ABSTRACT
High-frequency chest wall oscillation (HFCWO) has gained acceptance for treating airway clearance issues in patients with non-CF bronchiectasis (BE), either by itself or combined with chronic obstructive pulmonary disease (COPD). Little is known about the effectiveness of HFCWO for patients with COPD who lack a diagnosis of BE (COPD-only).

RESULTS
• The study population included 865 patients with BE and 135 patients with COPD only who had initiated HFCWO therapy.
• Among patients with BE:
  ○ The mean number of all-cause hospitalizations was lower by 33% during the post-period versus pre-period (0.2 vs. 0.3, p<0.001).
  ○ Numbers of physician office visits, emergency department visits, hospital outpatient visits, and prescriptions also were significantly lower.
• Among patients with COPD-only:
  ○ The mean number of all-cause hospitalizations was lower by 40% during the post-period (0.3 vs. 0.5, p=0.020).
  ○ Physician office visits and emergency department visits also were significantly lower.

DISCUSSION
• HFCWO has found increasing acceptance in treating adults with non-CF bronchiectasis.
• Studies have found HFCWO to be effective for non-CF bronchiectasis and also for COPD when the status of BE was unknown.
• The paucity of published results for COPD-only patients may be due, in part, to the lack of reimbursement for this condition.
• These data suggest that HFCWO is effective in COPD patients without recognized bronchiectasis.
• More research is needed to confirm these findings.

CONCLUSIONS
• For patients with non-CF bronchiectasis and patients with COPD in the absence of BE, hospitalizations and other metrics of utilization were significantly improved during the three-month period following initiation of HFCWO therapy.
• Patients with COPD without recognized bronchiectasis may benefit from HFCWO treatment.

REFERENCES