

LETTERS TO THE EDITOR

Sleep medicine durable medical equipment management during the COVID-19 pandemic: our center's initial experience

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The global coronavirus disease 2019 (COVID-19) pandemic disrupted durable medical equipment (DME) operations for many sleep centers, including ours. In this Letter, we share our initial experience responding to these disruptions with the hope that doing so will encourage others to share their innovations and together we can shape new DME best practices for our patients. We are fortunate to have an existing virtual-care infrastructure that includes a sleep therapy management (STM) program, a single DME provider for ~90% of our patients, electronic health record-integrated positive airway pressure (PAP) data with DME messaging, and remote capabilities for device surveillance and adjustments. Since 2013, our STM program offers structured telemedicine coaching and therapy diversion for patients who do not meet objective and self-reported PAP benchmarks, abandon therapy (<20 minutes average daily use), or are otherwise identified by their providers.

Our first challenge in adapting to pandemic policies was to address the interruption in face-to-face appointments for new patients prescribed PAP devices. Previously, like at many sleep centers, our DME technicians would offer mask fitting, pressure-setting adjustments, and patient education. As of March 2020, instead of these face-to-face appointments, our center offers DME curbside pickup or in-home delivery. To minimize potential coronavirus transmission, patients who select curbside pickup receive a COVID-19 screening phone call and our technicians wear facemasks and gloves at the pick-up.¹ A telephone follow-up is scheduled for initial set-up and care of the device—our calls are longer and more frequent than pre-COVID. Interpreter/translation services are available for these calls. We are sharing DME education videos via YouTube. Due to uncertain exposure risk,^{2,3} very limited in-home DME visits using full PPE (personal protective equipment) are available for urgent PAP therapy, respiratory assist device, or noninvasive ventilatory set-ups. Integrated same-day periodic messaging with templated communications are provided by DME staff. Respiratory assist and noninvasive ventilatory devices are being integrated into the electronic health records for rapid access by our providers.

Our second challenge was scaling our existing STM program to assist our DME follow-up services. As we shifted away from face-to-face DME set-up visits, our STM program has seen increased call volumes. Delays in data access from some external (~10%) DME PAP devices and noninvasive ventilatory devices have posed greater problems for care coordination. During the pause in overnight facility-based PAP titrations due to possible aerosol generation,³ we have switched to more intense home PAP titration after home sleep testing. Our coordinated care schedule incorporates frequent data review in subsets of patients who may require early pressure adjustments or mode changes due to high risk for central apneas or persistent hypoxemia. This strategy may evolve with the availability of rapid polymerase chain reaction testing, antibody testing, and/or validated measures to reduce risk of exposure to sleep center staff during PAP titrations. As Sleep Medicine's experiences in the COVID-19 pandemic are shared globally, we look forward to learning from, and contributing to, the future growth and further refinement of DME operations and clinical practices through adaptive and collaborative change.

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REFERENCES

1. Siegel J, Rhinehart E, Jackson M, Chiarello L; Healthcare Infection Control Practices Advisory Committee. *2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*. Atlanta, GA: Centers for Disease Control and Prevention; 2019.
2. Barker J, Oyefeso O, Koeckerling D, Mudalige NL, Pan D. COVID-19: community CPAP and NIV should be stopped unless medically necessary to support life. *Thorax*. 2020;75(5):367.

- Hui DS, Chow BK, Lo T, et al. Exhaled air dispersion during high-flow nasal cannula therapy versus CPAP via different masks. *Eur Respir J*. 2019; 53(4):1802339.

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