

## Reducing Readmissions for **Complex Pulmonary Patients**



Recent research indicates that respiratory failure poses an increasing challenge for providers and payers, in part due to the COVID-19 pandemic and demographic changes.<sup>1</sup> In order to optimize outcomes and efficiently manage total cost of care, payer networks should ensure that patients with acute pulmonary conditions have access to the most appropriate level of care.

**This guide details the increasing need for expertise in pulmonary care and explains how long-term acute care hospitals (LTACHs) often provide the most appropriate level of respiratory care for lasting patient recovery and for reduced readmissions.**

### **Acute respiratory distress syndrome (ARDS) and its impact**

Despite advances in science, ARDS, one cause of respiratory failure, affects about 190,000 Americans each year.<sup>2</sup> Some key statistics related to ARDS are:

- The unplanned 30-day readmission rate for ARDS patients is 18%.<sup>3</sup>
- Patients with chronic illnesses and comorbidities are more susceptible to developing ARDS, and more likely to readmit to the hospital within 30 days.<sup>4,5</sup>
- Sepsis and pneumonia cause 40-60% of all ARDS diagnoses.<sup>6</sup>

There is currently no cure for ARDS and therefore treatment involves addressing the immediate hypoxia, thus allowing time to treat underlying conditions.<sup>7</sup> The primary tool for supporting ARDS patients is ventilation, which has increased in demand with the emergence of COVID-19.

The unplanned 30-day  
readmission rate for

ARDS patients is

**18%**

## The Increasing Demand for Respiratory Care

There are two key factors that are contributing to the rise in serious pulmonary diseases such as ARDS.

- **COVID-19:** COVID-19, and its variants, is a virus that can cause serious lung injury. Observational studies conducted in Wuhan, China found that 42-67% of COVID patients developed ARDS and that over 81% of patients that had expired were diagnosed with ARDS.<sup>8,9</sup>
- **Chronic Illnesses:** Chronic illnesses are becoming more prevalent in patients of all ages, but especially among the elderly population, which is itself growing. Currently, 64% of the population age 65 and older have at least two chronic conditions.<sup>10</sup> By 2030, 20% of the US population will be in that age category.<sup>11</sup> Advanced age and chronic conditions are two risk factors that increase the likelihood of developing severe respiratory diseases such as ARDS.

As the COVID-19 virus mutates and surges, and as population changes increase the susceptibility to lung disease, America's health systems can expect a greater demand for pulmonary expertise.

## LTACH Expertise in Pulmonary Care and Recovery

Patients with acute lung conditions, including those with COVID-19, often require long-term respiratory support and weaning from mechanical ventilation. At an LTACH, respiratory patients receive care from a team led by pulmonologists, a benefit not found in other post-acute care (PAC) settings. LTACH clinicians are also educated and specially trained in their ability to liberate ventilator-dependent patients.

## Studies have found that ventilator care at a specialized LTACH can benefit both patients and healthcare systems:

- One study showed that protocol-driven ventilator weaning led by respiratory therapists at LTACHs can significantly decrease time on ventilator, mortality, and cost of care.<sup>12</sup>
- Another showed that an earlier discharge of ventilated patients from the ICU to an LTACH is associated with higher weaning probability for patients on prolonged mechanical ventilation.<sup>13</sup>

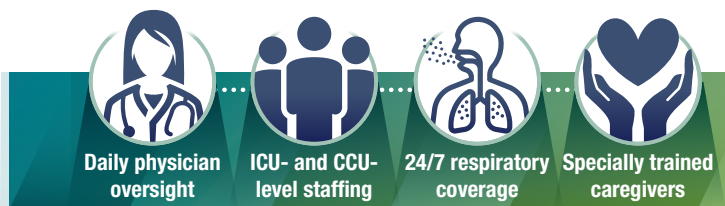
LTACHs also provide treatment of the underlying causes of lung diseases, which is essential to delivering lasting recovery and reducing avoidable readmissions. Their interdisciplinary care teams of physicians and nurses are trained in the care of patients

with chronic illnesses and multiple comorbidities. They also specialize in treating conditions such as pneumonia and sepsis which are significant causes of severe lung complications like ARDS and are contributors to readmission.

Healthcare systems aiming to reduce readmissions and total cost of care, therefore, should include LTACHs that can support and rehabilitate patients on ventilators as well as treat underlying conditions in their partner networks.

## How Kindred Can Help Your Respiratory Patients

Kindred Hospitals specialize in the treatment of medically complex patients who require intensive care and pulmonary rehabilitation in an acute hospital setting. With daily physician oversight, ICU- and CCU-level staffing, 24/7 respiratory care and specially trained caregivers, Kindred works to improve functional outcomes, reduce costly readmissions and help patients transition home or to a lower level of care.



## Clinical Protocol

Kindred Hospitals have proven success in treating patients with pulmonary disease and respiratory failure, including a long history of liberating patients from mechanical ventilation and artificial airways. Their program structure and management protocol include:

- A review of every new admission for inclusion in our Respiratory Failure Program
- Focused interdisciplinary care team and ventilator rounds for program participants
- Development of an individualized plan of care and creation of interdisciplinary goals targeting the patient's pulmonary needs
- Daily multidisciplinary assessment, evaluation, treatment and therapy following established clinical practice guidelines for ventilator liberation, early mobility, oral care, and maintenance of skin integrity.
- Disease-specific education for patients and their families in the Respiratory Failure Program
- Structured performance measure and patient perception data tracking to assess and assure program quality and ongoing success



### Care Initiatives

Kindred Hospitals are committed to providing excellent care to patients and their families. In order to provide patients with even higher quality care, Kindred Hospitals is achieving **disease-specific certifications from The Joint Commission** for both respiratory failure and sepsis in all locations across the country.

Additionally, Kindred's **early mobility program** incorporates movement as early as is safe and possible into the recovery plan for patients, including those on mechanical ventilation. The goal of this program is to combat potentially detrimental consequences of immobility that can lead to readmission.

Kindred Hospitals strive to be a valuable partner for providers and payers alike and are committed to an innovative approach to managed care. Health plan partnerships are customized by product and can be built on DRG or negotiated by per diem rates. Kindred Hospitals currently support the following contract products:

- Medicare Advantage
- Commercial
- Managed Medicaid
- Veterans Affairs
- Worker's Compensation

Visit [kindredmanagedcare.com](https://www.kindredmanagedcare.com) to request a conversation about how Kindred Hospital's level of service can help manage your critically complex patients.



[kindredmanagedcare.com](https://www.kindredmanagedcare.com)

### References

1. [https://journal.chestnet.org/article/S0012-3692\(20\)34937-0/fulltext](https://journal.chestnet.org/article/S0012-3692(20)34937-0/fulltext)
2. <https://www.yalemedicine.org/conditions/ards>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7392362/>
4. <https://www.yalemedicine.org/conditions/ards>
5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7392362/>
6. <https://www.yalemedicine.org/conditions/ards>
7. [https://doi.org/10.1016/S0140-6736\(21\)00439-6](https://doi.org/10.1016/S0140-6736(21)00439-6)
8. [https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(20\)30079-5/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30079-5/fulltext)
9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7070509/>
10. [https://www.cdc.gov/pccd/issues/2020/20\\_0130.htm](https://www.cdc.gov/pccd/issues/2020/20_0130.htm)
11. <https://www.businessinsider.com/aging-population-healthcare>
12. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7774095/>
13. <https://bmcpulmed.biomedcentral.com/articles/10.1186/s12890-021-01454-1>