



Coronavirus Disease 2019 (COVID-19)

Strategies to Allocate Ventilators from Stockpiles to Facilities

During a large-scale public health emergency involving a respiratory disease like COVID-19, federal, state, or local stockpiled ventilators should be deployed in a way that optimizes the effectiveness, efficiency, and equity of this scarce resource. Decisions on the allocation of stockpiled ventilators to facilities should be based on multiple factors, including:¹

- Assessment of need
- Determination of facilities' ability to absorb additional ventilators
- Ethical considerations to inform how this scarce resource is provided to facilities to save as many lives as possible
- Input from state and local leadership, legal and ethical experts, and informed stakeholders

State and local planners can use the strategies in this guide to assist them when allocating ventilators from public health stockpiles to hospitals and other facilities during a pandemic.

Assessment of need:

- Use available surveillance data to predict the number of ventilators needed²
 - Growth in number of daily cases (increasing, stable, decreasing)
 - Number of hospitalizations
 - Percentage of hospitalizations with critical illness requiring critical care
 - Percentage of critically ill patients needing ventilatory support
- Assess the number of ventilators currently available for use by each facility
 - Ventilators currently not in use or in storage
 - Ventilators anticipated to be available from surge contracts or sharing agreements
 - Ventilators in use that may be available for future use

Facility's ability to absorb additional ventilators:

- Identify facilities that may have capacity to care for critically ill patients who will need mechanical ventilation (from prior or current assessments).
- Quantify the number of additional ventilators each facility can realistically absorb.
 - Base this estimate on having enough trained and qualified staff, space, and necessary equipment needed for caring for additional patients on mechanical ventilation.
- Determine the population size that each hospital serves and assess the capacity of each facility to serve vulnerable and high-risk populations within this area.
- Consider whether each hospital serves as a referral hospital/regional hospital or serves a high-density population area, rural area, or underserved populations.

Ethical considerations to inform ventilator allocation:⁴

- Use ethical principles to guide the development and implementation of ventilator allocation plans.
 - Will the allocation plan use scarce resources in a manner that will save as many lives as possible?⁵
 - Does the allocation plan apply criteria consistently across all hospitals/facilities in the jurisdiction?
 - If ventilators are insufficient to meet the needs of all those who would benefit from them, what are plans for

- If ventilators are insufficient to meet the needs of all those who would benefit from them, what are plans for providing care for patients who cannot access them?
- Does the plan include ways to clearly and transparently communicate the framework for allocation decisions to facility leadership, stakeholders, and to the general public?

Develop a plan for logistical issues for distribution:

- Create distribution plans assuming that once ventilators have been allocated to a facility, they are unlikely to be reallocated.
- Ensure that ventilators stockpiled locally are ready to be put into service.

References:

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