CORONAVIRUS DISEASE 2019
(COVID-19)

Device Availability Report: Ventilator Categories/Capabilities

Trinity Health

Audience: Respiratory Therapy Team, Incident Command Clinical Chiefs, Incident Command Logistics Chiefs	
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What's Changed: No changes made during the 9/24/2020 review.

Device Availability Report: Ventilator Categories/Capabilities

The System Office, Trinity Health Clinical Engineering (THCE) and ministry respiratory therapists collaborated to create the Ventilator Criteria Matrix shown below. The Matrix is a ready reference ventilator performance criteria chart that facilitates choosing ventilator type with respect to patient acuity and allows quick identification of the capabilities and limitations of the various ventilator devices. The team placed all ventilator units into one of six categories to help segregate and align them to standard ventilator categories as referenced by ECRI for COVID-19.

The Matrix has been added to the daily "Device Availability Report," which is the report that shows system overall ventilator device quantities and operational status by device use criteria. The device use criteria data can be expanded for a detailed look by each ministry down to manufacturer and model. Adding the Matrix to the "Device Availability Report" helps us, and our administrative teams, to understand the usability and limitations we may be faced with and the availability of each ventilator category within the ministry.

Please work with your Clinical Engineering team to review and update any missing devices. Rental, state, FEMA, and/or military devices being brought into the facility and bypassing THCE comprise the majority of devices identified as not being on the list. All ventilators need to have a THCE asset tag or it will be missed in the "Device Availability Report" regardless of ownership. This ensures the device has been assessed for operational and performance specifications before being placed into service.

We understand the Matrix below is not a perfect ventilator categorization but it will help facilitate the decision making and logistics of ventilator deployment and management.

Ventilator Criteria Matrix

Intensive Care Ventilators	Advanced Transport/Sub-Acute/Home Care Ventilators	Anesthesia Systems
100% Fio2 Capability	100% Fio2 Capability	100% Fio2 Capability
Volume ventilation	Volume ventilation	Volume ventilation
Pressure Ventilation	Pressure Ventilation	Pressure Ventilation
Advanced Modes of Ventilation	Advanced Modes of Ventilation - **NA**	Advanced Modes of Ventilation - **NA**
Set Respiratory Rate	Set Respiratory Rate	Set Respiratory Rate
EtCo2 - **NA**	EtCo2 - **NA**	EtCo2
Both Invasive & Non Invasive	Both Invasive & Non Invasive	Invasive
Internal Compressor	No Internal Compressor	No Internal Compressor
Gas Driving Source O2 AND AIR	Gas Driving Source O2	Gas Driving Source O2 AND AIR
Internal Battery	Internal Battery	No Battery
Peep	Peep	Peep
Pressure Support	Pressure Support	Pressure Support
Internal Oxygen **B**lender	Internal Oxygen **B**lender	Internal Oxygen **B**lender
Precise FiO2	Precise FiO2	Precise FiO2
Oxygen Bleed In - **NA**	Oxygen Bleed In	Oxygen Bleed In - **NA**
Portability - **NA**	Portability	Portability - **NA**
Graphics	Graphics	Graphics
Alarms	Alarms	Alarms Limited
External Alarm Capability	External Alarm Capability - **NA**	External Alarm Capability - **NA**
Add on Alarms Required - **NA**	Add on Alarms Required - **NA**	Add on Alarms Required
I:E Ratios variable	I:E Ratios variable	I:E Ratios Fixed

Basic Transport/Sub-Acute/Home Care Ventilators	Noninvasive Ventilators with modified circuit for intubation	Unmodified noninvasive ventilations (e.g., BIPAP)
100% Fio2 Capability - **NA**	100% Fio2 Capability	100% Fio2 Capability - **NA**
Volume ventilation	Not recommended in invasive mode	Volume Ventilation - **NA**
Pressure Ventilation	Pressure Ventilation	Pressure Ventilation - **NA**
Advanced Modes of Ventilation - **NA**	Advanced Modes of Ventilation - **NA**	Advanced Modes of Ventilation - **NA**
Set Respiratory Rate	Set Respiratory Rate	Set Respiratory Rate - **NA**
EtCo2 - **NA**	**EtCo2** - **NA**	EtCo2 - **NA**
Invasive	Both Invasive & Non Invasive	Non Invasive
No Internal Compressor	No Internal Compressor	No Internal Compressor
Gas Driving Source O2	Gas Driving Source O2	Gas Driving Source O2
No Battery	Internal Battery	No Battery
Peep - **NA**	Peep	Peep
Pressure Support - **NA**	Pressure Support - **NA**	Pressure Support - **NA**
Internal Oxygen Blender - **NA**	Internal Oxygen **B**lender	Internal Oxygen Blender - **NA**
Precise FiO2 - **NA**	Precise FiO2	Precise FiO2
Oxygen Bleed In	Oxygen Bleed In - **NA**	Oxygen Bleed In
Portability	Portability	Portability - **NA**
Graphics - **NA**	Graphics	Graphics
Alarms Limited	Alarms	Alarms Limited
External Alarm Capability - **NA**	External Alarm Capability	External Alarm Capability - **NA**
Add on Alarms Required - **NA**	Add on Alarms Required - **NA**	Add on Alarms Required
I:E Ratios Fixed	I:E Ratios Fixed	I:E Ratios - **NA**

NA – Not Available

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