

TennCare Plan for Improving Enhanced Respiratory Care Quality

Background

The long-term care ventilator program in Tennessee began in 2002. It was developed to improve access to nursing facility (NF) services for high acuity tracheostomized and ventilator dependent Tennesseans, with a primary goal of ventilator liberation (including patients previously deemed “unweanable”) and improved quality of life for individuals receiving these services.

In the early years, the program achieved remarkable success, with liberation rates in the 65% range across the three units that were established (one in each region), and earned national recognition as a best practice/center of excellence by the American College of Chest Physicians. Standards of care developed for the program were recommended as national standards by the American Association for Respiratory Care in 2010.

In March 2010, with the implementation of the CHOICES program, TennCare sought to embed the successful program in the Medicaid long-term care system, and developed and implemented specialized Medicaid Enhanced Respiratory Care (ERC) rates of reimbursement for Ventilator Weaning, Chronic Ventilator Care and Tracheal Suctioning delivered in NFs:

- Ventilator Weaning : \$750 per day
- Chronic Ventilator Care: \$600 per day
- Frequent Tracheal Suctioning: \$400 per day

The Tracheal Suctioning rate covered two potential clinical circumstances: a person requiring frequent suctioning through the tracheostomy, and short-term intensive respiratory intervention during the post-weaning period.

Also in 2010, Medicare revised Resource Utilization Groups (RUGs) rates, which doubled from an average of \$350 to \$700 per day, increasing provider interest in serving the ventilator population.¹

Since implementing the new TennCare ERC rates in 2010, the volume and cost of these services has grown exponentially in the Medicaid program. ERC has grown from a single provider operating three units across the state with a total bed capacity of 48, to eleven facilities with 316 beds licensed specifically for this purpose – a 558% increase in the number of licensed ventilator beds. Likewise, TennCare expenditures for these services multiplied more than tenfold (941%) between 2011 and 2015 (from \$2.2 million to \$22.8 million). Moreover, the program saw a marked movement away from the primary goal of liberation, with only 4% of 2015 expenditures for Ventilator Weaning. (66% of expenditures were Chronic Ventilator Care, and 30% Tracheal Suctioning.)

¹ **Resource Utilization Groups**, or RUGs, are mutually exclusive categories that reflect levels of resource need in long-term care settings, primarily to facilitate **Medicare** reimbursement to Skilled Nursing Facilities under the Prospective Payment System (PPS). A resident is initially assigned to one of the seven major categories of RUGs based on their clinical characteristics and functional abilities.

This gave rise to multiple questions and potential concerns, and led TennCare to announce in a January 2014 memo to ERC providers an initiative to review and improve these services. TennCare contracted with Eventa, LLC, a nationally recognized expert in the delivery of ventilator care services (led by the same principals that began the original successful ventilator program in Tennessee), to conduct on-site assessments of all NFs receiving ERC reimbursement, and to provide guidance to TennCare for system improvements, including the implementation of a modified reimbursement structure to appropriately align incentives and improve the quality of services provided as well as patient outcomes.

At the same time, TennCare placed a moratorium on new MCO contracts for ERC reimbursement pending evaluation of need and the development of more structured utilization management and quality processes to help ensure quality and manage growth.

The onsite NF reviews identified critical concerns with the quality of ERC services being delivered in the program. These included the lack of documented admission criteria, the lack of appropriate monitoring equipment, and the lack of structured processes for monitoring quality and managing patient care outcomes. In addition, a substantial number of admissions had come from out-of-state (70 in 2013), with roughly half of those patients converting to TennCare as the payer source of the most expensive NF rates in the TennCare program.

In November 2014, TennCare issued a second memo, advising NFs receiving ERC reimbursement of their obligation to begin submitting quality data to TennCare on a monthly basis. The memo made clear that submission of data would be *mandatory* in order to be eligible for ERC reimbursement, that audits of the data would be conducted, and how the data would be used: to monitor the quality of ERC services, and to identify appropriate benchmarks that would be used to finalize a new reimbursement structure to appropriately align incentives and improve the quality of ERC services provided. Facilities were notified at that time that *“Facilities providing better quality services with better patient outcomes will receive higher reimbursement, while facilities performing more poorly on quality measures will receive lower reimbursement.”* Intensive training and technical assistance was provided to NFs in the data submission process.

After allowing NFs almost a year to put quality measurement and improvement processes in place and in light of continued growth in ERC expenditures, TennCare included in the proposed FY 2016-2017 budget a moderate reduction in ERC expenditures (~\$2.2 million). This reduction in ERC expenditures was discussed in each of the budget hearings before the General Assembly, and approved by the General Assembly as part of the FY 2016-2017 Appropriations Act.

With the passage of the reduction item in the Appropriations Act, TennCare moved to finalize its multi-prong approach to improve the quality and efficiency of ERC services. Components include:

- I. Strengthen medical eligibility requirements, consistent with best practices.
- II. Refine standards of care for ventilator services.
- III. Establish standards of care for secretion management tracheal suctioning.
- IV. Manage network expansion in order to ensure quality and rein in expenditure growth.
- V. Strengthen health plan oversight of facilities receiving ERC reimbursement.
- VI. Develop and implement quality outcome and technology performance measures.
- VII. Modify ERC reimbursement to incentivize quality outcomes and improve the member’s quality of care and quality of life.

I. Strengthen medical eligibility requirements, consistent with best practices.

With expert consultation from Eventa, LLC, TennCare is making certain changes to the medical eligibility requirements for Chronic Ventilator Care reimbursement and Secretion Management Tracheal Suctioning reimbursement. New or modified requirements are underlined below. These changes will help to ensure that ERC services are patient-centered (rather than reimbursement driven), and will allow for less invasive technologies to be utilized in appropriate circumstances in order to improve the quality of care and quality of life of individuals with respiratory care needs.

As has been the case since 2010, a Pre Admission Evaluation (PAE) is not required for Ventilator Weaning reimbursement or for Sub-Acute Tracheal Suctioning to address intensive respiratory care needs during the post-weaning period. Medical necessity for each of these services and approval of the higher level of ERC reimbursement is determined by a member's MCO. MCOs are expected to have medical necessity guidelines for ventilator weaning and sub-acute tracheal suctioning and make them available to providers, confirm that the NF has an available bed licensed specifically for ventilator care, and provide authorizations that are specific to the service for which medical necessity has been approved.

As has also been the case since 2010, a PAE is required for Chronic Ventilator Care and Secretion Management Tracheal Suctioning. MCOs are expected to authorize reimbursement in accordance with the approved PAE, but should also ensure that a new PAE is submitted anytime ERC reimbursement is no longer appropriate.

PAE criteria put in place in 2010 for Chronic Ventilator will continue: the person must be ventilator dependent for at least 12 hours each day with an invasive patient end of the circuit (i.e., tracheostomy cannula). However, effective July 1, 2016, on a case-by-case basis, TennCare may, subject to additional medical review, authorize Chronic Ventilator reimbursement for an applicant who is ventilator dependent with a progressive neuromuscular disorder, spinal cord injury, or chronic respiratory failure and is ventilated using noninvasive positive pressure ventilation (NIPPV) by mask or mouthpiece for at least 12 hours each day in order to avoid or delay tracheostomy. This will help to ensure that NFs are not incentivized to utilize a more invasive technology when NIPPV is determined appropriate. Like Ventilator Weaning and Sub-Acute Tracheal Suctioning, the MCO must confirm that the NF has an available bed licensed specifically for ventilator care before authorizing the higher level of reimbursement.

Also beginning July 1, 2016, medical eligibility requirements are being adjusted for Secretion Management Tracheal Suctioning. In order to qualify for the higher level of reimbursement, a resident must have a functioning tracheostomy and a copious volume of secretions, and require invasive tracheal suctioning, at a minimum, once every three (3) hours with documented assessment pre- and post-suctioning; or 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. 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 person's spontaneous effort. Suctioning of the nasal or oral cavity does not qualify for this higher level of reimbursement.

In addition, effective July 1, 2016, a PAE for Secretion Management Tracheal Suctioning Reimbursement will be approved for no more than a period of thirty (30) days. Clinical review and approval of a new PAE will be required for ongoing coverage, which will include evaluation of clinical progress and the NF's efforts to improve secretion management through alternative methods. A NF who has an approved PAE for Tracheal Suctioning Reimbursement for any resident as of July 1, 2016 is entitled to continue to receive such level of reimbursement no later than July 31, 2016 (or any earlier date that may be specified in the approved PAE). The NF must submit a new PAE for the resident no later July 19, 2016 in order to determine whether Secretion Management Tracheal Suctioning Reimbursement will be continued, or whether a different level of NF reimbursement is appropriate.

II. Refine standards of care for ventilator services.

Standards of care for ventilator services have been in place since ERC rates were established in 2010. To ensure higher quality of care and improved patient outcomes, TennCare is making adjustments to the standards of care for Ventilator Weaning, Chronic Ventilator Care and Sub-Acute Tracheal Suctioning reimbursement. New or modified requirements are underlined below:

- Medical direction by a TN licensed physician who is board certified in pulmonary disease or critical care medicine
- A licensed respiratory care practitioner onsite in the ventilator care unit 24/7 to provide:
 - Ventilator Care;
 - Administration of medical gases;
 - Administration of aerosol medications; and
 - Diagnostic testing and monitoring of life support systems
- An individualized plan of care for each resident developed with input/participation from the ventilator program's medical director
- Admissions criteria to ensure stability prior to transfer with documentation of clinical evaluation for appropriateness of placement required
- For all residents receiving Chronic Ventilator Reimbursement, end tidal carbon dioxide (etCO₂) or transcutaneous monitoring of carbon dioxide and oxygen (tcCO₂) and continuous pulse oximetry measurements available and provided as needed
- For residents receiving Ventilator Weaning or Sub-Acute Tracheal Suctioning Reimbursement, end tidal carbon dioxide (etCO₂) and pulse oximetry measurements provided no less than every four (4) hours, and within one (1) hour following all vent parameter changes
- Audible alarm with redundant external alarm connected to emergency power or battery back-up
- Ventilator equipment connected to back-up generator via clearly marked wall outlets
- Ventilators equipped with adequate back-up provisions:
 - Internal and/or external battery back-up systems to provide a minimum of eight (8) hours of power
 - Sufficient emergency oxygen delivery devices (i.e., compressed gas or battery operated concentrators)
 - At least one (1) battery operated suction device available per every eight (8) residents on mechanical ventilator or with a tracheostomy
 - A minimum of one (1) patient-ready back-up ventilator which shall be available in the facility at all times

- Current ventilator technology to encourage and enable maximum mobility and comfort, ideally weighing less than fifteen (15) pounds with various mounting options for portability (e.g., wheelchair, bedside table, or backpack)
- An emergency preparedness plan specific to residents receiving ERC; must address total power failures (loss of power and generator), as well as other emergency circumstances
- Written training program, including an annual demonstration of competencies, for all staff caring for residents receiving ERC

As has long been reflected in the TennCare Rule, to be eligible for ERC reimbursement for Ventilator Weaning, Chronic Ventilator Care, and Sub-Acute Tracheal Suctioning, the NF must be operating in compliance with all standards of care required for purposes of licensure. These are listed in both the TennCare Rule and in the Rules of Department of Health's Division of Health Care Facilities.²

Beginning January 1, 2017, NFs must be in compliance with ALL (including new/revised) standards of care for ventilator services. This six-month advance notification will allow time for NFs to make any needed adjustments in order to achieve compliance. It will also provide opportunity for a public rulemaking process on the permanent rule. NFs must submit attestation of compliance with all standards of care or may submit a plan of correction to achieve compliance by 1/1/17 with any condition not currently required for purposes of licensure. TennCare intends to work with Health Care Facilities to align licensure rules with TennCare rules, wherever possible, but will continue to require all specified standards of care for purposes of Medicaid reimbursement.

III. Establish standards of care for secretion management tracheal suctioning.

Of particular concern is the lack of specific standards of care for Secretion Management Tracheal Suctioning Reimbursement. To ensure higher quality of care and improved patient outcomes, with expert consultation from Eventa, LLC, TennCare is establishing standards of care for Secretion Management Tracheal Suctioning reimbursement, as follows:

- A licensed respiratory care practitioner on site a minimum of weekly to provide:
 - Clinical Assessment of each resident receiving Secretion Management (including Pulse Oximetry measurements);
 - Evaluation of appropriate humidification;
 - Tracheostomy site and neck skin assessment;
 - Care plan updates; and
 - Ongoing education and training on patient assessment, equipment and treatment
- An individualized plan of care for each resident developed with input and participation of the on-site licensed respiratory care practitioner
- Admissions criteria to ensure stability prior to transfer and documentation of clinical evaluation for appropriateness of placement required
- Pulse oximetry measurements provided at least daily with continuous monitoring available, based on the needs of each resident
 - For any resident being weaned from the tracheostomy, end tidal carbon dioxide (etCO₂) measurements shall be provided at least every 12 hours (transcutaneous (tcCO₂) not appropriate for intermittent monitoring)

² See 1200-13-01-.03(5)(c) and 1200-08-06-.06(12).

- Mechanical airway clearance devices and/or heated high flow molecular humidification via the tracheostomy available for secretion management and provided as appropriate for the needs of each resident
- Oxygen equipment connected to back-up generator power via clearly marked wall outlets
- Adequate back up provisions, including:
 - Sufficient emergency oxygen delivery devices (e.g., compressed gas or battery operated concentrators)
 - At least one (1) battery operated suction device available per every eight (8) residents on mechanical ventilation or with a tracheostomy
- Emergency preparedness plan specific to residents receiving Secretion Management Tracheal Suctioning Reimbursement; must address total power failures (loss of power and generator), as well as other emergency circumstances
- Written training program, including an annual demonstration of competencies, for all staff caring for residents receiving Secretion Management Tracheal Suctioning Reimbursement that includes (at a minimum) alarm response, positioning, transfers, care within licensure scope, and rescue breathing
- For “Tracheostomy Units” (i.e., more than three (3) residents receiving Tracheal Suctioning Reimbursement—Sub-Acute or Secretion Management—on the same day), licensed respiratory care practitioner on site a minimum of daily for assessment, care management, and care planning

Beginning January 1, 2017, to be eligible for Secretion Management reimbursement a NF must be in compliance with new standards of care. This six-month advance notification will allow time for NFs to make any needed adjustments in order to achieve compliance. It will also provide opportunity for a public rulemaking process on the permanent rule. NFs must submit attestation of compliance with all standards of care or may submit a plan of correction to achieve compliance by 1/1/17. TennCare intends to work with Health Care Facilities to align licensure rules with TennCare rules wherever possible, but will continue to require the new standards of care for purposes of Medicaid reimbursement.

IV. Manage network expansion in order to ensure quality and rein in expenditure growth.

In January 2014 TennCare implemented a moratorium on new MCO contracts for ERC reimbursement.³ This moratorium will continue. An MCO may request exception upon demonstration of the need for additional capacity within the geographic area and the NF’s compliance with applicable standards of care. Consistent with longstanding requirements, NFs receiving ERC reimbursement must be dual certified (Medicare SNF/Medicaid NF). Any contract with a NF for ERC reimbursement must be terminated by the MCO upon the NF’s loss of licensure/certification.

V. Strengthen health plan oversight of facilities receiving ERC reimbursement.

MCOs are contractually obligated to monitor the quality of ERC services provided by contracted NFs. This includes, at a minimum, monthly review of ERC quality data, and onsite review by a respiratory care practitioner with sufficient experience to adequately monitor the quality of care provided by the facility to each of the MCO’s members. MCOs are also obligated to report deficiencies in ventilator or other

³ MCOs are obligated to contract with NFs in accordance with TCA 71-5-1412, but are not obligated to extend such contracts for higher levels of ERC reimbursement.

enhanced respiratory care practices to TennCare and to TDOH within 24 hours if such deficiencies raise concerns about potential licensure rule violations.

VI. Develop and implement quality outcome and technology performance measures.

In consultation with Eventa, LLC, TennCare established quality outcome and technology performance measures and began collecting performance data late in 2014. NFs are required to submit data to TennCare on a monthly basis for all residents that receive ERC services, regardless of the funding source. TennCare provided training, technical assistance and feedback to assist NFs in submitting accurate data. Excluding the initial months of data (gathered while facilities were still developing their quality measurement and improvement processes), TennCare has collected 14 months of data (from April 2015 through May 2016), and analyzed 12 months of the data (April 2015 through March 2016) for purposes of establishing initial ERC program benchmarks.

Performance ranges were established based on the level of performance that would be expected according to best practices, but modified the ranges based on actual performance data collected in order to ensure that benchmarks are achievable, while also continuing to incentivize improved quality performance across the program. Quality Outcome Measures and Technology Measures, definitions, initial performance benchmarks and point awards are listed below.

Quality Outcome Measures

Measure	Definition	Performance range	Points earned
Ventilator wean rate*	Number of vent patients successfully weaned/Number of vent patients	>60% 45-60% 20-44% <20%	40 25 10 0
Average length of stay to wean*	For vent patients successfully weaned, average days from admission to weaning	If wean rate is >44% <45 days ≥45 days If wean rate is 20-44% <45 days ≥45 days If wean rate is <20%	35 25 25 10 0
Infection rate	Current: Number of patients with an infection (>96 hours from admission)/member months Future: Consistent with MCO Quality Method (new antibiotics)	Did not assign points at this time	
Unplanned hospitalizations	Current: Number of ERC patients with an unplanned hospitalization/member months Future: Number of hospitalizations/member	<5% 5-10% 11-15% 16-25% >25%	25 20 10 5 0

	months		
Decannulation rate	Number of tracheal suctioning patients decannulated/ number of tracheal suctioning patients	>70% 40-70% 10-39% <10%	20 15 10 0
Unanticipated deaths	Number of deaths/member months	<1% 1-3% >3%	20 10 0
Denial rate	Number not admitted/ number of referrals	Did not assign points at this time	

*Measure not applied to Tracheal Suctioning only NFs

Technology Measures (available and used)

Measure	Points earned
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 Tracheal Suctioning only NFs

NFs that provide all of the ERC 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 of points earned is 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:

NFs contracted to provide all levels of ERC reimbursement:

Tier	Percent of Available Points	Range of Points
High	>70%	>124
Moderate	60-70%	106-124
Low	<60%	<106

NFs contracted to provide Tracheal Suctioning only:

Tier	Percent of Available Points	Range of Points
High	>70%	>61
Moderate	60-70%	52-61
Low	<60%	<52

VII. Modify ERC reimbursement to incentivize quality outcomes and improve the member’s quality of care and quality of life.

The final component of the quality improvement initiative is modifying the ERC reimbursement structure order to incentivize quality outcomes and improve the member’s experience of care and quality of life.

As with other components of the quality improvement initiative, the new rates were established in consultation with Eventa, LLC, experts in the field of respiratory care. Also consistent with other components of the quality improvement initiative, the primary focus is on improving the quality of care and quality of life experienced by individuals with ERC needs.

The previous ERC reimbursement structure includes 3 levels as noted above. Effective July 1, 2016, TennCare will separate Tracheal Suctioning reimbursement into two levels (Sub-Acute Tracheal Suctioning and Secretion Management Tracheal Suctioning) to align with programmatic goals and to recognize the difference in staffing and other costs associated with each unique set of clinical circumstances.

Rather than functioning as a separate per diem payment, in the new reimbursement structure, the ERC rate will be an **add-on** to NF’s Level 2 rate (or to the blended Level 1/Level 2 rate when established later in the FY 2016-2017 fiscal year). The amount of each NF’s add-on payment for each level of reimbursement (Ventilator Weaning, Chronic Ventilator Care, Sub-Acute Tracheal Suctioning and Secretion Management Tracheal Suctioning) will be based on the NF’s performance on the Quality Outcome and Technology measures described above. Consistent with the November 2014 memo, NFs providing higher quality of care and producing better patient outcomes will be in a higher tier and will receive a higher rate of reimbursement for each service, while NFs performing more poorly will receive a lower rate of reimbursement.

Effective July 1, 2016, ERC **add-on rates** are as follows:

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

Assuming a \$200 average Level 2 per diem (inclusive of acuity and quality-based rate adjustments), the add-on rates plus the per diem are as follows:

Tier	Ventilator Weaning	Ventilator	Sub-Acute Tracheal Suctioning	Secretion Management Tracheal Suctioning
High	\$800	\$550	\$400	\$300
Moderate	\$750	\$500	\$350	\$275
Low	\$650	\$450	\$300	\$250

Of note, NFs performing at the highest level in terms of quality and patient outcomes may actually earn a *higher* rate of reimbursement for certain services (i.e., ventilator weaning) once the new rates go into effect.

The ~\$2.2 million reduction in ERC expenditures required under the approved FY 2016-2017 budget is encompassed within the new reimbursement structure, with the impact of the reduction distributed across NFs receiving ERC reimbursement according to their performance.

It is also worth noting that Tennessee is one of the few states that has a ventilator care program and offers enhanced rates of NF reimbursement for these services. Thus, even with the reduction contemplated by the FY 2016-2017 budget, the rates of reimbursement for these services remain more generous than most (if not all) other states.

ERC reimbursement is not available beyond the number of beds licensed for such purpose. ERC reimbursement is only available if accurate quality measurement data is submitted monthly. Submitting false information will subject the NF to applicable state and federal laws pertaining to false claims.

VIII. Summary

Any administrative authority needed to implement these changes will be handled under Emergency Rule Making authority, in order to comply with the FY 2016-2017 Appropriations Act. A public rulemaking hearing will occur prior to implementing the permanent rule later this year. Certain changes (i.e., new or modified standards of care) will become effective on January 1, 2017, to allow opportunity for facilities to achieve compliance and for public input in the rulemaking process.

TennCare remains focused on improving the quality of life and quality of care for individuals with ERC needs. Quality improvement is a continuous process, not an event. Quality outcome and technology measures, definitions, methodologies, and performance benchmarks, as well as tiers and reimbursement levels may be adjusted during FY 2016-2017 to ensure compliance with the Appropriations Act and no more frequently than annually thereafter to reflect system learnings, and to continue to incentivize improved quality performance and quality of life outcomes. A facility may increase its rates by improving its performance relative to other facilities and to quality expectations. Improving quality outcomes and quality of life is the goal. The ERC add-on payment will adjusted no more frequently than semi-annually based on NF performance.

We look forward to seeing how these changes will impact the delivery of these services within the long-term care system. Moreover, we look forward to seeing the positive impact they will have on the lives of Tennesseans with ERC needs.