

Factors identified for readmission among children with ARDS

September 14 2023, by Elana Gotkine



Among hospitalized children with acute respiratory distress syndrome

(ARDS) who survive to discharge, the presence or development of a chronic medical condition, tracheostomy placement during the admission, and hospitalization of 14 days or longer are associated with readmission within one year, according to a study published online Sept. 8 in *JAMA Network Open*.

Garrett Keim, M.D., from the Children's Hospital of Philadelphia, and colleagues examined one-year [readmission](#) rates among survivors of pediatric ARDS and the associations with three index hospitalization factors in a retrospective cohort study. Data were obtained for 13,505 hospitalized children ages 28 days to 18 years from the IBM MarketScan commercial and Medicaid databases (2013 to 2017) who received [mechanical ventilation](#) and had algorithm-identified ARDS.

The researchers found that one-year readmission occurred in 3,748 children with mechanically ventilated ARDS who survived to hospital discharge, with a probability of one-year readmission of 30.0 percent in a survival analysis. Of the readmissions, one-half occurred within 61 days of discharge.

Associations were seen for respiratory and nonrespiratory complex [chronic conditions](#) with one-year readmission (adjusted hazard ratios, 2.69 and 1.86, respectively). In addition, placement of a new tracheostomy and length of stay (LOS) of 14 days or longer were also associated with readmission (adjusted hazard ratios, 1.98 and 1.87, respectively). LOS of 14 days or longer continued to be associated with readmission after exclusion of children with chronic conditions (adjusted hazard ratio, 1.92).

"One-half of readmissions occurred within 61 days of [hospital discharge](#), suggesting that interventions during the early postdischarge period might have an impact on outcomes trajectories," the authors write.

Several authors disclosed ties to the pharmaceutical and medical device industries.

More information: Garrett Keim et al, Readmission Rates After Acute Respiratory Distress Syndrome in Children, *JAMA Network Open* (2023). [DOI: 10.1001/jamanetworkopen.2023.30774](https://doi.org/10.1001/jamanetworkopen.2023.30774)

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