

Non-Invasive Home Mechanical Ventilation in the COPD Population

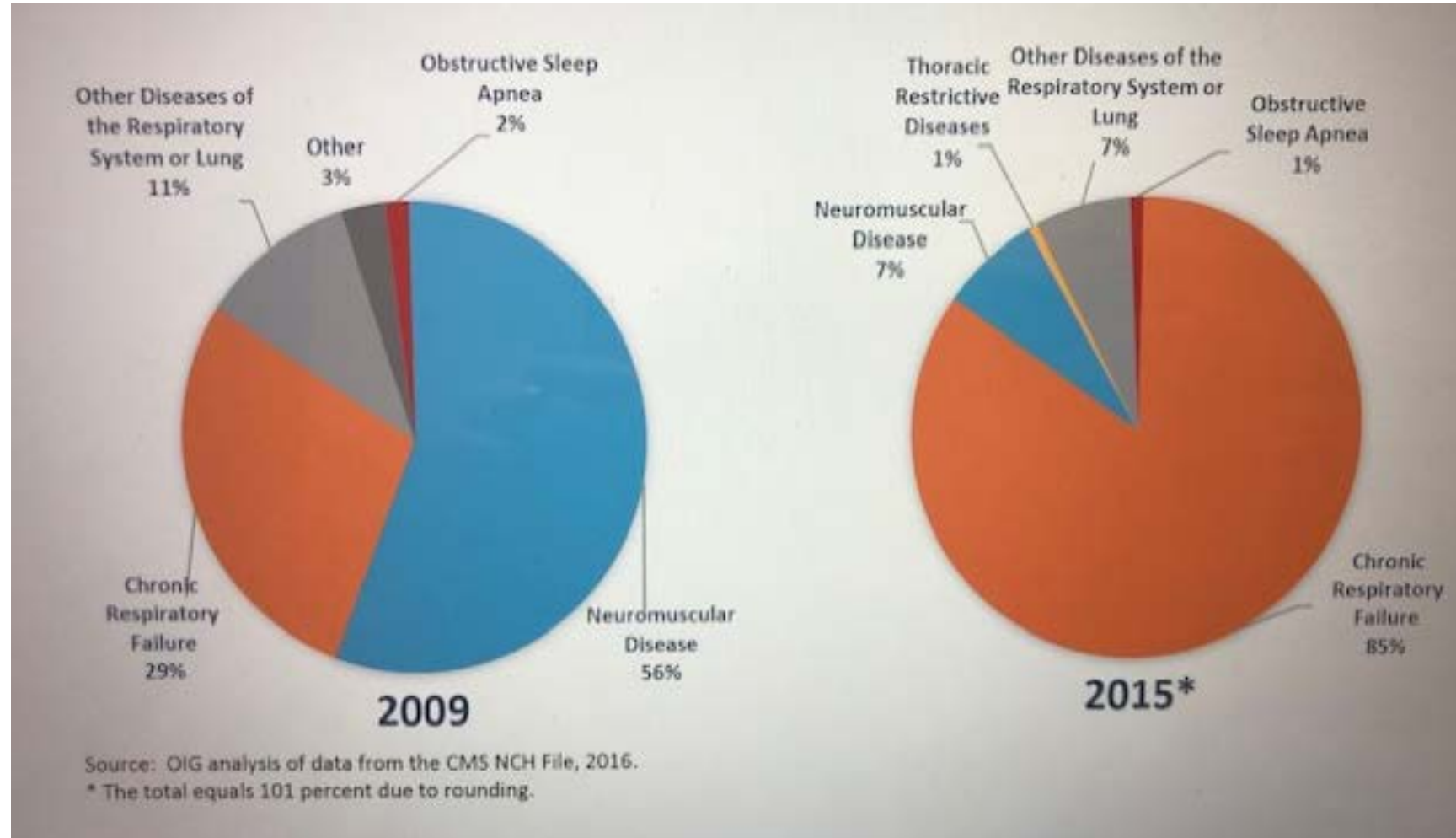
Gregory A. Holt, PhD RRT
Diplomate, American Board of Sleep Medicine
Director of Operations & Polysomnography
Houston, TX



Financial Disclosure

- I have nothing to declare.
G Holt, PhD

OIG Reports on the Increased Utilization of the HCPCS Code for Home Mechanical Ventilation



Events Following OIG Reports

- CMS reimbursement for the E0466 code was reduced by 30% in 2016.
- E0466 code added to the competitive bidding process in 2019.
- E0466 code added to a potential list of codes requiring pre-authorization.
- E0466 code was removed from the CBP during the COVID-19 pandemic.
- There are developing differences in fee schedules for the E0466 code among 3rd party payors, including a “rent to own” ventilator policy.

What happened?

- CMS stopped reimbursement on RAD devices requiring frequent & substantial servicing.
- Definitions for chronic respiratory failure fit 20,000,000 people.
- Qualifying criteria for COPD and NIV-HMV is fairly broad.
- DME companies pressed the code utilization.
- Non-uniform acceptance criteria used by DME companies to qualify for HMV.

Agency for Healthcare Research & Quality Report on Home Mechanical Ventilation - 2017

A review of the literature since 1995 covering various disease states and the use of NIV, HMV. (n>6,000 and reduced by criteria to <100 articles)

- Vasquez 2017: HMV reduced mortality over BiPAP or CPAP. HMV reduced hospital admissions over CPAP.
- Heineman 2011: HMV compared to standard care showed increased survival odds at 1 year.
- Oscroft 2010: BiPAP initiation in stable COPD showed increased survival time over BiPAP initiation in COPD exacerbation.
- Durao 2018: No difference in hospitalizations starting NIV while stable or in exacerbation.
- Bhatt 2013: BiPAP vs No BiPAP showed an increased QoL, but no difference in exacerbations or dyspnea.

Where do we go from here?

- Can't wait for the literature to catch up to utilization.
- Can form a panel to determine diagnosis specific NIV criteria in the COPD population.
 - Review of current acceptance criteria and comparison to other national healthcare standards.
 - RAD tolerance while stable to occur between Dx and increasing exacerbations.
 - RAD effectiveness at reducing $P_{ET}CO_2$
- RAD to HMV transition criteria.
 - Higher hypercapnic and lower pH standards that are incompletely compensated by the renal system.
 - 2 or more distinct ER admissions while on BiPAP AVAPS (or similar volume supported delivery device).
 - Daily usage exceeds 10hrs/day.
 - Established need for battery backup.
 - Established need for secondary, "rescue" settings.
 - Determined by ER visit and successful NIV recovery.

Conclusions

- Respiratory failure, dyspnea and the COPD population has required the use of all available resources, including HMV.
- The initiation of NIV and the transition to HMV are questionable points needing more uniform and tighter qualifying criteria.
- Respiratory Therapists monitoring the COPD patient's ventilatory equipment online and providing at home support are necessary to improving patient outcomes and containing costs. Considerations for reimbursement must be actively pursued, either by bundled fee schedules or new, individual RT reimbursement.