests such as electrocardiography or echocardiography. Asthma is analogous. We agree that starting empiric asthma treatment on clinical grounds alone is sometimes appropriate. However, the diagnosis of asthma should subsequently be confirmed objectively. If we instead diagnose and manage asthma clinically while testing only selectively, as Dr D'Urzo advocates, we will overtreat about one-third of patients while in many cases undertreating the true cause of their respiratory symptoms.

Dr D'Urzo says that "physicians who do not use spirometry might be more inclined to refer asthma patients outside of their practices, a strategy that can hinder continuity of care." We thank him for reinforcing the point of our article. Out-of-office spirometry might be more time-consuming and hence less desirable for patients and physicians, with less immediate feedback,[2] than spirometry done in primary care practice.[5] Therefore, to ensure patients receive adequate and timely access to care, primary care physicians should consider making spirometry available in their own offices, provided it meets the appropriate standards.[6] This is feasible in many places and necessary in communities where other options are unavailable. Doing spirometry testing in the office, with inhaler technique reinforced, is the optimal model for continuity of care in asthma management.

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**Competing interests**

**Dr Kaplan** is a member of an advisory board for, or has received honoraria from, Astra Zeneca, Boehringer Ingelheim, Glaxo Smith Kline, Merck Frosst, Nycomed, Pfizer, Purdue, and Talecris.

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This rebuttal is a response from the authors of the debate in the February issue (*Can Fam Physician* 2010;56:126-9 [Eng], 130-3[Fr]). See **www.cfp.ca.**