# **Project Objectives:**

The new AARC Benchmarking 2.0 will continue to measure metrics important to respiratory therapy departments to provide accurate data to support administrative decisions and identify and promote best professional practices. Benchmarking 2.0 will continue to provide comparisons on:

- Productivity and efficiency data (with AARC Uniform Reporting Manual Time standards)
- · Aerosol therapy and missed treatments
- Airway clearance procedures (by specific device category in new version)
- Ventilation LOS (separated by CPT code in newer version into 2 categories)
  - With artificial airways (mechanical ventilation)
  - · Non-Invasive

In addition to these traditional benchmarking metrics, our subscribers told us in 2015 through an extensive survey that they desire more patient-related and safety (quality) metrics to be included as we move forward. The initial launch of the AARC Benchmarking 2.0 will also include the following new parameters:

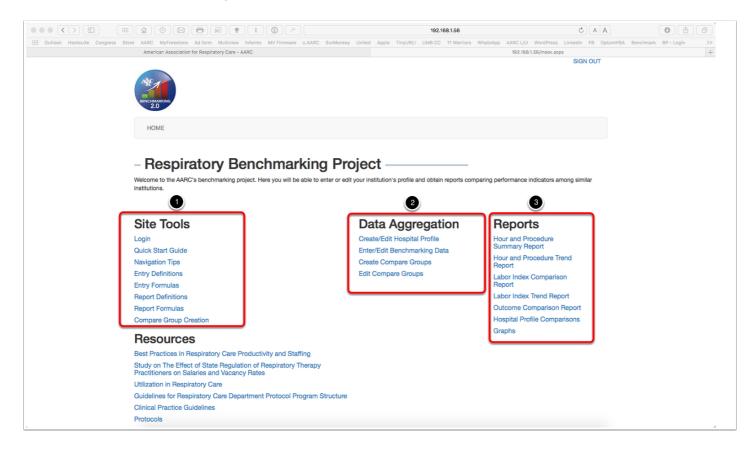
- COPD Readmission Rates
- Accidental Extubation Rates
- · Ventilator Associated Events (VAE) Rates



## **Benchmarking 2.0 Dashboard**

The Home Page is the starting point for any subscriber and from any page in AARC Benchmarking the user can easily return to the home page by clicking on Home just below the AARC Benchmarking 2.0 logo. The Home Page includes three specific sections:

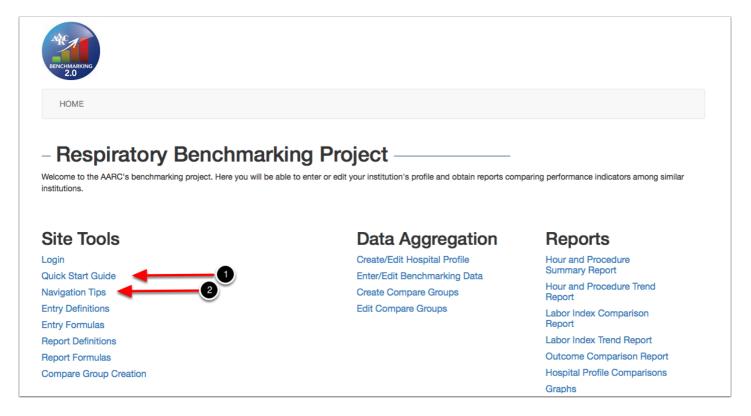
- 1. **Site Tools:** These are directions, definitions, and formulas used in AARC Benchmarking as well as other references related to benchmarking and staffing respiratory care departments.
- 2. **Data Aggregation**: These sections provide for the entry of user data, inclusive of the set up of compare groups. The user can also return to this section to view past data or edit any entry.
- 3. **Reports**: The desired report can be selected from this list. Once a report is open the user will be able to define the period, range, and comparison hospitals, as well as export any data into Excel for further analysis.



## **Benchmarking 2.0 Site Tools**

AARC Benchmarking Committee and Staff have created two quick tools to get you started quickly and easily on your benchmarking endeavors

- 1. Quick Start Guide:
- 2. Navigation Tips: This document is intended to provide tips on how to navigate AARC Respiratory Care Benchmarking so you can easily enter data and view reports.



## **Benchmarking 2.0 Data Entry- Labor Hours**

## Variable Worked Hours

Hoursactually worked by staff in the provision of direct patient care within the respiratory care department. This includes all staff providing or directly supporting patient care, with the exception of fixed support/administrative staff (those identified in question 14 of the profile are considered fixed and not reported in Variable Worked Hours). If a flex staff model is in place, it is these hours that will typically vary with changes in work demand.

## **Fixed Worked Hours**

Hours actually worked by support and administrative staff in fixed classifications in which hours typically will not vary with changes in work demand. These are typically inclusive of hours worked by staff in the positions identified in question 14 of the profile.

#### Variable Paid Hours

Total paid hours by staff in the provision of direct patient care within the respiratory care department. This includes all staff providing or directly supporting patient care, with the exception of fixed support/administrative staff (those identified in question 14 of the profile are considered fixed and not reported in Variable Paid Hours). These hours are inclusive of worked, overtime, in addition to vacation, sick, holiday, and other situations in which the employee is paid while not reporting to work.

## **Fixed Paid Hours**

Total paid hours by support and administrative staff in fixed classifications in which hours will not vary with changes in work demand. These are typically inclusive of hours worked by staff in the positions identified in question 14 of the profile. These hours are inclusive of worked and overtime in addition to vacation, sick, holiday, and other situations in which the employee is paid while not reporting to work.

## **Total Paid Hours of Overtime**

While paid overtime is captured in paid hour totals for both variable and fix classification, in most situations they are also identified and separately reported as overtime, premium overtime, double time, etc.

#### **Total Worked Hours**

Is the sum of both Variable and Fixed work hours

## **Total Paid Hours**

Total Paid Hours is the sum of both Variable and Fixed paid hours

BINCHARAKING 2.0				
HOME				
Hospital Name Myers Ho Enter New Information	spital			
Calendar Year Select year Calendar Quarter Select Quarter	0			
View/Edit Previous Data				
		Labor Hours		
	Hours Per Quarter	Annualized	FTES	
Variable Worked Hours (Clinical Staff)				
Variable Worked Hours (Clinical Staff) Fixed Worked Hours (Mngmt/Support)				
Fixed Worked Hours (Mngmt/Support)				
Fixed Worked Hours (Mngmt/Support) Variable Paid Hours (Clinical Staff)				
Fixed Worked Hours (Mngmt/Support) Variable Paid Hours (Clinical Staff) Fixed Paid Hours (Mgmt/Support)	0	D	0	

## **Benchmarking 2.0 Data Entry - Secretion Clearance**

## **Secretion Clearance**

All activity descriptions for secretion clearance were transcribed directly from the AARC Uniform Reporting Mannual 5th Edition. Refer to the AARC URM for a complete description of each activity and task specific to the activity described. RVUs in the AARC URM are expressed in minutes which were also transcribed into the URM Time Standard column for each secretion clearance activity.

It is encouraged that departments that do not capture and report the type of secretion clearance as described in the AARC URM, consider refining systems to do so. In the event the client hospitaldoes not differentiate secretion clearance by these descriptions they shall enter data for the activity description (s) that are most similar to the activities they do capture.

Units of Service Data						
Secretion	Secretion Clearance					
Activity ID	CPT Code	Activity Description	# of Procedures Performed Quarterly	URM Time Standard (minutes)	Total Time (hours)	
01.2110	94667.00	Percussion/Vibration & Postural Drainage 3 or less positions Initial		20.68		
01.2111	94668.00	Percussion/Vibration & Postural Drainage 3 or less positions- Subsequent		19.15		
01.2112	94667.00	Percussion/Vibration & Postural Drainage 4 or more positions Initial		28.02		
01.2113	94668.00	Percussion/Vibration & Postural Drainage 4 or more positions Subsequent		26.13		
01.2130	94667.00	Autogenic Drainage Initial		17.60		
01.2131	94668.00	Autogenic Drainage Subsequent		13.33		
01.2140	94640.00	Intrapulmonary Percussion Initial		19.42		
01.2141	94640.00	Intrapulmonary Percussion Subsequent		19.42		
01.2150	94664.00	Expiratory Pressure Valve Therapy Initial (PEP and/or OPEP)		16.21		
01.2151	94664.00	Expiratory Pressure Valve Therapy Subseqnt (PEP and/or OPEP)		13.90		
		Secretion Clearance Total	0		D	

# Benchmarking 2.0 Data Entry - Aerosolized Medication Delivery

## **Aerosolized Medication Delivery**

All activity descriptions for Aerosolized Medication were transcribed directly from the AARC Uniform Reporting Mannual 5th Edition. Refer to the AARC URM for a complete description of each activityand task specific to the activity described. RVUs in the AARC URM are expressed in minutes which were also transcribed into the URM Time Standard column for each aerosolized medication activity.

It is encouraged that departments that do not capture and report the type of aerosolized medication delivery as described in the AARC URM, consider refining systems to do so. In the event the client hospitaldoes not differentiate aerosolized medication delivery by these descriptions they shall enter data for the activity description (s) that are most similar to the activities they do capture.

Activity ID	CPT Code	Activity Description	# of Procedures Performed Quarterly	URM Time Standard (minutes)	Total Time (hours)
01.2310	94640.00	Small Volume Nebulizer Treatment		15.84	
01.2311	94640.00	Small Volume Nebulizer with Mechanical Ventilation		14.65	
01.2312	94640.00	Small Volume Nebulizer Treatment Breath Actuated		13.55	
01.2320	94664.00	Aerosol Self Treatment Evaluation and Demonstration		17.02	
01.2321	94640.00	Metered Dose Inhaler Treatment		11.52	
01.2323	94640.00	Metered Dose Inhaler Extended Treatment		16.08	
01.2325	94640.00	Metered Dose Inhaler Treatment with Ventilation		10.81	
01.2326	94640.00	Metered Dose Inhaler Extended Treatment with Ventilation		13.13	
01.2330	94640.00	Ultrasonic Nebulizer Treatment		17.70	
01.2340	94640.00	Aerosol Sputum Induction		19.47	
01.2420	94645.00	Continuous Medicated Aerosol Treatment - Setup		31.78	
01.2421	94644.00	Continuous Medicated Aerosol Treatment - Assessment		13.54	
01.2430	94645.00	Continuous Medicated Aerosol Treatment - Ventilator - Set up		28.83	
01.2220	94664.00	Intermittent Positive Pressure Breathing (IPPB)		19.37	
		Aerosolized Medication Total	0		0

## **Benchmarking 2.0 Data Entry - Mechanical Ventilator Days**

### **Mechanical Ventilator Days**

All activity descriptions for mechanical ventilation were transcribed directly from the AARC Uniform Reporting Mannual 5th Edition. Refer to the AARC URM for a complete description of each activityand task specific to the activity described. RVUs in the AARC URM are expressed in minutes which were also transcribed into the URM Time Standard column for each secretion clearance activity.

In addition to the URM, there has been the need for additional clarity in activity descriptions for NIV. The existing client base has further defined Non-emergent NIV as occurring primarily outside the ICU setting and used to capture both CPAP and BiPAP devices used to treat obstructive sleep apnea. Emergent NIV has been clarified to describe support initiated in an ICU or ER setting in which the patient is in acute or impending failure.

Standard methodology for reporting of ventilator days is to count a day of mechanical ventilation as any portion of a midnight to midnight 24 hour period in which the patient is on a ventilator. Hospitals that utilize the method of counting total ventilator hours and dividing the total by 24 to derive days, will significantly undercount vent days when compared to facilities that use a 24 hour midnight cut off.

Patient/Ventilator Assessment frequency will also significantly impact the total time of mechanical ventilation. The frequency of assessment may vary between any of these descriptions, however the client needs to insure an accurate assessment frequency is entered in order for AARC Benchmarking to properly calculate the total time spent in providing mechanical ventilation.

It is encouraged that departments that do not capture and report the type of ventilator days as described in the AARC URM, consider refining systems to do so. In the event the client hospitaldoes not differentiate ventilator days by these descriptions they shall enter data for the activity description (s) that are most similar to the activities they do capture.

Mechanic	al Ventilation	Days					
Activity ID	CPT Code	Activity Description	# of DAYS (Midnight Cut Off)	Assessment Frequency (activities per 24 hr Period)	URM Time Standard (minutes)	Total Time (hours)	
01.5110	94002.00	Initial Day Non-emergent NIV			30.88		
01.5120	94003.0	Subequent Day Non- emergent NIV			17.87		
01.5210	94002.00	Initial Day of Emergent NIV			34.48		
01.5220	94003.00	Subsequent Day of Emergent NIV			19.01		
01.5310	94002.00	Initial Day Invasive Conventional Mechanical Ventilation			36.99		
01.5320	94003.00	Subequent Day-Invasive Mechanical Ventilation			20.25		
Mechanica Frequency		al (Using Days and	0			0	
Total AARC	Benchmarking	Reportable Units	0			0	
Procedure	Time per Proce	dure (hours)		cedure Time per Procedure (hours)			

## **Benchmarking 2.0 Data Entry - Outcome Metrics**

## **Outcome Metrics**

### Number of missed Med Aero Treatments Secondary to RCP Not Available

The actual number of missed med aerosol treatments secondary to the RCP not available. This indicates that the RCP was not able to administer the therapy within the allowable timeline as a result of work demand in which the RCP had to delay or triage the treatment. This metric is only inclusive of medicated aerosol and limited to the RCP not being available.

#### Number of Ventilator Associated Events

Actual number of VAEs reported for the period. The % is determined per total invasive vent days.

#### Number of Accidental Extubations

Actual number of accidental extubations. The % is determined per total invasive vent days.

#### 30 Day Readmission Rate for COPD

The % of patient with a discharge diagnosis of COPD that are readmitted within 30 days.

	Patient Outcomes			
Description	Outcomes			
Number of Aerosol Treatments Missed secondary to RCP Not Available				
% Missed Treatments				
Duration of Non-Emergent Non Invasive Ventilation(days)				
Duration of Emergent Non Invasive Ventilation(days)				
Duration of Invasive Mechanical Ventilation(days)				
Ventilator Associated Events				
% <b>VAE</b>				
VAE per 1000 Ventilator Days				
Number of Accidental Extubations				
% Accidental Extubations				
Accidental Extubations per 1000 Vent Days				
30 Day Readmission Rate for COPD (enter percentage)				

## **Benchmarking 2.0 Data Entry**

## **User Defined Metric**

AARC Labor Index Reports will assess hours worked and paid using the following metrics:

- AARC Benchmarking Calculated Procedure Counts
- AARC Benchmarking Calculated Total Procedure Times
- AARC Calcuated Vent Days
- User entered Billable Procedures
- User entered Total Procedures

The client has 2 opportunities to select any metric of their choice (ie: number of respiratory patients treated, admissions) for data capture, trending, and determination of Labor Index ratios using a custom metric. The client must clearly define the name of the metric an provide a quantity/volume count.

User defined metrics will appear in client trend reports only. They will not appear in compare group reports secondary to the variability in selected metrics, although all clients will have access to directly view such data through access to other hospital entry forms.

## **Billable Procedures**

While AARC Benchmarking will only total procedure counts from secretion clearance, aerosolized medication, and vent day activity, the use can enter total Biliable Procedures as reported within their hospital system. This feature allows the client hospital to use a billable procedure metric that may be used through their finance department or used as a reportable metric in other benchmarking systems.

## **Total Procedures**

While AARC Benchmarking will only total procedure counts from secretion clearance, aerosolized medication, and vent day activity, the use can enter Total Procedures as reported within their hospital system. This feature allows the client hospital to use a total procedure metric that may be used through their finance department or used as a reportable metric in

other benchmarking systems.

8	User Defined Metrics (UDM)				
Name of Metric 1					
Count for UDM 1					
Name of Metric 2					
Count for UDM 2					
	Hospital Unit of S	Service (UOS)			
Total Billable Procedures Reported					
Total Procedures Reported (Billable and Non-Billable)					
	ha				

## **Benchmarking 2.0 Report**

- · Hour and Procedure Summary Report
- Hour and Procedure Trend Report
- · Labor Index Report (inclusive of compare groups)
- Labor Index Trend Report
- Outcome Compare Report
- Hospital Profile Comparison
- Data Graph Tool



# Respiratory Care Benchmarking ReportDefinitions

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