

## Bronchiolitis: Less Is More, but Different Is Better

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**B**ronchiolitis, the most common cause of hospital admission for infants, is responsible for more than \$500 million in direct medical costs in the United States yearly. Recent efforts have focused on what can be safely avoided when caring for patients with bronchiolitis (eg, continuous pulse oximetry or bronchodilator administration). While there remains substantial room for improvement in avoiding such low-value (or no-value) practices, the incremental improvements from these de-escalations will reach an asymptote over time. Further improvements in care and value must occur by doing things differently—not just simply doing less.

In this month's *Journal of Hospital Medicine*, Ohlsen et al<sup>1</sup> describe an intervention to decrease length of stay (LOS) for patients with bronchiolitis. They employed an interrupted time series analysis to evaluate implementation of an observation unit and home oxygen therapy (OU-HOT) model of care and found that LOS dramatically decreased immediately following implementation. This reduction was maintained over 9 years. Use of home oxygen decreased over the study period, while LOS remained low, suggesting that the most important intervention was a structural one—the admission of patients to a unit dedicated to efficient discharge.

Observation units, staffed 24/7 with attending physicians, are well adapted to care for patients with illnesses like bronchiolitis, where hospitalization, though often needed, may be brief.<sup>2</sup> These units are designed more like an emergency department than an inpatient unit, with protocolized care and the expectation of rapid turnover.

Multiple studies have shown that physician-related delays are a primary driver of delayed discharge from inpatient units. Such delays include delayed or variable clinical decision-making, inadequate communication of discharge criteria, and waiting to staff patients with an attending physician.<sup>3-5</sup> Addressing these issues could allow inpatient units to function more like observation units for specific diagnoses. Standardization of care around specific diagnoses can make decision-making and discharge more efficient. In 2014, White et al<sup>4</sup> showed that standardizing discharge criteria for specific diagnoses (including bronchiolitis) and embedding these criteria in admission order sets resulted in a significant decrease in LOS without affecting readmission rates or patient satisfaction.

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To address the issues of attending availability, we may need to rethink rounding. The daily structure of inpatient rounding has not meaningfully changed since the 1950s. While there has been a push for increased morning discharges, this approach misses many patients whose illness course is evolving and who may be ready for discharge in the afternoon or evening.<sup>6</sup> The current structure of morning rounds on medical teams is based on the need for resident education, supervision, and time available for attendings to complete administrative tasks and teaching in the afternoons. Structural change in patient care requires academic institutions to rethink what “being on service” actually means. Since LOS in these cases is brief, multiple days of clinical continuity may not be as beneficial as with other diagnoses. Further, there is no reason that daytime rounding teams are the only teams that can discharge patients. Telemedicine could also offer an opportunity for attending physicians to remotely determine whether a patient is discharge appropriate. Standardization of discharge criteria at admission could allow for trainees to discharge patients when they meet those criteria.

Perhaps we should begin to adapt our work structure to our patients' needs, rather than the other way around. In pediatrics, we have already made traditional rounding more patient-focused through the practice of family-centered rounding. We should identify, as the authors have, ways to do things differently to make further improvements in care.

Ultimately, the success of this OU-HOT protocol demonstrates the power of structural interventions aimed at changing how we do things, rather than just doing more (or less) of the same.

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