Teaching inhalation technique in COPD outpatients: Can a sustained improvement be achieved?

Setting the scene:
The aim of this study was to evaluate if educational intervention with COPD outpatients on the correct use of inhaler devices (IDs), can sustain long-term improvement in inhalation technique and to assess the inhaler and patient-related characteristics that are associated with some improvement in inhalation technique.

What did they do?
An interventional study was conducted in an outpatient respiratory care. Stable COPD patients ≥ 40 years diagnosed according to GOLD criteria were evaluated in two different medical visits, with a 10---12 months interval between them. Participants received face-to-face demonstration and training with inhalers containing placebo medications, until correct usage was achieved. After 10---12 months, participants were invited by mail for a second medical visit, and a re-evaluation of inhalers’ technique was conducted. The difference in number of critical errors between the two visits, expressed as qualitative, was defined as outcome.

Takeaway message:
Researchers found significant positive association between symptoms and improvement of the inhaler technique. They hypothesized that more symptomatic patients can be more motivated to learn how to use inhalers properly. They also found that male patients who improve their inhalation technique seem to greater belief in need for medication than women. Probably men, but not women, have to believe in the need of medication to improve their learning of correct inhalation techniques.