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Reimbursement for Non-Invasive Respiratory Support in Hospital Inpatient, Emergency Department and Other Outpatient Settings[1]

The purpose of this document is to provide Respiratory Therapy Departments with information on the relationship between Respiratory Department coding and billing and hospital reimbursement for noninvasive mechanical ventilation and other respiratory support modalities delivered in the inpatient hospital and outpatient emergency department settings.

I. Introduction

There are several variables that a hospital considers in selecting a preferred therapeutic modality for patients who present in acute respiratory distress or who require respiratory support in the inpatient setting (during post-operative recovery, intensive care, or on the general care floor), in the outpatient setting and in the emergency department. These variables include:

- **Clinical efficacy** – the ability of the therapeutic modality to provide the required support, reduce the needed duration of support, improve outcomes and minimize adverse events;
- **Patient compliance** – patient tolerance to the therapy and patient comfort.
- **Staff resource requirements** – the time and effort hospital staff members need to devote to the delivery of the required support;
- **Compatibility with the broader patient care process** – the impact, if any, on the ability of other members of the patient care team (physicians, nurses, orderlies, etc.) to do their job efficiently and effectively;
- **The institutional and departmental profit impact** - reimbursement from billing, minus the cost of providing the respiratory support modality.

This document addresses this final variable: the impact of Respiratory Department billing and coding on hospital reimbursement for the different non-invasive mechanical ventilation modalities in the inpatient hospital, emergency department and outpatient settings.

[1] Vapotherm commissioned and paid for the creation of this White Paper. The views expressed in the paper are those of Larchmont Strategic Advisors and not of Vapotherm.

II. Hospital Reimbursement for Non-Invasive Respiratory Support in the Inpatient Setting

The selection of a respiratory therapy modality has no impact on inpatient hospital revenue.

For Medicare, the largest U.S. insurer, and for most private insurers, payment to the hospital for inpatient care is based on the assignment of an episode of care to one or another diagnosis-related group (DRG)[2], or similar case-rate category defined by diagnoses, patient characteristics and surgical procedures performed. The amount of payment to the hospital depends upon the DRG (or similar case category) assignment. Payment does not vary with the specific diagnostic tests, pharmaceuticals or other services provided during the inpatient stay. Respiratory therapy does not affect hospital revenue; the hospital is paid the same amount for the patient stay regardless of whether that patient received NIPPV, High Velocity Nasal Insufflation (HVNI), High Flow Nasal Cannula (HFNC), simple oxygenation therapy or no respiratory support.

Hospitals use the ICD-10-PCS code set to report procedures performed in the inpatient setting. ICD-10-PCS procedure codes and ICD-10-CM diagnosis codes are used to determine the DRG assignment and consequent reimbursement for an inpatient episode of care.[3] The ICD-10- PCS codes specific to respiratory therapy identify both the duration and modality of respiratory therapy given. Duration is coded into one of three categories:

- Less than 24 consecutive hours
- 24-96 consecutive hours
- Greater than 96 consecutive hours.

For each of these duration categories, there are four (4) codes identifying specific therapy modalities and a fifth (5th) code for modalities not specifically identified:

- Continuous positive airway pressure
- Intermittent positive airway pressure
- Continuous negative airway pressure
- Intermittent negative airway pressure
- Unspecified

Table I provides a complete list of the respiratory therapy ICD-10-PCS codes. **None of these codes is determinant of DRG assignment. Because they do not affect DRG assignment, they do not affect the amount of reimbursement to the hospital.**

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[2] See the appended Glossary for an explanation of this and other abbreviations or technical terms found in this White Paper.

[3] An inpatient stay is reimbursed for one and only DRG – the highest paying DRG for which the stay qualifies.

Table I
ICD-10 Procedure Codes for Respiratory Therapy

Code	Descriptions
5A09357	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours, Continuous Positive Airway Pressure
5A09358	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours, Intermittent Positive Airway Pressure
5A09359	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours, Continuous Negative Airway Pressure
5A0935B	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours, Intermittent Negative Airway Pressure
5A0935Z	Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours
5A09457	Assistance with Respiratory Ventilation, 24-96 Consecutive Hours, Continuous Positive Airway Pressure
5A09458	Assistance with Respiratory Ventilation, 24-96 Consecutive Hours, Intermittent Positive Airway Pressure
5A09459	Assistance with Respiratory Ventilation, 24-96 Consecutive Hours, Continuous Negative Airway Pressure
5A0945B	Assistance with Respiratory Ventilation, 24-96 Consecutive Hours, Intermittent Negative Airway Pressure
5A0945Z	Assistance with Respiratory Ventilation, 24-96 Consecutive Hours
5A09557	Assistance with Respiratory Ventilation, More than 96 Consecutive Hours, Continuous Positive Airway Pressure
5A09558	Assistance with Respiratory Ventilation, More than 96 Consecutive Hours, Intermittent Positive Airway Pressure
5A09559	Assistance with Respiratory Ventilation, More than Consecutive Hours, Continuous Negative Airway Pressure
5A0955B	Assistance with Respiratory Ventilation, More than 96 Consecutive Hours, Intermittent Negative Airway Pressure
5A0955Z	Assistance with Respiratory Ventilation, More than 96 Consecutive Hours

III. Hospital Reimbursement for Non-invasive Respiratory Support in the Hospital Outpatient Setting, Including the Emergency Department

There is no reimbursement advantage to the hospital for the use of any particular method of non-invasive mechanical respiratory support in the Emergency Department or other hospital outpatient setting.

For patients who present in the emergency department in respiratory distress, or who suffer acute respiratory distress while being treated in the ED or the outpatient department, non-invasive mechanical respiratory support may be initiated in the outpatient setting:

- If the patient is subsequently admitted to the hospital for treatment or monitoring, the entire episode of care, including the ED visit cost, is reimbursed as an inpatient episode; in that case, payment is made under the DRG system or case-rate contract and there is no incremental revenue to the hospital for any of the services provided in the ED, including the mechanical respiratory support.
- Some patients who require mechanical respiratory support in the ED, in the Observation Unit, or other outpatient setting may not be admitted to the hospital; for those patients, payment is made under the rules governing hospital outpatient services.

Billing for ED and other hospital outpatient services.

Hospitals bill for outpatient services using the CPT coding system – the same system used by physicians and allied health professionals to bill for professional services. Medicare assigns each CPT code to an Ambulatory Payment Classification (APC), and the hospital receives a set payment for each APC. A single episode of outpatient care may involve multiple services and payment for multiple APCs. When closely related services are provided together, Medicare invokes a "multiple procedure reduction" and pays only 50% of the normal APC payment amount for the second and subsequent procedures. In other cases, a service may be bundled within a code that identifies a broader service package, such as a Critical Care or Evaluation and Management (E&M) code and is not reimbursed separately in the presence of that broader code.

The CPT code set is surprisingly thin in the non-invasive mechanical respiratory support area – far less detailed than the parallel ICD-10-PCS codes. This is partly due to the fact that the CPT system is "owned and operated" by the American Medical Association and that the committee maintaining CPT is primarily focused on services that are directly provided by physicians, but it may also be due to the fact that there is little difference in professional time and expertise required for the various respiratory support modalities.

Table II provides the full list of CPT codes for mechanical respiratory support and the Medicare outpatient hospital payment amounts for those codes:

Table II

CPT Codes for Noninvasive Mechanical Respiratory Support*

ED and Hospital Outpatient Payment

Code	Description	APC	$$**
94002	Ventilation assist and management, initiation of pressure or volume preset ventilators for assisted or controlled breathing; hospital inpatient/observation, initial day	5801 - Ventilation initiation and management	$460.70
94003	Ventilation assist and management, initiation of pressure or volume preset ventilators for assisted or controlled breathing; hospital inpatient/observation, each subsequent day	5801 - Ventilation initiation and management	$460.70
94660	Continuous positive airway pressure ventilation (CPAP), initiation and management*	5791 – Pulmonary treatment	$186.38
94662	Continuous negative pressure ventilation initiation and management	5801 - Ventilation initiation and management	$460.70
94799	Unlisted Pulmonary Service or Procedure***	5721 – Level 1 diagnostic tests and related procedures	$136.32

*There is no CPT code for basic oxygen, which is an unbilled component of any inpatient or outpatient service

**Medicare Base National Payment Amount; actual payment varies to reflect geographic area cost differences

***This code may be used if a pulmonary service is not identifiable by some more specific code

The circumstances under which the hospital will be paid the amounts shown in Table II are limited by two important payment system features:

1. As referenced above, services provided in the ED or outpatient department to patients who are admitted to inpatient status are considered part of the inpatient episode of care for payment purposes; and

2. Respiratory support services are typically bundled into outpatient Observation Status codes, but may under limited circumstances be separately reimbursed; and

3. Respiratory support codes as not billable by the hospital in conjunction with any E&M code. Medicare's Correct Coding Initiative (CCI) dictates that if respiratory support is initiated and managed in conjunction with a critical care evaluation

and ill or critically injured patient; first 30-74 minutes – is assigned to APC 5041 which pays $734.

IV. Provider (i.e. Physician, Nurse Practitioner, Physician Assistant) Reimbursement for Non-Invasive Respiratory Support in the inpatient, emergency department and outpatient settings.

Provider reimbursement is the same regardless of the particular mechanical ventilation modality one chooses.

Providers are reimbursed separately from the hospital. In both the inpatient or outpatient setting, providers bill using CPT codes defined in section III above. Table III below shows the Medicare payment amounts to service providers for the same ventilation initiation and management codes addressed in Table II. It is important to understand, however, that **professional billing is subject to the same CCI exclusion as is hospital billing: respiratory support codes are not payable to providers or to hospitals in conjunction with E&M codes.** In each case, the E&M code has a higher amount and incorporates the respiratory support.

Table III

CPT Codes for Noninvasive Mechanical Respiratory Support Provider Payment

Code	Description	Medicare $$*
94002	Ventilation assist and management, initiation of pressure or volume preset ventilators for assisted or controlled breathing; hospital inpatient/observation, initial day	$ 94.68
94003	Ventilation assist and management, initiation of pressure or volume preset ventilators for assisted or controlled breathing; hospital inpatient/observation, each subsequent day	$ 68.40
94660	Continuous positive airway pressure ventilation (CPAP), initiation and management*	$ 39.24
94662	Continuous negative pressure ventilation initiation and management	$ 37.08
94779	Unlisted Pulmonary Service or Procedure*	*

* Medicare payment is set by the regional claims processing Carrier

For comparison purposes, note that CPT 99291, the critical care code into which the respiratory services are often bundled, has a Medicare physician payment amount of $226.80.

The fact that certain services are not separately billed to and reimbursed by insurers does not mean that they are not coded and entered into the patient billing record. A clear and reliable record of what services were provided and by who is critically important for a number of reasons, including:

- Quality assurance – monitoring and assessment of care protocols;
- Staffing analyses, work load assessment and productivity measurement;
- Required hospital Medicare cost reporting; and
- Budget analyses and projections; departmental budget allocations.

It is important, therefore, that respiratory therapists enter the appropriate respiratory service code into the patient record even when the service is bundled into an E&M code and not billable. Such coding may not have a direct financial impact on the hospital, but it does allow for accurate recognition of the work RTs do when department and hospital managers conduct productivity assessments and plan and budget for the future.

V. Glossary

APC: Ambulatory Payment Classifications (APCs) are the Medicare program's method for paying for facility outpatient services. APC payments are made to hospitals when the Medicare outpatient is discharged from the Emergency Department or clinic. Medicare assigns each service (identified by CPT code) to an APC based upon clinical and cost similarity, and all services within an APC are paid at the same rate.

CPT Codes: CPT is the coding system used to identify services provided by physicians and some other practitioners. CPT is used by all payers to set payment rates to physicians for their professional services, and by Medicare and many private insurers to set payment rates to hospitals for outpatient services, including those provided in the Emergency Department.

DRG: Diagnosis Related Groups (DRGs) are the Medicare programs method of paying for inpatient hospital services. A patient is assigned at discharge to a single DRG on the basis of diagnoses, patient characteristics, and any surgical procedures performed during the episode of care. DRGs are designed to encompass cases that are similar both clinically and in terms of cost, and each case in a DRG provides the same payment to the hospital regardless of the specific services provided.

E&M: The CPT code system provides a series of Evaluation and Management (E&M) codes. E&M codes are the most frequently used codes in the CPT system, and describe patient encounters that do not involve specific procedures or services represented by other CPT codes. E&M codes identify such variables as the site of the patient encounter (e.g. office visit, emergency department, inpatient hospital, etc.), the duration of contact with the patient, the acuity of the patient, and/or the complexity of the physician's decision making. E&M codes typically subsume various common patient support services including, in cases involving critical care, noninvasive respiratory support.

Emergency Department: Care provided in the ED to a patient first seen there but then admitted to the hospital is reimbursed as inpatient care; care provided in the ED to a patient who is not admitted to the hospital is reimbursed as outpatient care.

ICD-10 codes: ICD-10-CM is the coding system used to record diagnoses in all patient care settings and ICD-10-PCS is used to identify procedures performed for hospital inpatients for billing purposes.

Inpatient setting: A patient formally admitted to the hospital is considered to be an inpatient and his/her care is reimbursed through Medicare's DRG payment system or (in most cases) similar case rates established by private insurers through hospital-specific contracts.

Outpatient setting: a patient seen in the hospital but not admitted for an inpatient stay is considered an outpatient and his/her care is reimbursed through Medicare's APC payment system or (in most cases) similar procedure rates established by private insurers.