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*Tennessee Division of Health Care  
Finance and Administration*

# **ENHANCED RESPIRATORY CARE OPERATIONS MANUAL**

**Myers and Stauffer LC  
Effective for ERC Reviews conducted on or after xxx**

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# I. Overview

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The purpose of this manual is to offer clear guidance to Nursing Facilities (NFs) regarding certain aspects of the Bureau of TennCare’s Enhanced Respiratory Care (ERC) quality improvement initiative.<sup>1</sup>

In November 2014, TennCare notified NFs receiving Medicaid enhanced respiratory care (ERC) reimbursement of their obligation to begin submitting quality data to TennCare on a monthly basis. Working in partnership with NFs contracted by TennCare Managed Care Organizations (MCOs) to receive ERC reimbursement and in consultation with Eventa, LLC, a nationally recognized expert in the delivery of ventilator care services, the quality outcome and technology measures have been refined over a period of several years.

An analysis of quality outcome and technology performance measurement data is conducted bi-annually. This analysis serves two purposes: (1) It allows TennCare to monitor and improve the quality of ERC services in Tennessee; and 2) it allows TennCare to establish the rates of reimbursement that will be provided as an add-on payment to the established per diem rate for a NF contracted by one or more TennCare MCOs to receive ERC reimbursement. Facilities demonstrating better performance (i.e., higher overall quality outcome and technology scores) are placed into higher quality tiers, which in turn offer higher rates of ERC reimbursement. Facilities are therefore incentivized to undertake activities which will enhance resident outcomes in order to receive higher reimbursement rates.

This manual sets forth the quality outcome and technology measures that NFs contracted to receive ERC reimbursement are required to report, the operating definition (including the numerator and denominator) of each measure, reporting and supporting documentation requirements and interpretive guidance, performance ranges and point values associated with each measure, and the methodology by which point values are used to determine a NF’s quality tier and associated add-on payment to the NF’s established per diem rate for each specified level of ERC reimbursement. It also describes the process by which reporting will be audited in order to verify its accuracy.

**The manual will be updated as needed to ensure transparency with respect to quality performance expectations and the processes by which quality performance is assessed and ERC reimbursement is established, and to help continuously improve the quality of care and quality of life outcomes experienced by individuals receiving Enhanced Respiratory Care in a NF in Tennessee.**

## QUALITY OUTCOME MEASURES

Measure	Definition (numerator divided by denominator)		Performance Range	Point Value
	Numerator	Denominator		
<b>Ventilator Wean Rate*</b>	Number of vent residents successfully weaned	Number of non-excluded vent residents admitted during review period	>60%	40
			45-60%	25
			20-44%	10
			<20%	0
<b>Average Length of Stay to Wean*</b>	For vent residents admitted and successfully weaned during the review period, average days from admission to weaning	If wean rate is >44%	<45 days	35
			≥45 days	25
			If wean rate is 20-44%	

<sup>1</sup> Additional information regarding TennCare’s long-term care ventilator care program and the *TennCare Plan for Improving Enhanced Respiratory Care Quality* is available at: <https://www.tn.gov/assets/entities/tenncare/attachments/ERCQualityImprovementPlan.pdf>. Note that some of the information in that document has changed as the initiative has evolved.

			<45 days	25
			≥45 days	10
			If wean rate is <20%	0
<b>Infection Rate</b>	Number of residents with an Upper Respiratory Infection (URI) [>96 from admission]	Member months	No points assigned.	
<b>Unplanned Hospitalizations</b>	Number of unplanned hospitalizations	Member months	<5%	25
			5-10%	20
			11-15%	10
			16-25%	5
			>25%	0
<b>Decannulation Rate</b>	Number of tracheal suctioning residents successfully decannulated	Number of non-excluded tracheal suctioning residents admitted during the review period	>70%	20
			40-70%	15
			10-39%	10
			<10%	0
<b>Unexpected Deaths</b>	Total number of unexpected deaths	Member months	<1%	20
			1-3%	10
			>3%	0
<b>Denial Rate</b>	Number not admitted	Number of referrals	No points assigned.	

\*Measure not applied to facilities who do not perform ventilation services.

## TECHNOLOGY MEASURES (available and used)

### 1. TECHNOLOGY MEASURES

Measure (available and used)	Point Value
Alarm Paging/Beeper System	4
Cough Assist	7
Heated Wire	3
High Flow Molecular Humidification	6
High Frequency Chest Wall Oscillation or Intrapulmonary Percussive Ventilation	3
Incentive Spirometer or any Positive Expiratory Pressure Device*	1
Mobile Monitoring Device*	3
Non-Invasive Ventilation*	8
Non-Invasive Open Ventilation (Nasal application for mobility)*	3

\*Measure not applied to facilities who do not perform ventilation services.

### 2. Tiering and Reimbursement Structures

NFs that provide mechanical ventilation services have the opportunity to earn up to 178 points. NFs that provide Tracheal Suctioning have the opportunity to earn up to 88 points.

Each NF's total points earned are divided by the total points available in order to determine the NF's percentage of total points earned. The percentages are then divided into quality tiers, as follows:

#### 1. NFs contracted to provide all levels of ERC reimbursement:

Tier	Percent of Available Points	Range of Points (out of 178)
High	>66%	>119
Moderate	33-66%	60-119
Low	<33%	<60

#### 2. NFs contracted to provide Tracheal Suctioning only:

Tier	Percent of Available Points	Range of Points (out of 88)
High	>67%	>59
Moderate	33-67%	30-59
Low	<33%	<30

#### 3. Reimbursement effective January 1, 2016, ERC add-on rates as follows:

Tier	Ventilator Weaning	Ventilator	Sub-Acute Tracheal Suctioning	Secretion Management
High	\$600	\$350	\$200	\$125
Moderate	\$550	\$300	\$150	\$75
Low	\$450	\$250	\$100	\$50

# II. ERC DATA TOOL

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## OVERVIEW

*The ERC data tool was created in consultation with respiratory specialists in order to provide a mechanism for facilities to report resident outcomes that align with the program goal of providing quality care and ventilator liberation.*

*ERC data is reported monthly and is due on the 20<sup>th</sup> of the next month following the month for which the data is collected. For instance, April's information is due on May 20<sup>th</sup>. As the tool contains protected health information (PHI) the process for transmitting this data is by affixing the file to a pseudo-Personalized Acuity Evaluation (PAE) in the Tennessee Pre-Admission Evaluation System (TPAES).*

*For more information on utilizing the TPAES system please contact [ERC.LTSS@tn.gov](mailto:ERC.LTSS@tn.gov).*

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## OVERALL DOCUMENTATION INSTRUCTIONS

All conditions or treatments must have occurred within the designated reporting period.

Documentation in the clinical record should consistently support the reported data response and reflect care related to the symptom/problem. Documentation must apply to the appropriate reporting period and reflect the resident's status on all shifts.

Supportive documentation entries must be dated and their authors identified by signature or initials. Signatures are required to authenticate all medical records. At a minimum, the signature must include the first initial, last name, and title/credential. Any time a facility chooses to use initials in any part of the record for authentication of an entry, there must also be corresponding full identification of the initials on the same form or on a signature legend. Initials may never be used where a signature is required by law. When electronic signatures are used, there must be a policy to identify those who are authorized to sign electronically and safeguards in place to prevent unauthorized use of electronic signatures.

In cases of corrections, errors or mistaken entries, at a minimum, the staff must line through the incorrect information and include the staff's initials, the date the correction was made and the correct information.

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## REQUIRED SUPPORTING DOCUMENTATION FOR ERC REVIEW PURPOSES

Each row on the following ERC DATA TOOL provides an overview of the standards for documentation required to support the quality outcome and/or technology measure items. Providers should maintain this documentation for all reporting periods. Items marked as "N/A" relate only to required documentation for ERC review program purposes, and does not preclude the provider from maintaining this information for other required purposes (professional standards, billing, etc.).

# III. ERC DATA TOOL FIELDS

The following incorporates instructions and guidance concerning the validation of the ERC data tool, by field, and the associated supporting documentation necessary to comply with the ERC review process

## A. General Facility Information

A.1	<b>Facility Name</b>
	<b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
A.2	<b>Facility CMS Number (6 digits)</b>
	<b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
A.3	<b>Administrator Name</b>
	<b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
A.4	<b>Administrator Email</b>
	<b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
A.5	<b>Person Completing This Form</b>
	<b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
A.6	<b>Month Being Reported - A month must be chosen from the drop down list.</b>
	<b>Validation:</b> This is the month for which the data is being reported, not the month during which the report is being completed. This is a required data point. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A

A.7	<p><b>Year Being Reported</b> - A year must be chosen from the drop down list.</p> <p><b>Validation:</b> This is the year for which the data is being reported, not the year during which the report is being completed. This is a required data point. A blank will result in non-acceptance of the report.</p> <p><b>Required Supporting Documentation:</b> N/A</p>
A.8	<p><b>Date of Form Completion</b> (mm/dd/yyyy)</p> <p><b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report.</p> <p><b>Required Supporting Documentation:</b> N/A</p>
A.9	<p><b>Number of Ventilator Beds Licensed by TN</b></p>
A.10	<p><b>Alarm Paging/Beeper System</b> - Devices that alert the staff of any problems or changes. "Yes" must be chosen from the drop down list if an alarm paging/beeper system or device is <b>available</b> and "No" if it is not available.</p> <p><b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if an alarm paging/beeper system or device was used according to the <i>Patient Information</i> tab, no points will be awarded for this technology.</p> <p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of actual use of an alarm/paging/beeper system or device within the reporting month.</li> </ol>
A.11	<p><b>Cough Assist</b> - Clears secretions by gradually applying a positive pressure to the airway, then rapidly shifting to negative pressure. The rapid shift in pressure produces a high expiratory flow, simulating a natural cough. "Yes" must be chosen from the drop down list if cough assist device is <b>available</b> and "No" if it is not available.</p> <p><b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if the cough assist device was used according to the <i>Patient Information</i> tab, no points will be awarded for this technology.</p> <p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of actual use of a cough assist device within the reporting month.</li> </ol>
A.12	<p><b>Heated Wire</b> - Used to provide added humidification. The heated wires heat the air in the circuits and maintain the temperature along the tube to ensure continuous delivery of warm and humid air at an optimum level for the resident. "Yes" must be chosen from the drop down list if a heated wire device is <b>available</b> and "No" if it is not available.</p> <p><b>Validation:</b> This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if the heated wire device was used according to the <i>Patient Information</i> tab, no points will be awarded for this technology.</p> <p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of actual use of a heated wire device within the reporting month.</li> </ol>

**A.13 High Flow Molecular Humidification** - A high flow oxygen therapy system can deliver a high flow air/oxygen blend of up to 60 LPM with high molecular humidity through a nasal cannula or tracheal adapter. “Yes” must be chosen from the drop down list if a high flow molecular humidification device is **available** and “No” if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if high flow molecular humidification device was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual use of a high flow molecular humidification device within the reporting month.

**A.14 High Frequency Chest Wall Oscillation or Intrapulmonary Percussive Ventilation (IPV)**- High Frequency Chest Wall Oscillation involves a vest that is attached to a machine. The machine mechanically performs chest physical therapy by vibrating at a high frequency. The vest vibrates the chest to loosen mucus.

**IPV** sends small fast bursts of air, which opens airways. These small bursts of air also loosen and free mucus from airway walls. The high flow rate encourages deep breathing which helps air get around and behind mucus.

“Yes” must be chosen from the drop down list if high frequency chest wall oscillation or IPV device is **available** and “No” if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if high frequency chest wall oscillation or IPV device was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual use of a high frequency chest wall oscillation or IPV device within the reporting month.

**A.15 Incentive Spirometer or any Positive Expiratory Pressure Device (PEP)** - A medical device used to help residents improve the functioning of their lungs. “Yes” must be chosen from the drop down list if incentive spirometer or any PEP is **available** and “No” if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if an incentive spirometer or any PEP was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual use of an incentive spirometer or any PEP within the reporting month.

**A.16 Mobile Monitoring Device** – Device allows the resident to be mobile while provides the ability to monitor the patient even when outside the room, such as therapy, dining room, etc. regardless of respiratory equipment being utilized. . “Yes” must be chosen from the drop down list if a mobile monitoring device is **available** and “No” if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if a mobile monitoring device was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a mobile monitoring device within the reporting month.

**A.17 Non-Invasive Ventilation** - Refers to the administration of ventilator support without using an invasive artificial airway. "Yes" must be chosen from the drop down list if non-invasive ventilation is **available** and "No" if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if non-invasive ventilation was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of non-invasive ventilation within the reporting month

**A.18 Non-Invasive Open Ventilation (Nasal application for mobility)** - A small device that helps the resident take a bigger breath by delivering additional volume. Uses a special nasal cannula to deliver additional breath volumes at higher flows. The goal is to make the lungs more efficient, reduce the work of breathing, and relieve shortness of breath. "Yes" must be chosen from the drop down list if non-invasive open ventilation device is **available** and "No" if it is not available.

**Validation:** This is a required data point. A blank will result in non-acceptance of the report. If no is chosen, even if non-invasive open ventilation device was used according to the *Patient Information* tab, no points will be awarded for this technology.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a non-invasive open ventilation device within the reporting month.

**B. Referral Information**

**B.1 Last Name**

**Validation:** This is a required data point for each referral. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:** N/A

**B.2 First Name**

**Validation:** This is a required data point for each referral. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:** N/A

**B.3 Date NF Received Referral** - Date referral was received, not the date resident was admitted (mm/dd/yyyy)

**Validation:** This is a required data point for each referral. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:** N/A

- B.4 Acute Care Days Prior to NF Admission** - Number of days the resident was in acute care before the referral was received. One set of the following ranges must be chosen from the drop down list:
- a. 1-7
  - b. 8-15
  - c. 16-30
  - d. 31-60
  - e. >60

**Required Supporting Documentation:** N/A

- B.5 Hospitalization in Last 12 Months** - How many times has the resident been in the hospital in the past 12 months, regardless of diagnosis? A response must be chosen from the following drop down list:
- a. 1
  - b. 2
  - c. 3
  - d. >4

**Required Supporting Documentation:** N/A

- B.6 Number of Wounds (not stages)** - Referral source will provide information, or the facility will perform an onsite evaluation and document wounds. A response must be chosen from the following drop down list:
- a. 0
  - b. 1
  - c. 2-3
  - d. 4 or more

**Required Supporting Documentation:** N/A

- B.7 Admitted** - Was the resident admitted to the ERC unit? Yes or No must be chosen from the drop down list.

**Validation:** If no, the Reason Not Admitted field should be completed. This is a required data point for each referral. A blank will result in non-acceptance of the report. If yes, the resident should appear on the *Patient Information* tab.

**Required Supporting Documentation:**

- 1. If yes, the resident's original permanent medical record must document admission to ERC unit/services date within the reporting month.

- B.8 Social Security Number (if admitted)** - This will automatically format correctly, so it is not necessary to enter hyphens.

**Validation:** This should match the social security number provided on the *Patient Information* tab. If referral was admitted, this is a required and a blank will result in non-acceptance of the report.

**Required Supporting Documentation:** N/A

**B.9 Reason Not Admitted** - If the facility did not admit the referral to ERC services, they will need to specify why here. One of the following reasons must be chosen from the drop down list:

- a. Dialysis
- b. No available beds
- c. PASRR
- d. Can't meet pt. needs - resident too acute
- e. Can't meet pt. needs – other
- f. Resident deceased prior to admission
- g. Resident chose another NF
- h. Insurance

**Validation:** This should only be filled in if the admitted column was marked "No".

**Required Supporting Documentation:** N/A

**B.10 Primary Payor** - Refers to the insurance company that pays first on claims submitted by suppliers and providers. One of the following must be chosen from a drop down list:

- a. TennCare (MCO)
- b. Medicare
- c. Other State Medicaid
- d. Commercial
- e. Other

**Validation:** This should match information on *Patient Information* tab.

**Required Supporting Documentation:** N/A

**B.11 Secondary Payor** - Refers to the insurance company that may pay an amount not covered by the primary insurance payer. Referral source will have this information on file. Example: an individual may have Medicare as a Primary payer and Medicaid, BCBS, etc. as an additional or "secondary" payer. Choose from the following options in a drop down list:

- a. TennCare (MCO)
- b. Medicare
- c. Other State Medicaid
- d. Commercial
- e. Other
- f. None

**Validation:** This should match information on the *Patient Information* tab.

**Required Supporting Documentation:** N/A

**B.12 State of Residence at time of admission** – A state must be chosen from the drop down list. This is a required data point for each referral. A blank will result in non-acceptance of the report.

**Note:** Pursuant to *TennCare Rule* 1200-13-01-.03(5)(i):

Eligibility for access to ERC services by individuals from out of state is governed by 42 CFR 453.403. A NF shall not recruit individuals from other states to received ERC in Tennessee. A NF shall not be eligible to receive TennCare reimbursement for ERC services for a resident placed by another state or any agency acting on behalf of another state in making the placement because such services are not available in the individual's current state of residence, including residences admitted to NF/SNF under the Medicare Skilled Nursing Facility care benefit when such benefit has been exhausted. The NF shall be responsible for arranging, prior to the resident's admission to the facility, Medicaid reimbursement for ERC services from the Medicaid Agency of the state which placed the resident and which will

commence when other payment sources (e.g., Medicare, private pay, but not TennCare) has been exhausted.

**C. Patient Information (yellow section)**

C.1	<b>First Name</b>
	<b>Validation:</b> This is a required data point for every resident. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
C.2	<b>Last Name</b>
	<b>Validation:</b> This is a required data point for every resident. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
C.3	<b>SSN - Social security number</b>
	<b>Validation:</b> This is a required data point for every resident. A blank will result in non-acceptance of the report.
	<b>Required Supporting Documentation:</b> N/A
C.4	<b>Medicaid ID</b>
C.5	<b>Primary Payor - Refers to the insurance company that pays first on claims submitted by suppliers and providers. One of the following must be chosen from a drop down list:</b> <ul style="list-style-type: none"><li>a. TennCare (MCO)</li><li>b. Medicare</li><li>c. Other State Medicaid</li><li>d. Commercial</li><li>e. Other</li></ul>
	<b>Validation:</b> If resident was admitted to ERC services during the reporting month, this should match information on <i>Referral Information</i> tab.
	<b>Required Supporting Documentation:</b> N/A

C.6

**Secondary Payor** - Refers to the insurance company that may pay an amount not covered by the primary insurance payer. Referral source will have this information on file. Example: an individual may have Medicare as a Primary payer and Medicaid, BCBS, etc. as an additional or "secondary" payer. One of the following must be chosen from a drop down list:

- a. TennCare (MCO)
- b. Medicare
- c. Other State Medicaid
- d. Commercial
- e. Other
- f. None

**Validation:** If resident was admitted to ERC services during the reporting month, this should match information on *Referral Information* tab.

**Required Supporting Documentation:** N/A

C.7

**Admission Date to ERC:** The date the resident was admitted to ERC services, not the date of the referral.

**Hospitalization and Discharge:** If a resident is discharged to the hospital for less than thirty days they **should not** be issued a new admission date for the purposes of this tool. The previous admission date should continue to be used unless a resident is discharged to the hospital for more than thirty days.

**Validation:** This is a required data point for every resident. A blank will result in non-acceptance of the report. Resident should appear on ERC monthly report from date of admission until discharge is reported (mm/dd/yyyy).

**Required Supporting Documentation:**

- 1. The resident's original permanent medical record must have documentation of admission date to ERC services within the reporting month.

C.8

**Non-Weaning Exclusion (Y/N)** - This includes:

- 1. Residents who have a diagnosis of a progressive neuromuscular disease which makes weaning from mechanical ventilation detrimental to the residents' survival. This will include:
  - a. Amyotrophic lateral sclerosis (ALS)
  - b. Duchenne muscular dystrophy (DMD)
  - c. Other progressive neuromuscular disease (must be specified in medical record);
- 2. Residents who have an irreversible neurological injury or disease or dysfunction such as high spinal cord injury (C2) in which weaning may be detrimental to survival;
- 3. Residents who have end stage renal disease and are undergoing dialysis; and/or
- 4. Residents who are undergoing end of life hospice care as a result of resident or family choice.

In addition to meeting one or more of the above criteria, for a resident to qualify under the non-weaning exclusion, the determination of non-weaning exclusion status must be discussed with the resident or family, and documented at admission and agreed to by the attending physician and consulting pulmonologist. There shall be a corresponding order for non-weaning care.

Advanced directive "Code status" is not a consideration in determining the non-weaning care plan. Yes or No must be chosen from the drop down list.

**Validation:** This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation as per definitions of:
  - a. ALS
  - b. DMD
  - c. Other progressive neuromuscular disease
  - d. Irreversible neurological injury or dysfunction
  - e. ESRD/dialysis
  - f. End of life hospice care
2. The resident's original permanent medical record must have documentation of resident status discussion with resident or family:
  - a. Documentation of resident status discussion at admission
  - b. Agreed to by attending physician and consulting pulmonologist
  - c. Corresponding order for non-weaning care

**C.9**

**Resident Status** - Knowing that the resident status can change throughout the reporting month, this asks for the status as of the beginning of the reporting month. If the resident is admitted after the beginning of the month, then please report the resident status as of admission to ERC services. Note that invasive means "with trach" and non-invasive is "without trach" (i.e., by mouthpiece or mask). Please see the conditions for chronic ventilator reimbursement for an individual receiving non-invasive ventilation in TennCare Rule §1200-13-01-.10(5)(c). One of the following options must be chosen from the drop down list:

- a. Invasive Ventilator or Tracheal Suctioning
- b. Non-Invasive Ventilator (less than 12 hours per day)
- c. Non-Invasive Ventilator (12 or more hours per day due to progressive neuromuscular disorder, spinal cord injury, or chronic respiratory failure)

**Note:** Non-Invasive ventilation which does not meet the requirements of the Rules of TennCare 1200-13-01-.10(5)(c), **option b** on this question, is not eligible for enhanced ERC reimbursement.

**Validation:** This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

The resident's original permanent medical record must have documentation of resident status as of

- a. Beginning of the reporting month or
- b. If admitted after the beginning of the month, status as of admission to ERC services
- c. Ventilator dependence for at least 12 hours each day verified by daily notes and/or flow sheet/log and
- d. TennCare authorization for chronic ventilator reimbursement if applicable

**Care Days during the Month (pink section)**

**C.10**

**Days in Reporting Month Prior to Admission** -The number of days from the beginning of the reporting month to the date of ERC admission; these are non-care days, i.e., days in the reporting period during which a resident is not under the care of the ERC nursing facility. A blank will be interpreted as zero days (i.e., residents who were admitted in a previous month). If the resident is admitted in the current reporting month, a number from 1 – 30 will be chosen from the drop down list.

**Note:** if a resident was hospitalized the previous month for less than 30 days but the hospitalization lasts into the current reporting month, the Days in Reporting Month Prior to Admission will be zero because the admission date will not have changed.

**Validation:** This only applies to new admissions, so the admission date must fall within the reporting month and year. This number must equal the number of days from the beginning of the month to the date of admission. Cannot be more than the number of the days in the reporting month minus one.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of admission date to ERC services within the reporting month.

**C.11 Ventilator Care Days** - The number of days in the reporting month that the resident received chronic ventilator care (Code 94004). A blank will be interpreted as zero chronic ventilator care days. If the resident had chronic ventilator care days during the reporting month, a number from 1 – 31 will be chosen from the drop down list.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Care Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal the number of days in the month from admission.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of daily ventilator use notes and/or flow sheet/log.

**C.12 Weaning Care Days** - The number of days in the reporting month that the resident received ventilator weaning care (Code 94004 SC). This may include days during the weaning process that the resident was periodically off the ventilator for spontaneous breathing trials but had not yet successfully weaned. A blank will be interpreted as zero ventilator weaning care days. If the resident had ventilator weaning care days during the reporting month, a number from 1 – 31 will be chosen from the drop down list.

**Note:** If a resident successfully weans, the seven consecutive days after the last day on mechanical ventilation should be reported as vent weaning care days.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Care Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal the number of days in the month from admission.

**Required Supporting Documentation:**

1. Medical record must have documentation of daily weaning notes and/or flow sheet/log.

**C.13 Sub-Acute Tracheal Suctioning Care Days** - The number of days in the reporting month that the resident received sub-acute tracheal suctioning care (Code: 31889). A blank will be interpreted as zero sub-acute tracheal suctioning care days. If the resident had sub-acute tracheal suctioning care days during the reporting month, a number from 1 – 31 will be chosen from the drop down list.

**Note:** If a resident successfully decannulates, the three consecutive days after the removal of the artificial airway should be reported as Sub-Acute Tracheal Suctioning Suctioning care days.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal

the number of days in the month from admission.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of daily tracheal suctioning notes and/or flow sheet/log within the reporting month.

C.14

**Secretion Management Tracheal Suctioning Care Days** - The number of days in the reporting month that the resident received secretion management care (Code 31889 SC). A blank will be interpreted as zero days of secretion management tracheal suctioning care days. If the resident had secretion management tracheal suctioning care days during the reporting month, a number from 1 – 31 will be chosen from the drop down list.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal the number of days in the month from admission.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of daily tracheal suctioning notes and/or flow sheet/log within the reporting month.

C.15

**Total # of Days in Hospital** - This is the number of days the resident was receiving care in a hospital. A blank here will be interpreted as zero days in the hospital. If the resident had hospital care days due to hospital admission during the reporting month, a number from 1 – 31 will be chosen from the drop down list.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal the number of days in the month from admission. If resident had one or more unplanned hospitalizations, the total number of days in hospital cannot be blank or zero.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of number of days in the hospital within the reporting month.

C.16

**Total Care Days** - Sum of hospital, ventilator, weaning, and sub-acute and secretion management tracheal suctioning care days and days prior to admission. This field automatically populates with the sum so no data is entered here.

**Validation:** Sum of Ventilator, Weaning, Sub-Acute, Secretion Management, and Hospital Days must equal to the Number of Days in the Reporting Month **or if new admission**, this sum must equal the number of days in the month from admission.

**Required Supporting Documentation:** N/A

**Outcomes during Month (purple section)**

C.17

**Successful Wean** - Was resident off of the ventilator for at least seven consecutive days during the reporting month? Yes or No must be chosen from the drop down list.

**Note:** A terminal wean, when an individual is weaned from the vent (terminating life support) with the

anticipated outcome being death (immediate or impending without the life support), should not be counted as a successful wean. Please assure terminal weans are marked as “yes” for non-weaning exclusion.

**Note:** If a resident successfully weans, the seven consecutive days after the last day on mechanical ventilation should be reported as vent weaning care days.

**Validation:** If yes, then the date of weaning must be provided and it must be within current reporting month. If the Date of Weaning is left blank, then the wean will not be considered successful. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual wean end date.
2. Daily weaning notes and/or flow sheet/log for 7 consecutive days after last date on mechanical ventilation.

**C.18 Date of Weaning** - If wean was successful (see above), this is the last day on the ventilator plus seven days (mm/dd/yyyy).

**Validation:** If a wean date is provided (and is current within the reporting month) but the Successful Wean was left blank or answered no, then the wean will not be considered successful.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual wean end date.
2. Daily weaning notes and/or flow sheet/log for 7 consecutive days after last date on mechanical ventilation.

**C.19 Days from admission to wean** - The number of days from the ERC admission date to the Date of Weaning. This field automatically populates with the calculation result so no data is entered here.

**C.20 Vent Wean Start Date** - The date a resident started the ventilator weaning process (mm/dd/yyyy).

**Validation:** Vent weaning days should be greater than zero.

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must have documentation of actual wean start date.

**C.21 Successful Weaning Duration** - The number of days from ventilator weaning start to end. This field automatically populates with the calculation results so no data will be entered here.

**C.22 Decannulation** - Was the resident’s artificial airway removed successfully (meaning resident remained stable for 3 days following removal and did not require re-insertion)? Yes or No will be chosen from the drop down list.

**Note:** A terminal wean/decannulation, when an individual is weaned from the vent and decannulated (terminating life support) with the anticipated outcome being death (immediate or impending without the life support), should not be counted as a successful decannulation. Please assure terminal weans are marked as “yes” for non-weaning exclusion.

**Note:** If a resident successfully decannulates, the three consecutive days after the removal of the artificial airway should be reported as Sub-Acute Tracheal Suctioning Suctioning care days.

**Validation:** If yes, then the date of decannulation must be provided and it must be within the current reporting month.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation that the resident remained stable for 3 consecutive days following date of decannulation.
2. Daily weaning notes and/or flow sheet/log.

**C.23**

**Date of Decannulation** - If decannulation is successful (see above), this is the date the resident's artificial airway was removed + 3 days (mm/dd/yyyy).

**Validation:** If a decannulation date is provided (and is current within the reporting month) but the Decannulation field was left blank or answered no, then the decannulation will not be considered successful and thus, will not be included in the numerator of the decannulation rate calculation. \*\*If decannulation date is prior to or on the wean date, then information should be verified with facility. Incidents validated by facility should be compiled and submitted to Director of Value Based Purchasing for review. Incidents may be forwarded to MCO ERC contractors as needed. \*\*

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of date artificial airway was removed + 3 days.

**Events during Month (light blue section)**

**C.24** **Number of new URIs** - number of new upper respiratory infections or incidents of pneumonia. This is to specifically monitor respiratory infections that are acquired or exacerbated more than 4 calendar days after entering the facility, not those acquired during hospitalization or prior to admission. A blank here will be interpreted as zero new URIs.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual treatment provided for each URI and/or incident of pneumonia within the reporting month.

**C.25** **Number of unplanned hospitalizations** - Please note that this column on the spreadsheet is asking for the number of new *unplanned* hospital admissions that occurred within the reporting month.

An unplanned hospitalization refers to any unplanned ER visit or unplanned hospital admission. This does not include any scheduled, non-emergent appointment or scheduled procedure. If a resident is admitted following a planned appointment or procedure without prior planning for that admission, that hospital admission would then be considered an unplanned hospitalization.

**Validation:** This is a required data point for every resident. A blank will result in non-acceptance of the report. If this is greater than zero, then hospital days should be greater than zero.

**Required Supporting Documentation:**

1. Listing of all hospital admissions including emergency department and observation stays during the reporting month.

**C.26** **Unexpected death** - death not associated with care given to treat any condition listed in the non-weaning exclusion. Yes or No will be chosen from the drop down list.

**Validation:** This is a required data point for every resident. A blank will result in non-acceptance of the report. If unexpected death is "Yes", then Non-Weaning Exclusion must be "No."

**Required Supporting Documentation:**

1. Listing of all deaths during reporting month.
2. The resident's original permanent medical record must have documentation of date of death within the reporting month.

**C.27** **ERC Discharge Date** - Date resident stopped receiving ERC services within the reporting month (i.e., date the resident is no longer being billed an ERC rate, regardless of reason). (mm/dd/yyyy)

**Hospitalization and Discharge:** If a resident is discharged to the hospital for less than thirty days they **should not** be issued a new admission date. The previous admission date should continue to be used unless a resident is discharged to the hospital for more than thirty days.

**Validation:** If an ERC discharge date is provided, a discharge reason must also be provided. Discharge date should be after vent wean date. If this is not true then information should be validated with facility. Incidents validated by facility should be compiled and submitted to Director of Value Based Purchasing for review. Incidents may be forwarded to MCO ERC contractor(s) as needed.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of the actual date of discharge from ERC services within the reporting month.

<b>C.28</b>	<p><b>ERC Discharge Reason</b> - the destination (i.e., reason) the ERC resident was discharged to. One of the following options must be chosen from the drop down list:</p> <ol style="list-style-type: none"> <li>a. Home or community setting</li> <li>b. Hospital – plan to return</li> <li>c. Hospital – not planning to return</li> <li>d. Hospital – unknown return</li> <li>e. Another nursing facility</li> <li>f. Deceased</li> <li>g. Other</li> </ol>
	<p><b>Validation:</b> An ERC discharge date must be provided.</p>
	<p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of reason for discharge within the reporting month.</li> </ol>

If any of the technologies below were used, the field to the right of the technology will need to be marked "Yes". If it was not used, the field will need to be marked "No". **A blank will result in non-acceptance of the report.** See definitions in section **A.10 – A.18** with any questions.

<b>C.29</b>	<p><b>Alarm Paging / Beeper System</b></p>
	<p><b>Validation:</b> If an alarm paging/beeper system was used, it should be marked as available on <i>General Facility Information</i> Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.</p>
	<p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of actual use of an alarm paging/beeper system or device within the reporting month.</li> </ol>

<b>C.30</b>	<p><b>Cough Assist</b></p>
	<p><b>Validation:</b> If a cough assist was used, it should be marked as available on <i>General Facility Information</i> Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.</p>
	<p><b>Required Supporting Documentation:</b></p> <ol style="list-style-type: none"> <li>1. The resident's original permanent medical record must have documentation of actual use of a cough assist device within the reporting month.</li> </ol>

<b>C.31</b>	<p><b>Heated Wire</b></p>
	<p><b>Validation:</b> If a heated wire device was used, it should be marked as available on <i>General Facility Information</i> Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.</p>
	<p><b>Required Supporting Documentation:</b></p>

1. The resident's original permanent medical record must have documentation of actual use of a heated wire device within the reporting month.

**C.32 High Flow Molecular**

**Validation:** If a high flow molecular humidification device was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a high flow molecular humidification device within the reporting month.

**C.33 High Frequency Chest Wall Oscillation or Intrapulmonary Ventilation (IPV)**

**Validation:** If a high frequency chest wall oscillation or IPV device was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a high frequency chest wall oscillation or IPV device within the reporting month.

**C.34 Incentive Spirometer or any PEP**

**Validation:** If an incentive spirometer or any PEP was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of an incentive spirometer or any PEP within the reporting month.

**C.35 Mobile Monitoring Device**

**Validation:** If a mobile monitoring device was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a mobile monitoring device within the reporting month.

**C.36 Non-Invasive Ventilation**

**Validation:** If non-invasive ventilation was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of

non-invasive ventilation within the reporting month

**C.37 Non-Invasive Open Ventilation**

**Validation:** If a non-invasive open ventilation device was used, it should be marked as available on *General Facility Information* Tab. This is a required data point for every resident. A blank will result in non-acceptance of the report.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of actual use of a non-invasive open ventilation device within the reporting month.

**Clinical Resident Information (green and blue sections)**

**C.38 PAE Acuity Score** - A number from 0 to 26 will be chosen from a drop down list.

**C.39 Primary Diagnosis** - Primary diagnosis requiring ERC services will be the diagnosis listed as the primary cause of a resident requiring specific services or care. Example: A resident receiving ERC will have a respiratory related illness or an illness that compromises respiratory function. One of the following options will be chosen from the drop down list:

- a. COPD - 496
- b. CRF(Chronic Respiratory Failure) - 518.83
- c. ACRF(Acute Chronic Respiratory Failure) - 518.84
- d. Hypoxemia - 514
- e. Pneumonia - 486
- f. Other

**Required Supporting Documentation:** N/A

**C.40 Secondary Diagnosis** - (Diagnosis in addition to Primary) - Secondary Diagnosis reflects an additional illness that contributes to, but does not necessarily cause the need for ERC services. One of the following options will be chosen from the drop down list:

- a. COPD - 496
- b. CRF(Chronic Respiratory Failure) - 518.83
- c. ACRF(Acute Chronic Respiratory Failure) - 518.84
- d. CVA
- e. Trauma
- f. Other

**Required Supporting Documentation:** N/A

**C.41 Care Status Change within Reported Month** - Either "Yes" or "No" will be chosen from a drop down list to respond to this item. Answer "yes" if the resident transitioned from one care type to another within the reporting month. For example, answer this question yes if the resident transitioned from ventilator invasive weaning to tracheal suctioning within the reporting month.

**Validation:** If a resident weans or is decannulated, this question should be marked yes.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of date of care status change within the reporting month.

C.42

**Sentinel Event** - This refers to events such as unexpected deaths, serious injuries, situations where the resident required emergency intervention by respiratory, nursing or EMS, and deaths within 72 hours of hospitalization. Either "yes" or "no" will be chosen from a drop down list to respond to this item. If "yes," is chosen, the date and type of sentinel event are required.

**Validation:** If yes, date and type of sentinel event.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of the date and type of sentinel event within the reporting month.

C.43

**Date of Sentinel Event** - Date the sentinel event occurred (mm/dd/yyyy)

**Validation:** Date should occur within reporting month. If sentinel event occurred prior to or on either the wean date or decannulation date, then information should be verified with facility. Incidents where the date of the sentinel event occurred prior to or on the wean or decannulation data that are validated by the facility should be compiled and submitted to Director of Value Based Purchasing for review. Incidents may be forwarded to MCO ERC contractors as needed.

**Required Supporting Documentation:**

1. The resident's original permanent medical record must have documentation of the date and type of sentinel event.

C.44

**Type of Sentinel Event** - An option from the following drop down list will be chosen:

- a. Unexpected Death (death not associated with palliative care)
- b. Serious Injury
- c. Required Emergency Intervention
- d. Death within 72 hours of hospitalization
- e. Other

**D. Failed Validation and Discrepancies**

If report fails validation, or errors are identified by TennCare in the reporting, then TennCare shall contact the facility administrator and the person who completed the report as listed on the *General Facility Information* tab and require resubmission within a time frame determined by TennCare. Information provided to facility should include reasons why report validation failed.

# IV. CALCULATION OF RATES

## Data Analysis and Reporting

The information entered by facilities will be compiled into a comprehensive aggregate report. This report will reflect facility-level ERC performance data based on the resident-specific data entered each month. This performance data will provide quality metrics to allow both facilities and TennCare to monitor quality improvement effort outcomes.

These TennCare ERC program quality outcome measures are listed in the table below and include the method by which they are calculated:

<b>A. Wean Rate</b>	
<b>1. Numerator:</b> total number of unduplicated successfully weaned (within the review period) ventilator residents	
<b>a. Unduplicated:</b> this refers to a count of unique residents (i.e., if Jane Doe has been there every month during the 6 month review period, she is only counted once). Unduplication is based upon patient identifying information and admission date. Please note that for a resident who weans multiple times but has the same admission date, only the most recent wean will be counted in the wean rate.	
<b>b. Ventilator Residents:</b> Residents with either vent care days or weaning care days or both. Residents who have neither vent care days nor vent weaning care days are not considered ventilator residents when calculating the numerator of the wean rate. In addition, patients who only require less than 12 hours of non-invasive ventilation are not considered ventilator residents. Thus any resident marked as "Non-Invasive Ventilator (less than 12 hours per day)" will be excluded from the numerator of the wean rate.	
<b>c. Successfully Weaned Residents:</b> residents who meet <b>BOTH</b> of the following criteria: <ul style="list-style-type: none"> <li>- have been off the ventilator for at least 7 consecutive days</li> <li>- residents must have a wean date <b>within the review period</b></li> </ul> <b>*** If a resident meets only one of these criteria, they will NOT be counted. For example, if a wean date is provided but the answer to the question "Was resident off of the ventilator for at least 7 consecutive days during the reporting month?" is "No", then this resident would not be counted as a successfully weaned ventilator resident. And if the answer to this question is "Yes" but a wean date is not provided, then this resident would not be counted as a successfully weaned ventilator resident either.</b>	
<b>2. Denominator:</b> the total number of unduplicated residents whose: (1) Admission date is within the evaluation period AND whose non-wean exclusion was flagged as 'NO'; (2) Admission date is within the evaluation period AND whose non-wean exclusion was flagged as 'YES' AND who successfully weaned within the review period; (3) Admission date is prior to the start of the evaluation period but successfully weaned within the review period.	
<b>a. Unduplicated:</b> this refers to a count of unique residents (i.e., if Jane Doe has been there every month during the 6 month review period, she is only counted once). Unduplication is based upon patient identifying information and admission date.	
<b>b. Non-Excluded:</b> residents for which "Non-Weaning Exclusions? (Y/N)" is marked "No" are included in the denominator of the wean rate. Residents for which the non-weaning exclusion is marked "Yes" are excluded from the denominator. <b>***Please see the definition of Non-Weaning Exclusion in section C.8.</b>	

c.	<b>Ventilator Residents:</b> residents with either vent care days or weaning care days or both. Residents who have neither vent care days nor vent weaning care days are not considered ventilator residents when calculating the denominator of the wean rate and are excluded from this calculation. Also, any resident marked as "Non-Invasive Ventilator (less than 12 hours per day)" will be excluded from the denominator of the wean rate.
d.	<b>Review period:</b> data from this user-specified time period (at least 6 to 12 months) is used to evaluate quality outcome measures. Non-excluded residents whose admission date is within the review period are counted in the denominator of the wean rate.

<b>B. Average Length of Stay to Wean</b>
This is the average number of days from admission date to wean date for successfully weaned, ventilator residents who were <b>admitted and weaned during the review period</b>
<p>1. <b>Successfully Weaned Residents:</b> residents who meet <b>BOTH</b> of the following criteria:</p> <ul style="list-style-type: none"> <li>- have been off the ventilator for at least 7 consecutive days</li> <li>- residents must have a wean date <b>within the review period</b></li> </ul> <p>*** If a resident meets only one of these criteria, they will NOT be counted. For example, if a wean date is provided but the answer to the question "Was resident off of the ventilator for at least 7 consecutive days during the reporting month?" is "No", then this resident would not be counted as a successfully weaned ventilator resident. And if the answer to this question is "Yes" but a wean date is not provided, then this resident would not be counted as a successfully weaned ventilator resident either.</p>
2. <b>Days from Admission to Wean:</b> Average of days from admission to date of weaning if the resident was weaned successfully and admitted during the review period.
3. <b>Ventilator Residents:</b> residents with either vent care days or weaning care days or both. Residents who have neither vent care days nor vent weaning care days are not considered ventilator residents when calculating the average length of stay to wean and excluded from this calculation. In addition, patients who only require less than 12 hours of non-invasive ventilation are not considered ventilator residents. Thus any resident marked as "Non-Invasive Ventilator (less than 12 hours per day)" will be excluded from the denominator of the wean rate.

<b>C. Decannulation Rate</b>	
1. <b>Numerator:</b> total number of unduplicated, successfully decannulated tracheal suctioning residents	
a.	<b>Unduplicated:</b> this refers to a count of unique residents (i.e., if Jane Doe has been there every month during the 6 month review period, she is only counted once). Unduplication is based upon patient identifying information and admission date. Please note that for a resident who decannulates multiple times but has the same admission date, only the most recent decannulation will be counted in the decannulation rate.
b.	<b>Tracheal Suctioning Residents:</b> residents with either sub-acute tracheal suctioning care days or secretion management tracheal suctioning care days or both. Residents who don't have tracheal suctioning care days (either sub-acute, secretion management or both) are not considered tracheal suctioning residents when calculating the numerator of the decannulation rate and are excluded from this calculation.
c.	<b>Successfully Decannulated Residents:</b> residents who meet <b>BOTH</b> of the following criteria: <ul style="list-style-type: none"> <li>- have been decannulated, indicated by answering "Yes" to "Was resident decannulated?"</li> <li>- residents must have a decannulation date <b>within the review period</b></li> </ul> <p>*** If a resident meets only one of these criteria, they will NOT be counted. For example, if a decannulation date is provided but the answer to the question "Was resident decannulated?" is "No",</p>

	then this resident would not be counted as a successfully decannulated tracheal suctioning resident. And if the answer to this question is "Yes" but a decannulation date is not provided, then this resident would not be counted as a successfully decannulated tracheal suctioning resident either.
2.	<b>Denominator:</b> the total number of unduplicated residents whose: (1) Admission date is within the evaluation period AND whose non-wean exclusion was flagged as 'NO'; (2) Admission date is within the evaluation period AND whose non-wean exclusion was flagged as 'YES' AND who successfully decannulated within the review period; (3) Admission date is prior to the start of the evaluation period but successfully decannulated within the review period.
a.	<b>Unduplicated:</b> this refers to a count of unique residents (i.e., if Jane Doe has been there every month during the 6 month review period, she is only counted once). Unduplication is based upon patient identifying information and admission date.
b.	<b>Non-Excluded:</b> residents for which "Non-Wearing Exclusions? (Y/N)" is marked "No" are included in the denominator of the decannulation rate. Residents for which the non-weaning exclusion is marked "Yes" are excluded from the denominator.
c.	<b>Tracheal Suctioning Residents:</b> residents with either sub-acute tracheal suctioning care days or secretion management tracheal suctioning care days or both. Residents who don't have tracheal suctioning care days (either sub-acute, secretion management or both) are not considered tracheal suctioning residents when calculating the denominator of the decannulation rate.
d.	<b>Review period:</b> data from this user-specified time period (at least 6 to 12 months) is used to evaluate quality outcome measures. Non-excluded residents whose admission date is within the review period are counted in the denominator of the decannulation rate.

D.	<b>Infection Rate</b>
1.	<b>Numerator:</b> Total number of upper respiratory infections (URI).
2.	<b>Denominator:</b> member months; count of non-blank rows evaluated during the review period (resident duplication is acceptable for this measure)

E.	<b>Unplanned Hospitalization Rate</b>
1.	<b>Numerator:</b> Total number of unplanned hospitalizations.
2.	<b>Denominator:</b> member months; count of non-blank rows evaluated during the review period (resident duplication is acceptable for this measure)

F.	<b>Unexpected Death Rate</b>
1.	<b>Numerator:</b> Total number of unexpected deaths
2.	<b>Denominator:</b> member months; count of non-blank rows evaluated during the review period (resident duplication is acceptable for this measure)

G.	<b>Denial Rate</b>
1.	<b>Numerator:</b> Total number of unduplicated denials.
2.	<b>Denominator</b> – total number of referrals; count of non-blank rows on the <i>Referral Information</i> tab
H.	<b>Technology:</b> If a technology was used at any point during the review period AND it is marked as present in the facility on the <i>General Facility</i> Information, points are awarded for that particular technology.

## **Analysis and Scoring**

Quality outcome measures shall be analyzed and scored in order to determine tier scores. The quality outcome measures score weights shall be examined no less frequently than once every twelve months in order to assure their validity in accurately reflecting an increasing quality of ERC care.

## **Reporting Scores to ERC Nursing Facilities**

### **1. Preliminary Scores to Facilities**

Preliminary reports shall be submitted to ERC facilities with proposed ERC scores. TennCare shall allow a period of no less than seven (7) calendar days for facilities to self-evaluate scores and submit questions related to their specific data and calculations.

### **2. Reconsideration Procedure**

TennCare shall reply to all questions related to preliminary scores and calculations. TennCare shall have the option of allowing for the resubmission of any data.

### **3. Final Reports**

Final reports shall be submitted to ERC facilities no later than seven (7) calendar days prior to the final rate-set.

# V. ERC REVIEW PROTOCOL

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## Enhanced Respiratory Care (ERC) Policy Decisions

1. All payer sources are selected for review
2. All discharged residents who have reported ERC data during the review period are subject to the review process
3. Tennessee Department of Health/TennCare Enhanced Respiratory Care Review Standards
4. Frequency of Reviews
  - a. One (1) educational review for each facility; then
  - b. One (1) “hold-harmless” review for each facility; then
  - c. All providers semi-annually
5. Primary Sample Size
  - a. Greater of 10 residents or 20% of the reported residents during the review period

## ERC Pre-Review Protocol

1. Facility notification will occur no later than two (2) business-days prior to the scheduled on-site review
  - a. Telephonic Notification
    - i. Administrative staff contact facility administrator and utilize standardized script
      1. If administrator is not available, Director of Respiratory Care will be requested
      2. If Director of Respiratory Care is not available, Director of Nursing will be requested
      3. If no leadership staff available, message will be left with staff member answering the phone and it will be the responsibility of the facility staff member to notify the Administrator
    - b. Email confirmation
      - i. Administrative staff notification via email of Estimated Enhanced Respiratory Care Review form
        1. Administrator email will be requested, if not available, then
        2. Director of Respiratory Care email will be requested, if not available, then
        3. Director of Nursing email will be requested
        4. If no leadership email is available, email of person with whom administrative staff is speaking will be requested and it will be the responsibility of the staff member to assure the email is forwarded to the Administrator
      - ii. Email confirmation provides facility staff with listing of documentation that will be required during the ERC review

## ERC On-Site Review Protocol

1. Private work area free of any audio or video taping or surveillance will be requested
2. Entrance conference provided prior to the beginning of the review
  - a. All required documentation for the review process will be discussed
3. Reviewer will explain process and identify facility liaison
4. Reviewer will provide resident record list
5. Facility attendee(s) are required to sign the entrance conference form
6. Facility liaison to provide facility tour
7. Facility liaison must provide original legal medical records per resident list
8. Reviewer will request a limited number of resident charts one at a time to minimize chart removal from the resident chart location
9. Reviewer will request the liaison to assist in locating any documentation the reviewer is unable to locate in the medical record
10. Once records are brought to the review area, a record cannot leave the room until the reviewer releases the record
  - a. All reviewers expect facility staff to have access to their records in an emergency situation
11. Medical records may consist of electronic and/or hard copies
12. If access to electronic medical records is necessary, facility must have staff available to assist the reviewer as needed. Please have arrangements made prior to reviewer’s arrival (i.e. computer, password, etc.)

## **End-of-Review Protocol**

1. Exit conference provided following the completion of the review
2. If a review carries over to a second day, there will be an exit conference each day; records completed on each day are considered closed and will not be re-opened on a consecutive day of the review. A final exit conference will be provided following the completion of the ERC review.
3. Exit conference is an educational, learning experience
4. Facility Administrator or designee may invite staff of choice to attend the exit conference
5. Reviewer will report the preliminary findings
6. Facility attendee(s) are required to sign the exit conference form

# VI. SECRETION MANAGEMENT INTERPRETIVE GUIDELINES

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1. **An applicant must have a functioning tracheostomy and a copious volume of secretions and require either 1.(i) or 1. (ii) below.**

**Definition:**

1. A copious volume of secretions shall be defined as 25-30 ml per day- about 1 fluid ounce or “a shot glass full” occurring over the course of the day, and not necessarily at every suctioning. Please note, however, that for residents whose secretions are managed using a high flow device, the device is expected to provide ongoing relief of the copious volume of secretions, which shall not negate the need for intervention (and eligibility for Secretion Management Tracheal Suctioning Reimbursement), if absent the high flow device, the copious volume of secretions would require more invasive management (see ii below).

**Required Supporting Documentation:**

1. The resident’s original permanent medical record contains documentation of secretion measurements or
2. The resident’s original permanent medical record documents the use of a high flow device and effectiveness in providing relief of copious volume of secretions.

1.(i) **Invasive tracheal suctioning, at a minimum, once every three (3) hours with documented assessment pre-and post-suctioning; or**

**Definition:**

1. The requirement for invasive tracheal suctioning, at a minimum, once every three (3) hours shall be applied as a marker of the severity of the Applicant’s respiratory care needs. Secretion Management Tracheal Suctioning is not a scheduled intervention and shall not be performed as a medication would be delivered, i.e., at scheduled intervals (except as prescribed by an appropriately licensed health care professional practicing within the scope of his or her license). Rather, tracheal suctioning should be provided as clinically indicated, based on the needs of each person requiring such care; evidence of the need should be clearly and “accurately” documented. This could mean a shorter or longer interval at any point, but with a clinical need for invasive tracheal suctioning an average of every three (3) hours or more often in order to qualify for Secretion Management Tracheal Suctioning Reimbursement.
2. Note also that invasive tracheal suction is one of two options (see ii below).

**Required Supporting Documentation:**

1. The resident’s original permanent medical record must contain documentation of invasive tracheal suctioning, at a minimum, once every 3 hours during the reporting month
2. The resident’s original permanent medical record must contain documentation of a pre- and post-suctioning assessment during the reporting month.

**1.(ii) The use of mechanical airway clearance devices and/or heated high flow molecular humidification via the tracheostomy, at a minimum, three (3) times per day with documented assessment pre-and post.**

**Definition:**

1. This provision is an effort to guide NFs away from the practice of suctioning the trachea which is an invasive maneuver that irritates the trachea and causes trauma as well as increased risk for infection. In these cases, there must be documented evidence of the Applicant's copious secretions, but they are managed non-invasively using a cough assist device periodically or high flow molecular humidity continuously or at least three (3) times per day as ongoing treatment. The high flow device will provide ongoing relief of the copious volume of secretions, which shall not negate the need for intervention (and eligibility for Secretion Management Tracheal Suctioning Reimbursement), if absent the high flow device, the copious volume of secretions would require more invasive management.

**Required Supporting Documentation:**

1. The resident's original permanent medical record documents the use of a mechanical airway clearance device at a minimum of 3 times a day and/or
2. The resident's original permanent medical record documents the use of a heated high flow molecular humidification via the trach at a minimum of 3 times a day.
3. The resident's original permanent medical record documents pre- and post- assessment.
4. Requires daily use notes and/or flow sheet/log.

**2. The suctioning (or airway clearance, as applicable) must be required to remove excess secretions and/or aspirate from the trachea, which cannot be removed by the Applicant's spontaneous effort.**

**Definition:**

1. Suctioning of the nasal or oral cavity does not qualify for this higher level of reimbursement.
2. An MCO may authorize, based on medical necessity, short-term payment at the Sub-Acute Tracheal Suctioning ERC rate for a person who has just been weaned from the ventilator, but who still requires short-term intensive respiratory intervention during the post-weaning period which shall include documented progress in weaning from the tracheostomy.

**Required Supporting Documentation:**

1. The resident's original permanent medical record documents that suctioning (or airway clearance, as applicable) must be required to remove excess secretions and or aspirate from the trachea
2. The resident's original permanent medical record documents that Applicant (resident) cannot remove excess secretions by spontaneous effort.
3. Requires daily note and/or flow sheet/log

**3. A PAE for Secretion Management Tracheal Suctioning Reimbursement shall be approved for no more than a period of thirty (30) days.**

**Definition:**

1. Clinical review and approval of a new PAE shall be required for ongoing coverage, which shall include evaluation of clinical progress and the NF's efforts to improve secretion management through alternative methods.
2. TennCare may, on a case-by-case basis, approve a PAE for Secretion Management Tracheal Suctioning Management Reimbursement for a period of more than thirty (30) days, e.g., if a person has ALS or another progressive neuromuscular disorder, spinal cord injury, or chronic respiratory failure, or is in a persistent vegetative state, where ongoing secretion management tracheal suctioning is expected to continue.

**Required Supporting Documentation:**

1. Requires approved PAE for the reporting month.

# VII. STANDARDS OF CARE FOR VENTILATOR SERVICES

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1. 

<b>Medical Director</b>
<b>Definition:</b> <ol style="list-style-type: none"> <li>1. Physician licensed to practice in Tennessee.</li> <li>2. Board certified in pulmonary disease or critical care medicine as recognized by either the American Board of Medical Specialties or American Osteopathic Association as applicable.</li> </ol>
<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Tennessee medical license.</li> <li>2. Contract agreement (if applicable)</li> <li>3. Board certification in:               <ol style="list-style-type: none"> <li>a. Pulmonary Disease OR</li> <li>b. Critical Care Medicine</li> </ol> </li> </ol>
  
2. 

<b>Licensed Respiratory Care Practitioners</b>
<b>Definition:</b> <ol style="list-style-type: none"> <li>1. Defined by Tennessee Code Annotated Section 63-27-102(7) "Respiratory care practitioner means a registered respiratory therapist, a certified respiratory therapist, or a respiratory assistant licensed under this chapter."</li> </ol>
<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Listing of all respiratory care practitioners employed</li> <li>2. License/certification.</li> <li>3. Contract agreement (if applicable).</li> <li>4. Time sheets for reporting periods.</li> </ol>
  
3. 

<b>Ventilator back-up provisions</b>
<b>Definition:</b> <ol style="list-style-type: none"> <li>1. Internal and/or external battery back-up systems to provide a minimum of eight (8) hours of power.</li> <li>2. Sufficient emergency oxygen delivery devices (i.e., compressed gas or battery operated concentrators).</li> <li>3. At least one (1) battery operated suction device available per every eight (8) residents on mechanical ventilator or with a tracheostomy AND</li> <li>4. A minimum of one (1) resident-ready back-up ventilator which shall be available in the facility at all times.</li> </ol>
<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Back-up provisions visualized during facility tour.</li> </ol>

4.	<b>Emergency Preparedness Plan</b>
	<b>Definition:</b> <ol style="list-style-type: none"> <li>1. A plan specific to residents receiving ERC which shall specifically address total power failures (loss of power and generator), as well as other emergency circumstances.</li> </ol>
	<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Emergency preparedness plan containing all specified requirements.</li> </ol>
5.	<b>Written training program/plan</b>
	<b>Definition:</b> <ol style="list-style-type: none"> <li>1. A written training program, including an annual demonstration of competencies, for all staff caring for residents receiving ERC services.</li> </ol>
	<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Written training program/ plan.</li> <li>2. Documentation of annual demonstration of staff competencies for all staff caring for ERC residents.</li> </ol>
6.	<b>Electronic Signature Policy (if applicable)</b>
	<b>Definition:</b> <ol style="list-style-type: none"> <li>1. Must have written policy in place to ensure proper security measures to protect the use of an electronic signature by anyone other than the person to whom the electronic signature belongs.</li> </ol>
	<b>Required Supporting Documentation:</b> <ol style="list-style-type: none"> <li>1. Electronic signature policy</li> </ol>