

# Long-Term Care Hospital Quality Reporting Program Provider Training



**LTCH**

**LONG-TERM CARE HOSPITAL**

**QUALITY REPORTING  
PROGRAM**

## **Section O:**

**Special Treatments,  
Procedures, and Programs  
(Including Items Related to  
Ventilator Liberation)**

Terry Kahlert Eng  
RTI International

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# Acronyms Used in This Presentation

- Acute Respiratory Distress Syndrome (ARDS)
- Bilevel Positive Airway Pressure (BiPAP)
- Centers for Medicare & Medicaid Services (CMS)
- Chronic Obstructive Pulmonary Disease (COPD)
- Continuous Positive Airway Pressure (CPAP)
- Intensive Care Unit (ICU)
- Intravenous (IV)

# Acronyms Used in This Presentation (cont.)

- Long-Term Care Hospital (LTCH)
- LTCH Continuity Assessment Record and Evaluation Data Set (LTCH CARE Data Set)
- Partial Pressure of Carbon Dioxide in Arterial Blood (PaCO<sub>2</sub>)
- Spontaneous Breathing Trial (SBT)
- Total Parenteral Nutrition (TPN)

# Overview

- Define Section O: Special Treatments, Procedures, and Programs.
- Explain the intent of Section O.
- Describe new items introduced in the Long-Term Care Hospital (LTCH) Continuity Assessment Record and Evaluation (CARE) Data Set v4.00.
- Discuss coding instructions and needed information for items.
- Review practice coding scenarios.

# Objectives

- State the intent of changes to Section O.
- Articulate the purpose of the coding options for each new item.
- Apply coding instructions to accurately code practice scenarios.
- Define the components of the ventilator liberation quality measures.

# Intent

Identify any special treatments, procedures, and programs that the patient received during the stay, including spontaneous breathing trial (SBT) for ventilator liberation and IV vasoactive medication.

- Present the ventilator liberation items.
- Influenza vaccination items remain unchanged and are discussed in a separate presentation summarizing all unchanged sections.

# **Section O: Special Treatments, Procedures, and Programs**

**New Items Introduced in  
LTCH CARE Data Set v4.00**

# New Items: Admission Assessment

## O0100H. IV Medications

- **O0100H2a.** Vasoactive medications



# New Items: Admission Assessment (cont.)

## O0150. Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay

- **O0150A.** Invasive Mechanical Ventilation Support upon Admission to the LTCH
- **O0150B.** Assessed for readiness for SBT by day 2 the LTCH stay
- **O0150C.** Deemed medically ready for SBT by day 2 of the LTCH stay
- **O0150D.** Is there documentation of reason(s) in the patient's medical record that the patient was deemed medically unready for SBT by day 2 of the LTCH stay?
- **O0150E.** SBT performed by day 2 of the LTCH stay

# New Items: Discharge Assessment

## O0200. Ventilator Liberation Rate

- **O0200A.** Invasive Mechanical Ventilator: Liberation Status at Discharge

# New Items and Changes

## Removed

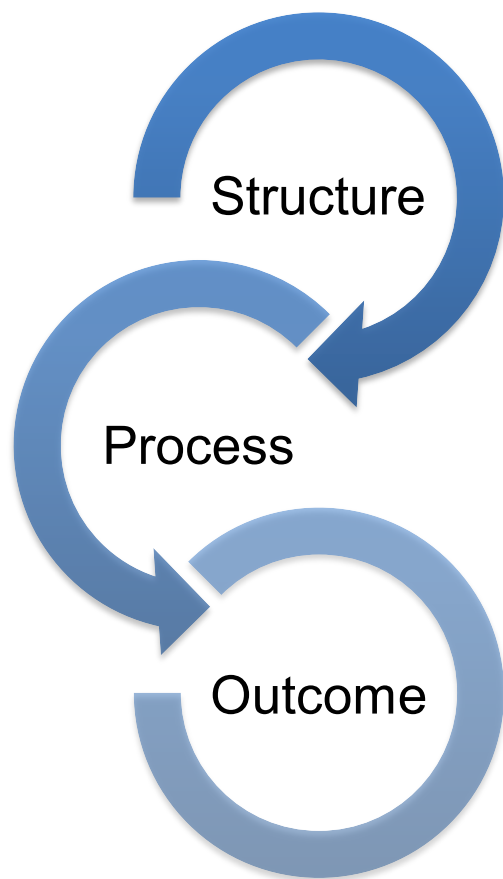
- **O0100F3.** Invasive Mechanical Ventilator: weaning
- **O0100F4.** Invasive Mechanical Ventilator: non-weaning

## Replaced by

- **O0150A.** Invasive Mechanical Ventilation Support upon Admission to the LTCH

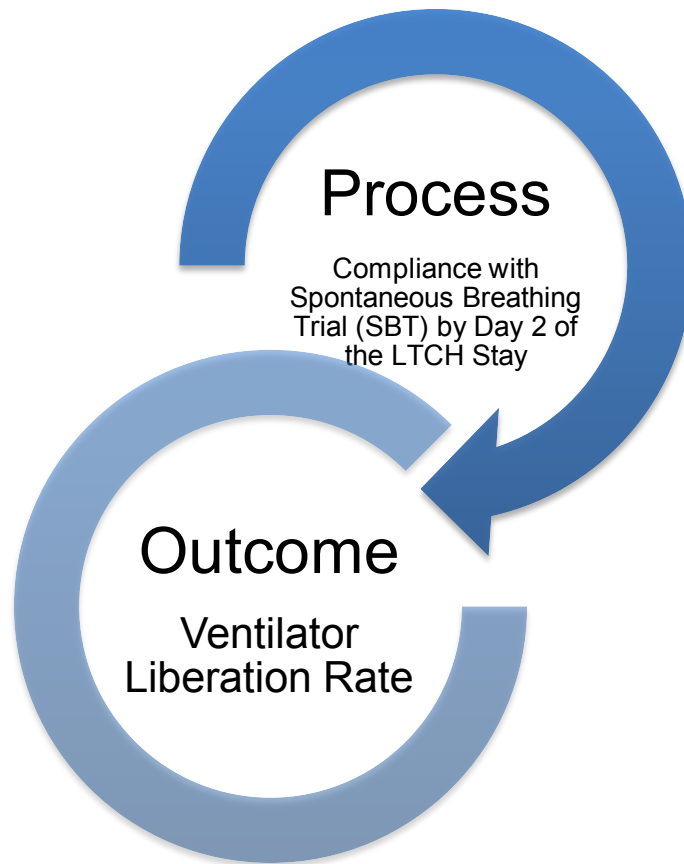
# Ventilator Liberation Quality Measures

# Ventilator Liberation Quality Measures: Overview



- Patient is admitted to an LTCH to be liberated from mechanical ventilation.
- LTCH initiates protocol to liberate patient from mechanical ventilation.
- Quality Measure: Compliance with Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay.
- End result of the patient due to care received at the LTCH.
- Quality Measure: Ventilator Liberation Rate.

# Ventilator Liberation Quality Measures: Overview (cont. 1)



- **Component 1:** Percentage of Patients Assessed for Readiness for SBT by Day 2 of the LTCH Stay.
- **Component 2:** Percentage of Patients Ready for SBT Who Received SBT by Day 2 of LTCH Stay.
- Percentage of Patients Who are Alive and Fully Liberated at Discharge.

# Ventilator Liberation Quality Measures: Overview (cont. 2)

## Denominator Exclusions:

1. Patients not on invasive mechanical ventilation support (i.e., O0150A = 0).
2. Patients on invasive mechanical ventilation support who were non-weaning (i.e., O0150A = 2).

# Ventilator Liberation Quality Measures: Overview (cont. 3)

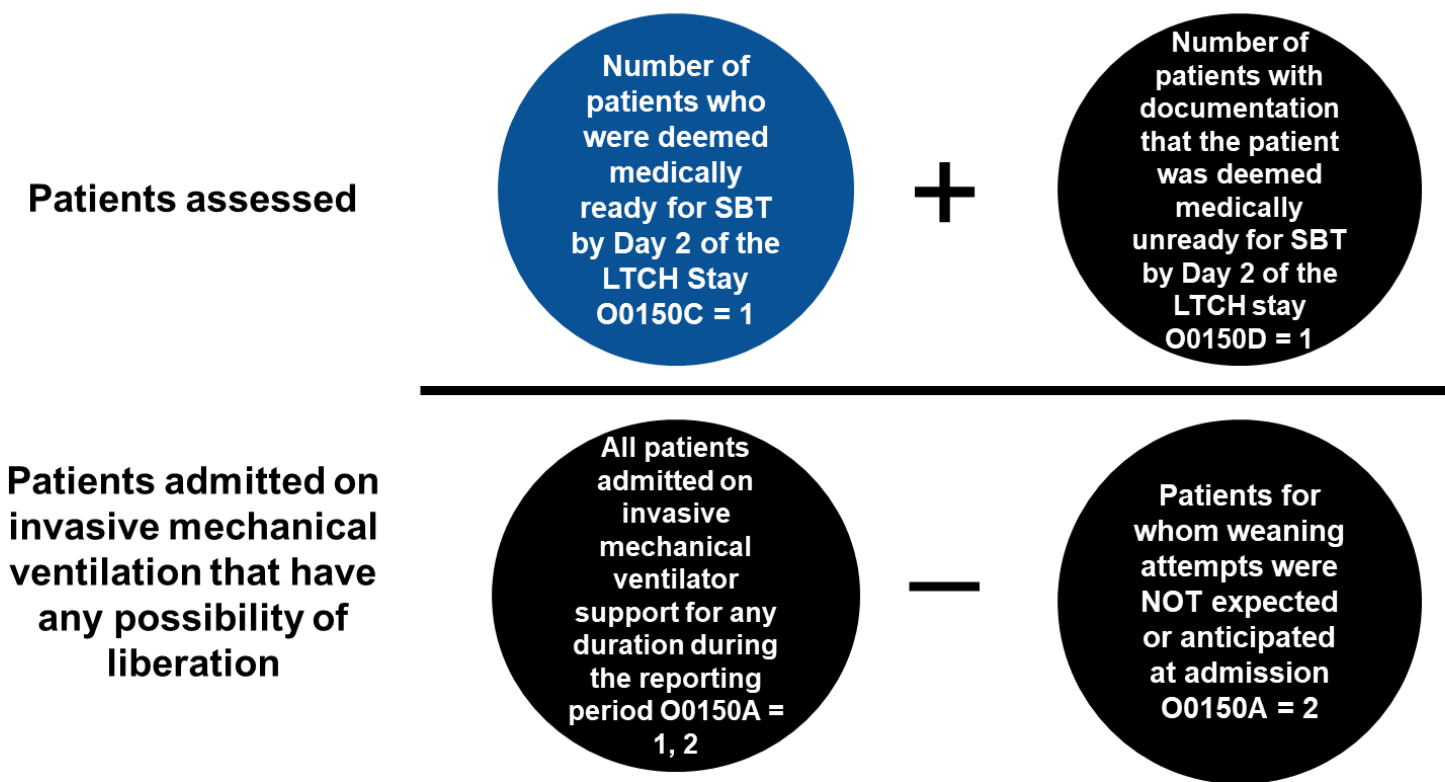
## Measure Time Window:

- The measure will be calculated quarterly using a rolling 12 months of data.
- All LTCH stays, except those that meet the exclusion criteria, are included in the denominator and are eligible for inclusion in the numerator.
- For patients with multiple stays, each stay is eligible for inclusion in the measure.



# Ventilator Liberation Quality Measures: Process

**Component 1:** Percentage of Patients Assessed for Readiness for SBT by Day 2 of the LTCH Stay



# Ventilator Liberation Quality Measures: Process (cont.)

**Component 2:** Percentage of Patients Ready for SBT Who Received SBT by Day 2 of LTCH Stay

Patients received SBT

Number of  
patients who  
received an SBT  
by Day 2 of the  
LTCH Stay  
O0150E = 1

Patients assessed  
and deemed ready  
for SBT

Number of  
patients who  
were deemed  
ready for SBT  
by Day 2 of the  
LTCH Stay  
O0150C = 1

# Ventilator Liberation Quality Measures: Outcome

Percentage of Patients Who are Alive and Fully Liberated at Discharge

Patient was alive and fully  
liberated at discharge  
A0250 = 10, 11;  
O0200A = 1

Patients for whom weaning  
attempts were expected or  
anticipated at admission  
O0150A = 1

# Ventilator Liberation Quality Measures: Risk Adjusters

Items used to risk-adjust the Ventilator Liberation Rate quality measure:

## Functional Abilities and Goals

- GG0100B. Prior Functioning: Everyday Activities. Indoor Mobility (Ambulation)

## Active Diagnoses

- Cancers – I0103, I0104
- Heart/Circulation – I0605
- Neurological – I4900, I5000, I5101, I5102, I5110, I5200, I5450, I5455, I5470, I5480
- Post Transplant – I7100, I7101, I7102, I7103, I7104

## Special Treatments, Procedures, and Programs

- O0100H2a. Vasoactive Medications
- O0100J. Dialysis

# **Section O: Special Treatments, Procedures, and Programs**

**Coding Guidance and  
Practice Scenarios**

# O0100. Special Treatments, Procedures, and Programs

## O0100. Special Treatments, Procedures, and Programs

Check all the treatments at admission. For dialysis, check if it is part of the patient's treatment plan.

↓ Check all that apply

### Respiratory Treatments

☐ G. Non-invasive Ventilator (BiPAP, CPAP)

### Other Treatments

☐ H. IV Medications (if checked, please specify below)

☐ H2a. Vasoactive medications (i.e., continuous infusions of vasopressors or inotropes)

☐ J. Dialysis

☐ N. Total Parenteral Nutrition

### None of the Above

☐ Z. None of the above

*Applies to Admission Assessment only.*

# 00100 Rationale

The treatments, procedures, and programs listed can affect the patient's ability to liberate from invasive mechanical ventilation and/or perform self-care and mobility activities.

# 00100 Steps for Assessment

- Review the patient's medical record to determine whether or not the patient received or performed any of the treatments, procedures, or programs during the three-day assessment period.
- For dialysis, check if it is part of the patient's treatment plan.



# 00100 Coding Instructions

## Respiratory Treatments

- **Check 00100G, Non-invasive Ventilator (BiPAP, CPAP).**
  - Any type of continuous positive airway pressure (CPAP) or bilevel positive airway pressure (BiPAP) respiratory support devices.
  - Mask enables the individual to support his or her own respiration.
  - Provides enough pressure when the individual inhales to keep his or her airway open, which are unlike ventilators that “breathe” for the individual.
- This item is coded if the patient puts on or removes his or her own BiPAP/CPAP mask or if the LTCH staff applies it for the patient.
- No change to 00100G.

# O0100 Coding Instructions (cont. 1)

## Other Treatments

- **Check O0100H, IV Medications, and O0100H2a, Vasoactive Medications**, if the patient received any intravenous vasoactive medications.
- **Check O0100J, Dialysis**, if the patient undergoes peritoneal or renal dialysis as part of the treatment plan.
- **Check O0100N, Total Parenteral Nutrition (TPN)**, if the patient receives parenteral/intravenous (IV) feeding.

# O0100 Coding Instructions (cont. 2)

## None of the Above

- **Check O0100Z, None of the above**, if none of the above were received or performed by the patient.

# O0100 Practice Coding

## Scenario 1

- Mr. G is a 62-year-old former smoker who is diagnosed with chronic obstructive pulmonary disease (COPD). He is dependent on 3 liters per minute of oxygen at home. Mr. G suffers from chronic carbon dioxide (CO<sub>2</sub>) retention. He was recently prescribed a BiPAP ventilator at night to assist him with eliminating CO<sub>2</sub>.
- Mr. G used the BiPAP device until he started to feel congested and had increased sputum production. The symptoms persisted until he was taken to the emergency department. Mr. G was admitted to the ICU requiring intubation and mechanical ventilation for 96 hours.
- Mr. G recovered and is admitted to the LTCH to optimize his BiPAP settings and receive therapy services to improve his activities of daily living. Although Mr. G can use his BiPAP independently, he requires some guidance and coaching to use his BiPAP device properly and consistently.

# O0100 Practice Coding Scenario 2

- Mrs. L developed acute renal failure related to excessive use of nonsteroidal anti-inflammatory drugs for her arthritis. She receives hemodialysis three times per week.

# O0100 Practice Coding

## Scenario 3

- Mrs. C has been unable to eat or ingest adequate nutrients since her bowel surgery.
- Mrs. C receives TPN using a peripherally inserted central catheter that infuses her nutrients, 24 hours daily.

# O0100 Practice Coding

## Scenario 4

- Mr. D is being treated for a hemorrhagic stroke. He does not require mechanical ventilation, IV vasoactive medication, dialysis, or TPN.

# O0100 Practice Coding Scenario 5

- Mrs. J was admitted to the LTCH recovering from septic shock and is on invasive mechanical ventilation. Her blood pressure was stable upon admission to the LTCH.
- On the second day of her hospitalization, Mrs. J's blood pressure decreased to 80/50 and norepinephrine was administered via a central venous catheter to treat her hypotension.



# O0150. Spontaneous Breathing Trial (SBT) by Day 2 of the LTCH Stay

O0150. Spontaneous Breathing Trial (SBT) (including Tracheostomy Collar or Continuous Positive Airway Pressure (CPAP) Breathing Trial) by Day 2 of the LTCH Stay	
Enter Code <input type="checkbox"/>	<b>A. Invasive Mechanical Ventilation Support upon Admission to the LTCH</b> 0. No, not on invasive mechanical ventilation support → Skip to O0250, Influenza Vaccine 1. Yes, weaning → Continue to O0150B, Assessed for readiness for SBT by day 2 of the LTCH stay 2. Yes, non-weaning → Skip to O0250, Influenza Vaccine
Enter Code <input type="checkbox"/>	<b>B. Assessed for readiness for SBT by day 2 of the LTCH stay</b> (Note: Day 2 = Date of Admission to the LTCH (Day 1) + 1 calendar day) 0. No → Skip to O0250, Influenza Vaccine 1. Yes → Continue to O0150C, Deemed medically ready for SBT by day 2 of the LTCH stay
Enter Code <input type="checkbox"/>	<b>C. Deemed medically ready for SBT by day 2 of the LTCH stay</b> 0. No → Continue to O0150D, Is there documentation of reason(s) in the patient's medical record that the patient was deemed medically unready for SBT by day 2 of the LTCH stay? 1. Yes → Continue to O0150E, SBT performed by day 2 of the LTCH stay
Enter Code <input type="checkbox"/>	<b>D. Is there documentation of reason(s) in the patient's medical record that the patient was deemed medically unready for SBT by day 2 of the LTCH stay?</b> 0. No → Skip to O0250, Influenza Vaccine 1. Yes → Skip to O0250, Influenza Vaccine
Enter Code <input type="checkbox"/>	<b>E. SBT performed by day 2 of the LTCH stay</b> 0. No 1. Yes

*Applies to the Admission Assessment only.*

# O0150 Item Rationale

- These data elements document the use of invasive mechanical ventilation support upon admission to the LTCH and the implementation of a spontaneous breathing trial by day 2 of the LTCH stay.

# 00150 Item Rationale (cont.)

- These data elements document the facility's implementation of evidence-based weaning guidelines that occurred as early as is beneficial to the patient during the LTCH patient stay when the patient is assessed as a candidate for weaning upon admission.

# O0150A Coding Instructions

- **Code 0, No, not on invasive mechanical ventilation support** if the patient was not on invasive mechanical ventilation support upon admission to the LTCH.
- If coded No, end data collection for O0150. Skip to O0250. Influenza Vaccine.

# O0150A Coding Instructions (cont. 1)

- **Code 1, Yes, weaning**, if the patient has any type of electrical or pneumatic closed-system mechanical ventilation device that delivers oxygen to a patient who is unable to support his or her own respiration and for whom weaning attempts are expected or anticipated at the time of admission.
  - Continue to O0150B. Assessed for readiness for SBT by day 2 of the LTCH stay.

# O0150A Coding Instructions (cont. 2)

- **Code 2, Yes, non-weaning**, if the patient has any type of electrical or pneumatic closed-system mechanical ventilator support device that delivers oxygen to a patient who is unable to support his or her own respiration and for whom weaning attempts are not expected or anticipated at the time of admission.
  - E.g., patients who are chronically ventilated in the community or at a facility, or who have progressive neuromuscular disease, such as amyotrophic lateral sclerosis, or irreversible neurological injury or disease or dysfunction, such as a high C-2 spinal cord injury.
    - If coded 2, Yes, non-weaning, end data collection for O0150.
    - Skip to O0250. Influenza Vaccine.

# 00150A Coding Instructions (cont. 3)

- Patients receiving closed-system ventilation include those patients receiving ventilation via a tracheostomy, and those patients with an endotracheal tube.
  - E.g., nasally or orally intubated.
- Documentation in support of this item should be recorded and dated by day 2 of the LTCH stay, where day 1 is the day of admission.

# O0150B Coding Instructions

- **Code 0, No**, if the patient was not assessed for readiness for SBT by day 2 of the LTCH stay.
  - If coded 0, No, end data collection for O0150.
  - Skip to O0250. Influenza Vaccine.
- **Code 1, Yes**, if the patient was assessed for readiness for SBT by day 2 of the LTCH stay.
  - If coded 1, Yes, continue to item O0150C. Deemed medically ready for SBT by day 2 of the LTCH stay.



# O0150C Coding Instructions

- **Code 0, No**, if the patient was not deemed medically ready for SBT by day 2 of the LTCH stay.
  - If coded No, continue to O0150D. Is there documentation of the reason(s) in the patient's medical record that the patient was deemed medically unready for SBT by day 2 of the LTCH stay?
- **Code 1, Yes**, if the patient was deemed medically ready for SBT by day 2 of the LTCH stay.
  - If coded Yes, continue to O0150E. SBT performed by day 2 of the LTCH stay.

# O0150D Coding Instructions

- **Code 0, No**, if there is no documentation of the reason(s) that the patient was deemed medically unready for SBT by day 2 of the LTCH stay.
  - Skip to O0250. Influenza Vaccine.
- **Code 1, Yes**, if there is documentation that the patient was deemed medically unready for SBT by day 2 of the LTCH stay.
  - Skip to O0250. Influenza Vaccine.

# O0150E Coding Instructions

- **Code 0, No**, if a SBT was not performed by day 2 of the LTCH stay.
- **Code 1, Yes**, if a SBT was performed by day 2 of the LTCH stay.

# O0150A Practice Coding Scenario 1

## **Invasive Mechanical Ventilation Support Upon Admission to the LTCH:**

- Ms. K is a 32-year-old female who is being discharged from the acute care hospital after an acute episode of respiratory failure secondary to pneumonia. Ms. K was diagnosed with cystic fibrosis and has had recurrent respiratory infections over the course of 6 months.
- Ms. K was intubated in the emergency department and transferred to the intensive care unit (ICU), where she was treated for her pneumonia. After several failed attempts to wean and extubate, Ms. K underwent surgery for placement of a tracheostomy tube. She remains fully ventilated and is being transferred to the LTCH for weaning. Ms. K was admitted to the ventilator weaning unit, where she is expected to liberate from mechanical ventilation; this is recorded in her discharge summary as well as in her care plan from her admission to the LTCH.

# 00150C Practice Coding

## Scenario 2

### **Deemed medically ready for SBT by day 2 of the LTCH stay:**

- Ms. T is a 32-year-old female with cystic fibrosis. She was discharged from the ICU yesterday and admitted to the ventilator weaning unit at the LTCH.
- She had a stable first night and transitioned from the ICU ventilator to the LTCH ventilator without issue. She understands that she passed the SBT criteria and is medically stable and ready to transition to spontaneous breathing via a tracheostomy mask.
- The registered nurse and respiratory therapist coordinated the trial for SBT to begin when Ms. T is finished with her routine morning care.

# O0150E Practice Coding

## Scenario 3

### **SBT Performed by Day 2 of the LTCH Stay:**

- Ms. M is an 82-year-old female admitted to the LTCH with a diagnosis of non-small-cell lung cancer. After a successful pneumonectomy procedure, she was transferred to the surgical ICU. While in the ICU, she required high levels of oxygen to maintain normal oxygen saturations. She eventually required intubation and ventilation for respiratory distress. Mrs. M's course was then complicated by the development of acute respiratory distress syndrome (ARDS). She was treated for ARDS and slowly improved over the course of 2 weeks.
- During this 2-week period, she underwent a procedure to place a tracheostomy tube. Yesterday she was discharged to the LTCH, where she was admitted to the ventilator weaning unit. It is documented in her care plan that she is expected or anticipated to liberate from mechanical ventilation prior to discharge.
- Ms. M was assessed on the day of admission and determined to be medically ready for SBT. However, due to inconsistent communication among the healthcare team, Ms. M did not perform the SBT until the third day of her LTCH stay.

# O0200. Ventilator Liberation Rate

O0200. Ventilator Liberation Rate	
Enter Code <input type="checkbox"/>	<b>A. Invasive Mechanical Ventilator: Liberation Status at Discharge</b> <ul style="list-style-type: none"><li><b>0. Not fully liberated at discharge</b> (i.e., patient required partial or full invasive mechanical ventilation support within 2 calendar days prior to discharge)</li><li><b>1. Fully liberated at discharge</b> (i.e., patient did not require any invasive mechanical ventilation support for at least 2 consecutive calendar days immediately prior to discharge)</li><li><b>9. NA</b> (code only if the patient was non-weaning or not ventilated on admission [O0150A=2 or 0 on Admission Assessment])</li></ul>

*Applies to the Planned Discharge and Unplanned Discharge Assessments only.*

# 00200 Rationale

- To determine the facility's rate of discontinuation of invasive mechanical ventilation, known as weaning or liberation, which is associated with improved patient health outcomes.



# O0200A Coding Instructions

- **Code 0, Not fully liberated at discharge**, if the patient required partial or full invasive mechanical ventilation support within 2 calendar days prior to discharge.
- **Code 1, Fully liberated at discharge**, if the patient did not require any invasive mechanical ventilation support for at least 2 consecutive calendar days immediately prior to discharge.
- **Code 9, NA**, if this item does not apply. This code only applies if the patient was non-weaning or not on invasive mechanical ventilation support on admission (O0150A=2 or 0 on Admission Assessment).

# 00200A Coding Tip

- For patients to be considered fully liberated, patients should not require any invasive mechanical ventilation support for at least 2 consecutive calendar days immediately prior to discharge and upon discharge.

# O0200 Practice Coding

## Scenario 1

- Ms. K is a 32-year-old female who is being discharged from the LTCH to a skilled nursing facility. She was admitted to the ventilator weaning unit after her ICU stay at an acute care hospital.
- Ms. K was diagnosed with cystic fibrosis complicated by multiple, recurrent respiratory infections, and she had a tracheostomy tube placed while at the acute care hospital after she failed several attempts to liberate from mechanical ventilation.
- While at the LTCH, Ms. K successfully liberated from mechanical ventilation. Ms. K will be discharged to a skilled nursing facility for tracheal decannulation; she has not required invasive mechanical ventilation for at least 2 consecutive calendar days immediately prior to this discharge.

# O0200 Practice Coding

## Scenario 2

- Mrs. F was admitted to the LTCH with a diagnosis of hypercarbic hypoxemic respiratory failure secondary to a COPD exacerbation. While Mrs. F was in the ICU, she underwent two attempts to wean fully from the ventilator and had two unsuccessful trials of BiPAP post-extubation. She was admitted to the LTCH with the expectation of fully liberating from invasive mechanical ventilation.
- Despite several attempts to wean her from the ventilator, she was unable to maintain normal partial pressure of carbon dioxide in arterial blood (PaCO<sub>2</sub>) levels for greater than a few hours. She remained fully ventilated until the time she was discharged to the acute care facility with sepsis.

# O0200 Practice Coding

## Scenario 3

- Mr. G was diagnosed several years ago with Amyotrophic Lateral Sclerosis. He has been managing his respiratory system adequately using a non-invasive ventilator.
- Over the past two months it has become increasingly difficult for him to maintain ventilation using a non-invasive ventilator in the home without developing pneumonia and atelectasis.
- He was recently admitted to the ICU at an acute care hospital for elective surgery to place a tracheostomy tube and subsequently be placed on full invasive mechanical ventilation. After his three day stay in the ICU he was stable on appropriate ventilator settings and transferred to the LTCH to prepare his family and caretakers to care for his needs in the home setting.

# Summary

- The treatments, procedures, and programs listed in O0100 can affect the patient's ability to perform self-care, mobility, and ventilator liberation activities.

# Summary (cont. 1)

- O0100H, O0100H2a, and O0150(A-E) are the new items on the Admission Assessment.
  - O0150 collects information on a facility's implementation of a SBT for patients on invasive mechanical ventilation .
- O0200 is the new item on the Planned Discharge and Unplanned Discharge Assessments.
  - Collects information on ventilator liberation status on discharge.

# Summary (cont. 2)

- Influenza vaccination items remain unchanged and are discussed in a separate presentation.



# Action Plan

- Review all items added to Section O.
- Determine methods for reviewing the patient's medical record to determine whether the patient received any of the treatments, procedures, or programs at the time of admission.
  - For dialysis, check if it is part of the patient's treatment plan.
  - If the patient does not receive the listed treatments, then check Z, None of the above.

# Action Plan (cont.)

- Determine methods for reviewing the patient's medical record to determine whether a SBT was performed by day 2 of the LTCH stay and whether the patient was fully liberated from the ventilator at discharge.
- Practice coding a variety of scenarios with staff.