

In a Commercially Insured Population, How Well Do Claims-Based Algorithms for Adherence Correspond to Objective Use?

STUDY DESIGN

Retrospective analysis of PAP adherence for OSA based on administrative claims data for commercially insured patients (N=213,341)

Compared **device usage data vs claims-based algorithms**



RESULTS

ADHERENCE

DEVICE USAGE

48% adherence in first year based on device usage

Consistently higher use across all metrics compared with claims-based

- 339.9 vs 260 to 290 days of use
 - 6.6 vs 5.1 to 5.6 d/wk
 - 6.4 vs 4.6 to 5.2 h/d

CLAIMS

Between **10% and 84%** identified as adherent based on claims with **accuracy 53% to 68%**

- **Patients who used PAP consistently were frequently identified as nonadherent**
- **Many patients who used PAP inconsistently classified as adherent**

In aggregate US commercial data with nonstandardized PAP coverage rules, concordance between existing claims-based definitions and objective PAP use was low. Caution is warranted when applying existing claims-based algorithms to commercial populations.