

#### **Ventilator Facilities**

#### 1.1 CLINICAL SERVICES

### 1.1.1 Respiratory Therapy Services

- **1.1.1.1** Licensed respiratory therapists (Certified Respiratory Therapists and Registered Respiratory Therapists) shall be on-site, in the designated ventilator unit to provide dedicated care to the program residents twenty-four (24) hours per day, seven (7) days per week.
- **1.1.1.2** Licensed respiratory therapists shall have policies and procedures to describe the scope of care and provision of care to the program residents, in accordance with the American Association for Respiratory Care.
- **1.1.1.3** Licensed respiratory therapists shall have annual competencies to demonstrate respiratory related provisions of care, including manufacturer specific training for ventilator devices, heated high flow humidification devices, mechanical in-exsufflation devices, high frequency chest wall oscillation devices, and other related devices.
- **1.1.1.4** Licensed respiratory therapists shall have documented annual training to focus on 1) ventilator and monitoring devices alarm response prioritization, 2) positioning and transferring mechanically ventilated and/or tracheostomized residents, 3) tracheostomy reinsertion and 4) rescue breathing with an artificial airway.
- **1.1.1.5** Licensed respiratory therapists' care shall be determined by a licensed physician's treatment plan.

#### 1.1.2 Nursing Services

- **1.1.2.1** Licensed nurses (Licensed Practical Nurse or Registered Nurse) shall be on-site to provide dedicated care to the program residents twenty-four (24) hours per day, seven (7) days per week.
- **1.1.2.2** Licensed nurses shall have policies and procedures to describe the scope of care and provision of care to the program residents, in accordance with job description and state laws.
- **1.1.2.3** Licensed nurses shall have annual competencies to demonstrate knowledge of respiratory related provision of care, including tracheal suction, tracheostomy care, and unintended tracheostomy decannulation.
- **1.1.2.4** Licensed nurses shall have documented annual training to focus on 1) ventilator and monitoring devices alarm response prioritization, 2) positioning and transferring mechanically ventilated and/or tracheostomized residents, and 3) rescue breathing with an artificial airway.
- **1.1.2.5** Licensed nurses' care shall be determined by a licensed physician's treatment plan.



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### 1.1.3 Nursing Assistant Services

- **1.1.3.1** Certified nursing assistants may be on-site to provide dedicated care to the program residents twenty-four (24) hours per day, seven (7) days per week.
- **1.1.3.2** Certified nursing assistants shall have policies and procedures to describe the scope of care and provision of care to the program residents, in accordance with job description and state laws.
- **1.1.3.3** Certified nursing assistants shall have documented annual training to focus on 1) ventilator and monitoring devices alarm prioritization and reporting to licensed staff, 2) assisting with positioning and transferring mechanically ventilated and/or tracheostomized residents, and 3) emergency rescue breathing with an artificial airway. Such training shall be provided with consideration to scope of practice for the CNA.
- **1.1.3.4** Certified nursing assistants' care shall be determined by a licensed physician's treatment plan.

## 1.1.4 Physician Services

- **1.1.4.1** A licensed physician shall provide medical oversight, and direct plan of care for each program resident.
- **1.1.4.2** A licensed physician assistant may also provide medical oversight and plan of care to each program resident.
- **1.1.4.3** A licensed nurse practitioner may also provide medical oversight and plan of care to each program resident.
- **1.1.4.4** A licensed physician, board certified in pulmonary disease or critical care medicine, shall provide medical oversight specific to the mechanically ventilated and/or tracheostomized residents, creating the unique scope of treatment and customized plan of care for each program resident.
- **1.1.4.5** A licensed physician, physician assistant, or nurse practitioner shall be available to the program residents twenty-four (24) hours per day, seven (7) days per week.

#### 1.2 RESIDENT CARE

#### 1.2.1 Resident Plan of Care

- **1.2.1.1** Mechanically ventilated residents shall have a customized multi-disciplinary plan of care, to include the pulmonary physician, respiratory therapist, nurse, and other interdisciplinary team members.
- **1.2.1.2** Mechanically ventilated residents shall have the customized plan of care updated on a regular basis, at a minimum of every three (3) months and with any changes in status.



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- **1.2.1.3** Tracheostomized residents shall have a customized multi-disciplinary plan of care, developed by the pulmonary physician, respiratory therapist, nurse, and other interdisciplinary team members.
- **1.2.1.4** Tracheostomized residents shall have the customized plan of care updated on a regular basis, at a minimum of every three (3) months and with any changes in status.

#### 1.2.2 Resident Monitoring

- **1.2.2.1** Mechanically ventilated residents shall be monitored via continuous pulse oximetry while weaning.
- **1.2.2.2** Weaning mechanically ventilated residents shall be monitored via end-tidal capnography or transcutaneous capnography at a minimum frequency of every four (4) hours and within one (1) hour of any ventilator parameter changes.
- **1.2.2.3** Non-weaning mechanically ventilated residents shall be monitored via pulse oximetry and end-tidal capnography or transcutaneous capnography at a minimum frequency of every twelve (12) hours.
- **1.2.2.4** Weaning tracheostomized residents shall be monitored via continuous pulse oximetry during and following tracheostomy downsizing, speaking valve trials, or tracheostomy capping trials.
- **1.2.2.5** Weaning tracheostomized residents shall be monitored via end-tidal capnography or transcutaneous capnography at a minimum frequency of every four (4) hours and continuously during any tracheostomy tube changes and within one (1) hour of any tracheostomy capping trials.
- **1.2.2.6** Non-weaning tracheostomized residents shall be monitored via end-tidal capnography or transcutaneous capnography at a minimum frequency of every twelve (12) hours.

#### 1.3 RESIDENT EQUIPMENT

### 1.3.1 Equipment Oversight

- **1.3.1.1** The facility shall create and maintain an updated itemized inventory list (for all equipment with serial numbers), for both owned and leased equipment.
- **1.3.1.2** The facility shall create and uphold a schedule for the inspection, testing, and maintenance of the itemized inventory list (for all equipment with serial numbers) in accordance with manufacturers' standards (or generally accepted standards).
- **1.3.1.3** The schedule of the itemized inventory list shall include the time and date for the completed inspection, testing, and maintenance of the equipment, the type of inspection, testing, and maintenance of the equipment, and the individual conducting the inspection, testing, and maintenance of the equipment.
- **1.3.1.4** The facility shall ensure that inspection, testing, and maintenance of all equipment is conducted by appropriately certified and/or trained personnel.



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**1.3.1.5** The facility shall develop a process for the removal of non-functioning or recalled equipment in a safe, efficient manner.

#### 1.3.2 Backup Equipment

- **1.3.2.1** At least one (1) patient-ready back-up ventilator per every twenty-four (24) residents utilizing mechanical ventilation, shall be available in the facility.
- **1.3.2.2** At least one (1) battery operated suction device available per every eight (8) residents utilizing mechanical ventilation or with a tracheostomy.
- **1.3.2.3** Emergency oxygen delivery devices shall be available for each patient receiving supplemental oxygen. (Compressed gas cylinders, liquid oxygen or battery-operated concentrators)

#### 1.3.3 Respiratory Specific Equipment

- **1.3.3.1** Mechanical ventilators shall be mobile (mobile stand, backpack, or carrying case) to encourage out of bed and out of room activities and therapies.
- **1.3.3.2** Mechanical ventilators should be less than 18 pounds in weight.
- **1.3.3.3** Mechanical ventilators shall have an internal and external battery life of at least six (6) hours or more.
- **1.3.3.4** Mechanical ventilators shall have connectivity to redundant alarm monitoring systems.
- **1.3.3.5** Pulse oximetry devices shall be available to all mechanically ventilated and/or tracheostomized residents.
- **1.3.3.6** End-tidal capnography or transcutaneous capnography devices shall be available to all mechanically ventilated and/or tracheostomized residents.
- **1.3.3.7** Heated, high flow humidification therapy devices shall be available to all mechanically ventilated and/or tracheostomized residents.
- **1.3.3.8** Mechanical airway clearance devices (Cough assist, percussive devices, etc.) shall be available to all mechanically ventilated and/or tracheostomized residents.
- **1.3.3.9** A redundant alarm system, with capacity to record and to report alarm events, shall be available to all mechanically ventilated and/or tracheostomized residents.



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#### 1.4 PROGRAM OPERATIONS

#### 1.4.1 Admission Processes

- **1.4.1.1** The facility shall establish admission criteria to evaluate each potential admission for medical stability and safety of transition.
- **1.4.1.2** The facility shall establish admission criteria specific to the respiratory related aspects of care.
- **1.4.1.3** The facility shall conduct written clinical evaluations for each admission to ensure the safest transition of care.
- **1.4.1.4** The facility shall maintain the written clinical evaluations for each admission.

### 1.4.2 Weaning Processes

- **1.4.2.1** Each resident shall have an individualized weaning plan developed by the pulmonary physician and respiratory therapist.
- **1.4.2.2** The weaning plan for each resident shall be assessed weekly for efficacy, progress, and appropriateness.
- **1.4.2.3** The facility shall complete written routine assessments, at least monthly, to assess weaning potential for residents not currently participating in the weaning process.

#### 1.4.3 Safety Processes

- **1.4.3.1** The facility shall connect all life support devices (mechanical ventilator, oxygen concentrator, and monitoring device) to electrical outlets with connectivity to a backup generator.
- **1.4.3.2** The facility shall develop emergency preparedness plans for all mechanically ventilated and/or tracheostomized residents, detailing specific evacuation (or isolation) procedures based upon facility risk assessment.
- **1.4.3.3** The facility shall conduct routine quarterly emergency preparedness drills in accordance with state and federal guidelines.

## 1.4.4 Quality of Life Processes

**1.4.4.1** The facility shall make available speaking valve devices or technological devices to residents to facilitate communication, as practical.



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- **1.4.4.2** The facility shall develop a person-centered activity program that provides opportunity for meaningful interaction and engagement in a variety of activities and settings.
- **1.4.4.3** The facility shall develop a palliative care interdisciplinary team and/or have employee(s) with a palliative care certification for all residents to participate in meaningful quality of life assessments and discussions.

#### 1.5 PROCESS IMPROVEMENT

#### 1.5.1 Metrics Tracking

- **1.5.1.1** The facility shall track the number of ventilator admissions, number of successful ventilator liberations (utilizing accepted calculation methods), and number of days to liberation for each successful ventilator liberation (to determine ventilator weaning rate and average days to successful wean).
- **1.5.1.2** The facility shall track the number of ventilator and tracheostomy admissions and number of successful tracheostomy decannulations (to determine the tracheostomy weaning rate).
- **1.5.1.3** The facility shall track the number of unplanned emergency room visits (ER only) and number of unplanned hospitalizations to determine the unplanned hospitalization rate. Unplanned hospitalization is defined as any emergency transport to hospital.
- **1.5.1.4** The facility shall track the number of unexpected deaths (to determine the unexpected death rate).
- **1.5.1.5** The facility shall track the number of sentinel events as defined by events requiring emergency intervention, events resulting in harm to the resident, or death within 72 hours of hospitalization.
- **1.5.1.6** The facility shall track discharge destination for all discharged residents.

### 1.5.2 Quality Improvement

- **1.5.2.1** The facility shall utilize written tools to review, track, and trend all unplanned emergency room visits and unplanned hospitalizations.
- **1.5.2.2** The facility shall utilize the tracked data from the unplanned emergency room visits and unplanned hospitalizations to identify the root causes (personnel training, staffing variances, physician versus nurse practitioner).
- **1.5.2.3** The facility shall initiate an investigation of sentinel events and unexpected deaths within 24 hours of notification of the occurrence.
- **1.5.2.4** The facility shall utilize the investigative data to determine the root cause of the sentinel events and unexpected deaths to mitigate risk of future occurrences.



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## 1.5.3 Discharge planning/coordination

- **1.5.3.1** The facility shall have a written discharge/coordination plan in place prior to the discharge date.
- **1.5.3.2** The facility shall ensure durable medical equipment training is completed prior to discharge, as practical.
- **1.5.3.3** A resident representative and/or prospective and caregivers shall participate in discharge planning to include demonstration of competencies, as applicable to individualized plan of care, prior to discharge.