

THE GUIDE

 American Association
for Respiratory Care

SAFE AND EFFECTIVE STAFFING GUIDE PRIMER

ACHIEVING YOUR MISSION TO DELIVER VALUE BASED RESPIRATORY CARE

Safe and Effective Staffing Guide Primer

Achieving your mission to deliver value based respiratory care

The Primer is an open access document for wide spread distribution. It is intended to provide an overview of key concepts in delivering safe and effective staffing. It serves as a preview of the content included in the Safe and Effective Staffing Guide available through the AARC.

THE EVOLUTION OF THE SAFE AND EFFECTIVE STAFFING GUIDE

The economics of health care continues to be a significant factor influencing the delivery of respiratory services. Because human resources are typically the most expensive component of hospital costs, they are carefully scrutinized and are often the first area to be reviewed when cost reductions are required. While the Primer includes select key concepts, the complete Safe and Effective Staffing Guide provides the essential resources to assist respiratory care leadership in determining and justifying staffing levels.

What was previously known as the AARC Uniform Reporting Manual has existed for over 35 years, and this year has been transformed to the Safe and Effective Staffing Guide (SESG or Guide). The Guide remains the recognized Gold Standard in identifying procedures associated with the provision of respiratory services and the time required to perform each of those procedures. As with prior Uniform Reporting Manuals, the Guide includes validated procedure time standards and the methodology to create staffing programs using procedure time standards. In addition, the Guide includes new content to assist in the implementation of staffing programs and systems, as well as a new focus on Value Efficiency. The AARC Safe and Effective Staffing Guide is designed to assist respiratory care leadership and decision-makers with:

- Understanding the benefits of using staffing metrics that are driven by the clinical needs of patients and the value of such care
- Access to nationally validated procedure time standards, scope of care, and CPT codes
- Methodology to apply the concept of Value Efficiency
- Tools, references, case studies, pre-configured workbooks, and accounts of best practices that provide a wealth of knowledge regarding staffing programs and how to successfully implement.

The data, methods and concepts included in the Guide can be applied in budget planning, shift-by-shift allocation of staff and reporting productivity. Systems developed and described will assist in evidence-based staffing decisions and can be adapted for expansions and changes to service programs. It will also help in identifying trends in service utilization and forecasting demand for equipment and supplies. Further, the Guide can serve as an essential resource to promote standardization in both terminology and processes of care to facilitate inter-facility comparisons and benchmarking labor efficiency.

The SESG would not exist without the extraordinary commitment of the 350 plus respiratory therapy leaders who gave unselfishly of their time to complete the extensive surveys required to collect procedure time standards. There is another group of exceptionally talented experts who must also be recognized-The AARC SESG Expert Panel. They drafted the initial activities, recruited other experts to assist them when needed, and provided constant guidance in the development of this Guide. We thank those that made the Safe and Effective Staffing Guide possible and those that continue to support the methods and processes described.

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Getting Started

The Primer includes information for managers to consider as they start the process of developing a comprehensive staffing plan and systems that assist in the assessment of patient acuity, the time required to treat patients, the allocation of resources, and the monitoring and reporting of both productivity and value efficiency. While the Primer can help managers get started, the Guide serves as a complete set of resources, references, and tools to support staffing programs for a broad range of respiratory services. Subscribers of the SESG will have different needs. Some may have fully integrated and successful staffing programs and are primarily looking for national data to validate existing time standards, while others are just getting started. Regardless, we urge all subscribers to become familiar with SESG content as a first step. Get to know what the Guide includes. Even those with well-established programs will find value in reviewing what this new SESG has to offer.

A real challenge is convincing decision-makers, administration, consultants, and even respiratory care staff that using SESG methodology and time/value-weighted metrics are the most efficient and effective approach to staffing respiratory services. For that reason, the Guide includes not only the procedure time standards, but other content intended to support application of systems and methodologies described. The content and structure of the Guide are easily identified and accessed through on-line resources. You can quickly identify critical areas of content and get to where you need to go. Tips to get started:

- Get familiar with the content
- Identify the challenges and barriers that may have prevented you from implementing a effective staffing program and use Guide content to gain a better understanding of key concepts before crucial discussions with stakeholders.
- Identify all your clinical and support activities and apply the Guide methodology to develop your time standards and validate them using the Guide statistical tables.
- If you already have time standard-based metrics, use the Guide statistical tables and methods to validate existing time standards.
- If needed, use the Excel workbooks to get started and modify the workbooks for your specific set of procedures and practice.

- If facing challenges and looking for ways to enhance your program, check out the specialized chapters that include everything from CPT codes, to case studies, to informatics, and most importantly, "Value Efficiency."
- Lastly, take advantage of the Annotated Bibliography, the AARC Connect SESG Community, and ongoing education and updates provided through the AARC.
- If you like what you see in the Primer, be a subscriber to the Guide.



How the Information in the Safe and Effective Staffing Guide Assists You in Managing Labor Resources

This guide identifies clinical activities commonly performed in the provision of respiratory services and provides time standards that are statistically validated for each activity. This data can be applied as a tool to monitor and report labor efficiency. Managers can use time standards to determine labor hours required by applying procedure counts to these time standards. These metrics can be incorporated into existing department systems and hospital information systems, or by using the pre-configured Labor Efficiency Worksheets provided in the guide. These systems can be configured to calculate labor efficiency/productivity using the number of labor hours required to deliver the service compared to the total number of hours worked by the staff who deliver those services.

SESG reported procedure times also assumes that a therapist is performing only one activity at a time. Therefore, if a therapist is doing several activities simultaneously, SESG reported time standards would need to be adjusted to reflect such practice. Additionally, it should be noted that the performance of multiple activities simultaneously will diminish the time spent with individual patients, thus can be viewed as reducing quality and value in the delivery of care. Respiratory Care activities may have adverse reactions and recognition of such complications is not possible if the patient is left unattended, thus placing the patient at increased risk.

The SESG also serves as a tool to track trends and acute changes in the number of staff needed with changes in workload, or the impact of new programs, changes in physical space, or the introduction of new equipment, supplies, or clinical policy/protocols that may impact the time required to deliver services. By enabling the comparison of standardized activities, it provides a foundation for comparing key productivity metrics with other facilities. These resources can also assist in budget development and comparisons of "actual" to "forecast" and drive safe staffing levels. By applying the time required in the provision of clinical services and the hourly cost of practitioners, estimates of direct variable clinical labor cost can also be determined. This information will assist managers in ensuring an appropriate match of resources and demands by helping to answer some key questions such as:

- What is the efficiency/productivity of staff, both individually and as a department?
- What are the number of Full-Time Equivalents (FTEs) needed to safely and efficiently perform respiratory care patient services and support activities?
- What will be the impact of new technology on hours required to deliver care?
- What is full-time/part-time staff mix most efficient based on variability in work demand?
- What will be the impact on resources by using Clinical Practice Guidelines, protocols, and policy changes to reduce misallocation?
- How many FTEs are required to implement a new service?
- What would be the reduction of FTEs resulting from discontinuing a service?
- Is service utilization changing with respect to the volume and intensity of services?
- What is the "gap" between billable and non-billable activities within your specific institution?
- What common set of characteristics should be captured in the process of benchmarking for best practice and labor efficiency?
- How can I validate our own internally developed procedure time standards?
- How much time and expenses are consumed in care that has no medical indication or no value?

Using this Guide to Establish an Efficiency (Productivity) Reporting System

Measuring and reporting the efficiency (productivity) of staff is assessed through determining the time required to provide services in relation to the hours worked by staff who are providing those services. The activity time standards contained in the SESG provide the mechanisms to determine the time required to deliver clinical services. The graph in Figure 2.1 provides one example of how productivity may be reported using SESG methodology.

- understanding fixed vs variable labor hours and activities
- identifying clinical activities with time standards
- identifying clinical activities without time standards
- accounting for support activities
- accounting for non-allocated activities

There are several key concepts that must be understood when developing a staffing plan, justifying labor resources and communicating information on staff efficiency. These concepts include:

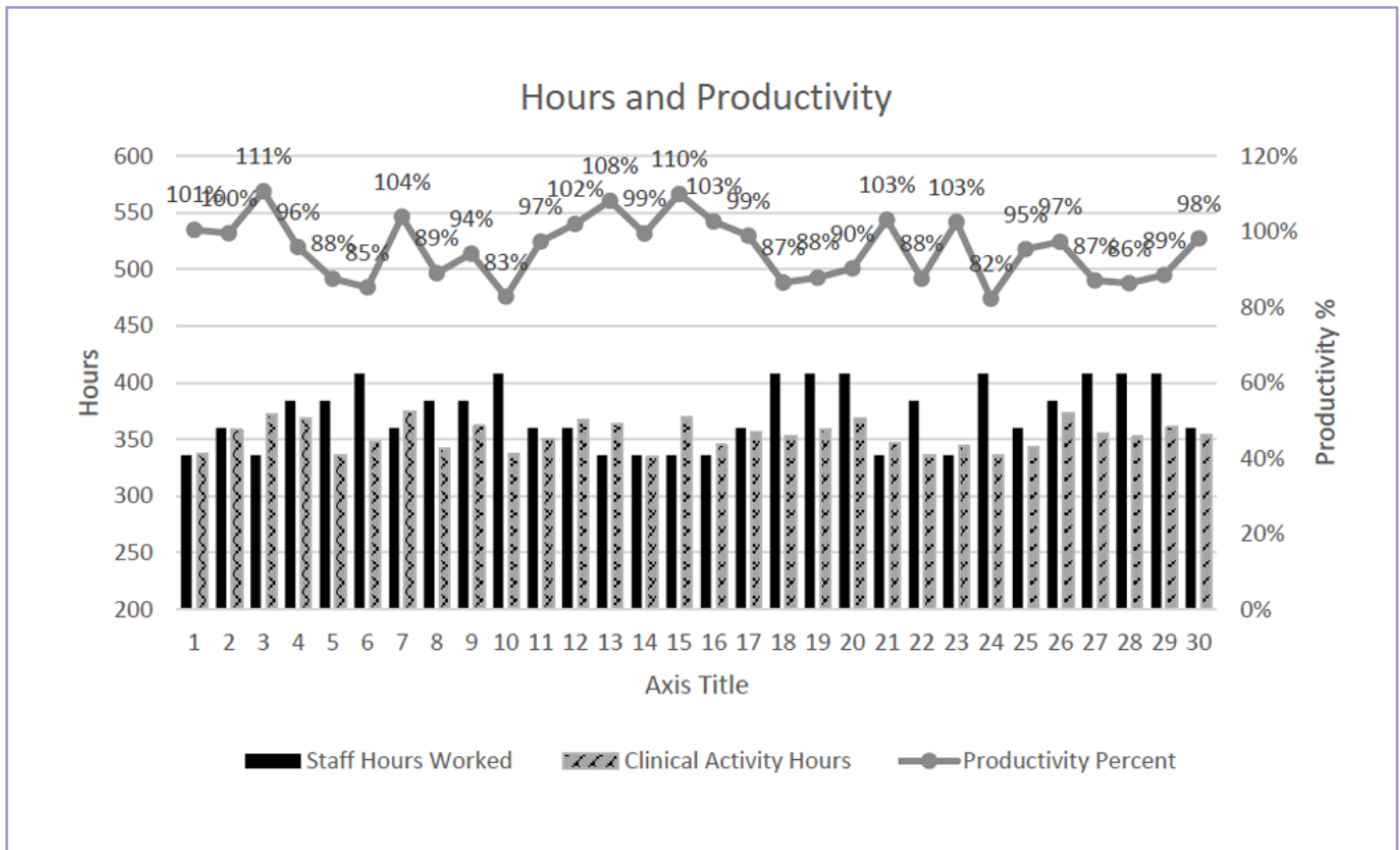


Figure 2.1: Daily productivity Visualization

FIXED VS VARIABLE HOURS AND ACTIVITIES

Whether labor hours are classified as fixed or variable can be determined by answering a simple question: How does the number of labor hours required to perform an activity change when activity volume increases or decreases?

If the number of labor hours varies directly with the volume of activities/procedures performed, then those labor hours are classified as variable hours. For example, as patients require additional medicated aerosol treatments, more time is required to provide prescribed care. Likewise when the total time to perform a set of activities varies depending on the number of activities performed, those activities are considered variable.

If the number of labor hours does not vary directly with the volume of service performed, then the associated labor hours considered fixed. An example of fixed labor is time spent by management or supervisory personnel inclusive of next shift workload assessment, the assignment of work, the performance of staff evaluations, project management, and other operational tasks. Likewise, procedures that do not require variable total time relative to the number performed are considered fixed activities. Depending on the nature and type of fixed activity some amount of labor must be allocated.

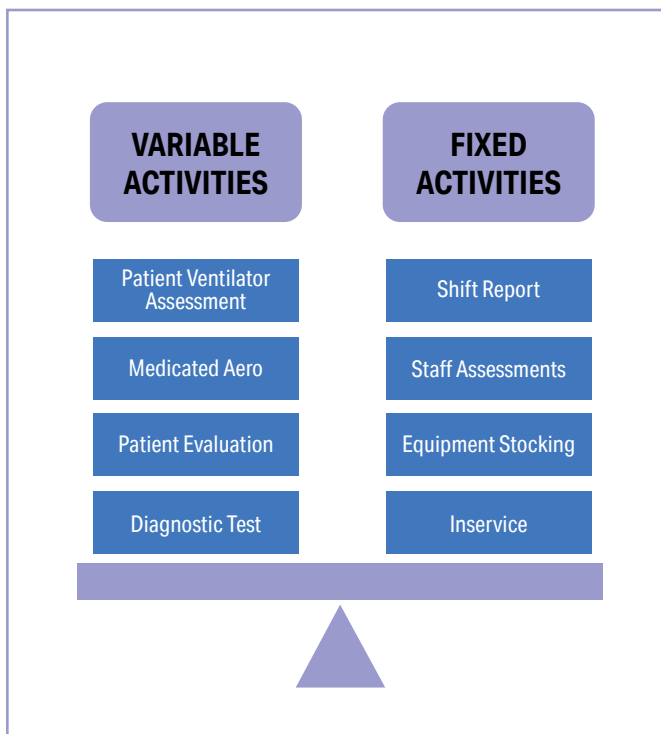


Figure 2.2: Variable and Fixed Activities

Labor hours are allocated or justified using the number of variable activities as well as an assessment of the total time to perform fixed activities. A shift supervisor may perform a number of fixed activities related to department operation; however, may also take a partial workload. Shift supervisors could be considered 50% fixed and 50% variable depending on the mix of the task they perform. When reporting the efficiency of labor, the total of all fixed and variable hours, must be determined.

The SESG provides the mechanisms to quantify how much the variable component of labor hours should change based on the number of variable activities performed. The SESG also provides considerations in how fixed activities should be accounted for that support the provision of care and the operational needs of a department. In addition to understanding what hours and activities are fixed or variable, it is also important to understand the 3 components of the time required to deliver patient care services. Activities can be classified into the categories identified in figure 2.3:

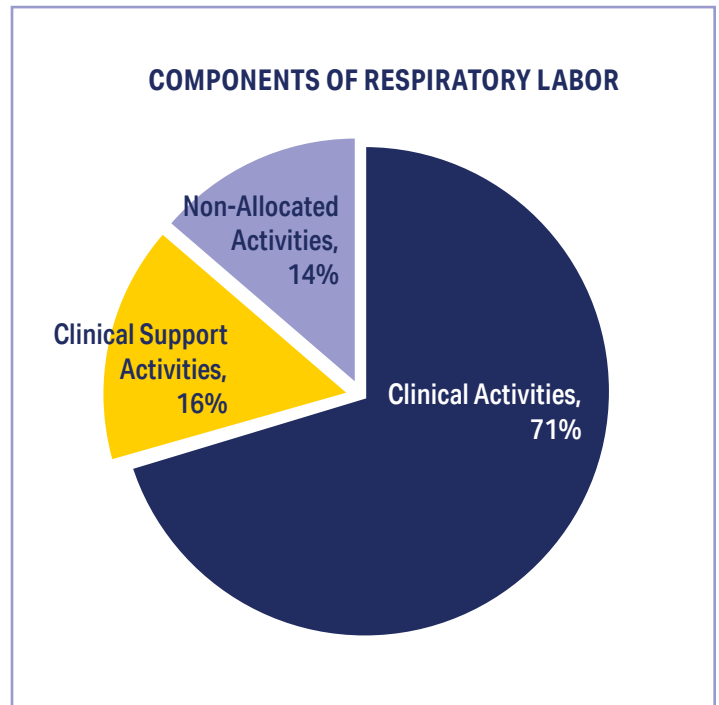


Figure 2.3: Components of Respiratory Labor

DEFINITION OF CLINICAL ACTIVITIES

If a statistically valid measure of time was determined through the SESG time standard survey, a time standard table is reported in the SESG. These time standards are inclusive of the procedure definition, components of the task and measures of central tendency such as mean and median values. They are not included in this Primer.

DEFINITION OF CLINICAL ACTIVITIES

These are activities performed to support the functions of delivering care and assure the safe provision of patient care and established standards of care are achieved. Major categories of these activities include:

- Management of equipment and supply activities are associated with equipment acquisition, cleaning, storage, preventive maintenance, and distribution.
- Management, supervision, and staff support activities include department administration and management,

staff education and training, administration of quality systems, and information management.

- The process of preparing physical space for care or testing, including equipment calibration and equipment disinfection.
- Activities associated with transport of patients

Depending on the nature of support activities, some are fixed and some are variable. Detailed examples of these activities may be found in the SESG.

DEFINITION OF NON-ALLOCATED TIME

Non-allocated time is time that is not consumed by clinical activities (with or without time standards) or support procedures. Non-allocated time is unique to each institution and varies depending on department/facility policy and practice. Examples of these activities include staff time required for shift change, the time it takes to travel between patients or care units, communication with other health care providers, patients, or families, and even using the restroom. Obviously, a therapist assigned to a specific unit for all work assignments requires much less travel time than a person who must deliver care to patients on different floors or wings of a facility. Thus, the percentage of non-allocated time is unique to each facility and is dependent on the design of the facility and staffing deployment patterns.

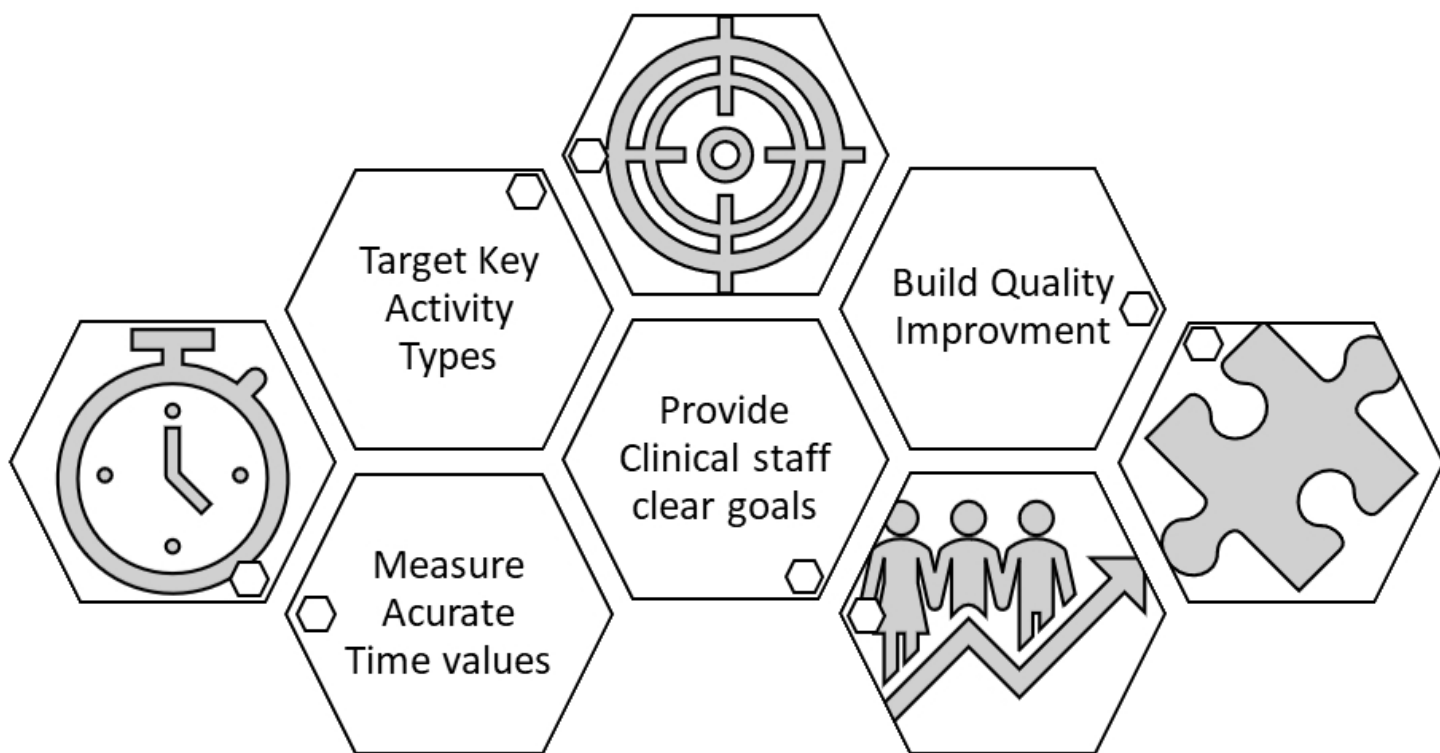
An approach to account for Non-Allocated time includes defining what portion of a shift can be accounted for in the provision of non-allocated and fixed support activities. An example may be a 12-hour shift. During that 12-hour shift, the type of non-allocated and support activities could include 30 minutes for shift report, 15 minutes for unit travel, 15 minutes for stocking, 30 minutes for paid lunch, and 2 mandated 15 min breaks. Using

these activities as an example, they account for 2 hours of time in a 12-hour shift that must be spent in non-allocated and support activity. This means the hours that remain to provide variable clinical activities is 10 hours. The determination of labor hours required and the reporting of productivity must therefore account for the fact that for every 12 hours worked, only 10 hours are available to perform clinical activities.

Decisions about determining whether certain activities should be considered as non-allocated time or clinical support time are the purview of each institution. Such detail should be included in a Department Staffing Plan and supported by Administration. Departments may elect to apply a standard percentage of labor hours that are consumed by both support and non-allocated activities.

Considering non-allocated time also consumes labor hours, it must also be accounted for in determining labor hours required or in reporting productivity. In many cases, once determined, the non-allocated time % remains the same unless there is a substantial change in any of its determining factors.

Building Your Productivity Reporting System



The SESG pre-configured worksheets can be used to determine hours required, capture hours worked, and report productivity (not included in this Primer). These can be used as a starting point in developing systems that are specific to your department/hospital. A step-by-step approach is included in the SESG.

ACCOUNTING FOR WORKED HOURS AVAILABLE TO PERFORM CLINICAL PROCEDURES

Worked hours must be accounted for to determine total productivity; however, not all worked hours can be spent in performing procedures or direct variable activities. This was briefly described as a component of Non-allocated Activities, but will use an 8-hour shift as an example:

- During an 8-hour shift (480 minutes), let us assume that in a given facility, 5% of therapist time (24 minutes) is non-allocated, and 20% (96 minutes) is required for support activities. That leaves 75% (360 minutes) for clinical procedures. Thus, a therapist performing clinical activities totaling 360 minutes is 100% productive. In such an example, the therapist would be expected to perform 360 minutes, not 480 minutes of patient care in that shift.

Some departments have been assigned or have negotiated a target productivity level for their operations. For example, if your target productivity was 85%, that would allow only 15% of staff time for support and non-allocated time. A common misconception is that 100% productivity means that therapists are performing direct patient care (procedures) 100% of the time they are at work, which is not feasible and may be a concern with regard to safe and effective provision of care.

Getting Your Medical and Administrative Leadership On Board

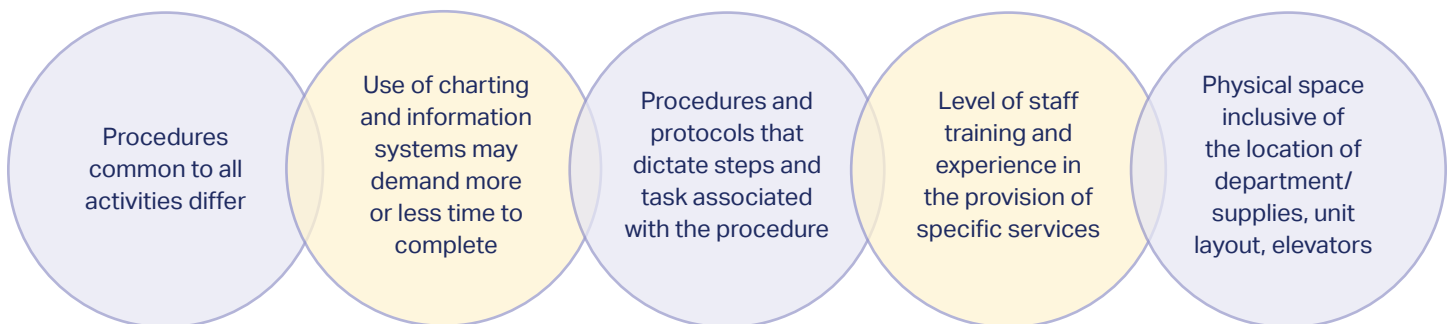
This guide can also help managers educate their medical and administrative officers regarding the unique aspects of respiratory care services that result from significant variability in the nature and types of care rendered in treating patients requiring respiratory services. There must be acceptance and agreement with administration on the standards and systems being used to assess staffing requirements in order to ensure institutional support and credibility. When developing or refining time standards, it's critically important that your administrator understands the system and is supportive of using SESG methodology to accurately capture patient demand as well as a determinant of FTEs required. Additionally, if a consulting firm declares your staffing levels to be inappropriate, your administrator can use the SESG as a resource or a cross-check methodology and will be armed with information about the basis of your staffing levels and better prepared to evaluate the claims of consultants.

This guide contains several important documents that will strengthen your knowledge about efficiency measurement and staffing. "Productivity Systems - The Importance of Accurate Time Standards" will help you understand the issues surrounding the measurement of workload using charges, CPT codes, and procedure counts and the benefits of using relative value units (RVUs) for this purpose. The AARC position paper titled "Best Practices in Respiratory Care Productivity and Staffing" can also be very helpful in communicating with and educating your administrator. These documents and a wealth of others can be found in the Guides Educational Resources and the Annotated Bibliography

While the SESG provides nationally reported procedure time standards, it is important to understand there are reasons why your procedure times may vary that include:

- Procedures common to all activities differ
- Use of charting and information systems may demand more or less time to complete
- Procedures and protocols that dictate steps and task associated with the procedure
- Level of staff training and experience in the provision of specific services
- Physical space inclusive of the location of department/ supplies, unit layout, elevators, etc.

For these reasons, every facility should determine what SESG procedure time standards need to be refined (see Methodology for Developing Time Standards). In cases where there are significant differences between any of your facility-specific procedure times and the SESG, you have the opportunity to demonstrate services in which you may be more efficient than others or ensure decision-makers understand the reasons you may take longer in performing a procedure. Such time standard refinement should be clearly understood and supported by the administration.



Additional Important Considerations

1. If two therapists are involved in performing a clinical activity on the same patient as a medical necessity, the time allocated for that activity should be doubled in order to capture total procedure time and ensure accurate reporting.
2. Be sure to educate, engage, and obtain approval from your hospital administrative and medical leadership in the planning and implementation of your staffing plan and productivity systems. Engaging key stakeholders is critical to having your productivity model accepted as the standard for determining clinical staff complement.
3. The brief definitions of clinical procedures provided in the SESG are not complete procedure descriptions. Rather, they provide guidance in helping the user define the activity applicable to the assigned time standard.
4. Accuracy in capturing procedure counts and calculating time standards, and vigilance in avoiding duplication or inflation of those standards, will result in a reporting system tailored to your service that is a useful management tool. This also applies to the inaccuracies in defining productivity by electing to use non-weighted and/or billable procedures.
5. While accuracy in procedure capture is key in determining productivity, there are situations in which departments may not have systems in place to capture all the types of procedures listed in the SESG. In such cases users can consider combining a set of procedures that are common to the course of treatment. An example may be the inability to individually capture the set of SESG procedures associated with ventilator care. SESG procedures related to ventilator care include Patient Ventilator Assessment, Setting Change, Circuit Change, Suctioning, Trach Care etc. If the only count captured regarding patients on mechanical ventilation is a Patient Day, estimates of the number of these separate SESG activities can be made and a single total activity time used for each ventilator day.

While procedure time-based systems remain important in determining the number of staff required and justifying labor resources, one cannot ignore that value is even more important. Few would agree that despite having a productivity system in place, that there is nothing productive in consuming labor hours in the performance of procedures that are not necessary or have no or little medical value. Protocols are one way to help insure only medically indicated therapy is provided. Having both SESG and Protocol systems in place make for a much more viable system to justify staff. In such cases the manager can then make the case with administration that a medically required procedure is ordered by the physician (or driven by Protocols) and thus the hospital is expected to provide the resources to perform such therapy. And further, the inability to provide resources as determined through SESG methodology places the patient and the institution at risk. The provision of value may be the last point made in the Introduction of the AARC Safe and Effective Staffing Guide, however it is the most important. For additional information on applying value as a key element in determining labor resources required, see the Value Efficiency AARC Position Statement and Issue Paper.

Clinical Activities with Time Standards

The long standing hallmark of the URM has been the inclusion of Clinical Activities and the Time Standards associated with those activities. The new SESG includes procedure definitions and time standards as a result of a national survey and appropriate statistical methodology to validate times reported by over 350 Respiratory Care Managers/Directors. The extensive list of the new time standards is reported in the Guide and available to all subscribers. The below example is of the procedure "Patient Assessment" to provide readers of the Primer an understanding of what is included in the Guide.



01.0000 PATIENT ASSESSMENTS

01.0000 PATIENT ASSESSMENTS

Introduction

Two patient assessment activities — Initial and Subsequent — are described in this section. These assessments are designed as stand-alone, discrete activities. They are not intended for use as a component of any other treatment described in the guide, since reference to evaluation of patient response to a specific intervention is already included in each activity.

The Initial Patient Assessment is ordered by a prescriber when a patient has just been admitted to the service, when it is part of the respiratory care department's standing orders, or when a complete review of a medical history is warranted in the preparation of a care plan. The Subsequent Patient Assessment is used when a reassessment of or change in a care plan is being considered.

The major difference in the two assessments is essentially the depth and scope of the data reviewed; both should be seen as aids to strategic clinical decision-making. They should never be confused with the patient evaluation that must take place in conjunction with any therapeutic intervention, as outlined in the "Tasks Common to All Activities" or Components section of each relevant activity in the guide.

01.0100 - Activity: Initial Patient Assessment

Definition: The process of gathering and evaluating data from a patient's medical record, consultations, physiological monitors, and bedside observations. This type of assessment is a specific and stand-alone procedure and is not associated with the pre/post evaluation of a patient's response to a therapeutic activity. It is intended to be used in situations such as the initial admission of the patient to service or the creation of a patient care plan.

Components:

1. Refer to "Tasks Common to All Activities".
2. The assessment may include, but is not limited to, gathering data on and/or evaluating:
 - a. Vital signs
 - b. Auscultation of breath sounds
 - c. Cough, sputum production
 - d. Work of breathing, chest symmetry, use of accessory muscles
 - e. $SpO_2 / FiO_2 / ETCO_2$
 - f. Bedside spirometry
 - g. Skin color
 - h. Level of consciousness
 - i. Review of patient's complete medical record (patient history, recent surgeries or hospitalizations, comorbidities)
 - j. Current/home medications and supplemental oxygen
 - k. Consultation with prescribers, nurses, and other professionals providing care to the patient
 - l. Examination of recent chest X-rays, CT scans, MRI or other radiology exams
 - m. Relevant laboratory tests (ABGs, CBC, culture reports, BNP, metabolic profile and others)
 - n. ECG, echocardiogram, or other cardiac studies
 - o. Other relevant findings derived from a physical examination of the patient

01.0100 - Initial Patient Assessment

	N	Mean	95% Confidence Interval for Mean		Median	Std. Deviation	Minimum	Maximum
			Lower Bound	Upper Bound				
Adult	261	21.0	20.0	22.0	20.0	8.4	5.0	60.0
Pediatric	193	22.0	20.7	23.4	20.0	9.5	5.0	60.0
Neonatal	185	21.8	20.4	23.2	20.0	9.7	3.0	60.0

01.0200 - Activity: Subsequent Patient Assessment

Definition: The process of gathering and evaluating data from a patient's recent medical record, consultations, physiological monitors and bedside observations to update the patient's care plan. This type of assessment is a specific and stand-alone activity and is not associated with the pre/post evaluation of a patient's response to a therapeutic activity.

Components:

1. Refer to "Tasks Common to All Activities".
2. The subsequent assessment utilizes information from the initial assessment and may include, but is not limited to, gathering data on and/or evaluating:
 - a. Vital signs
 - b. Auscultation of breath sounds
 - c. Cough, sputum production
 - d. Work of breathing, chest symmetry, use of accessory muscles
 - e. SpO₂ / FiO₂ / ETCO₂
 - f. Skin color
 - g. Level of consciousness
 - h. Review of patient's recent medical record (last 24 hours)
 - i. Consultation with prescribers, nurses, and other professionals providing care to the patient
 - j. Changes in current medications
 - k. Examination of recent lab, radiology or other diagnostic tests (last 24 hours)
 - l. Other relevant findings derived from a physical examination of the patient

01.0200 - Subsequent Patient Assessment

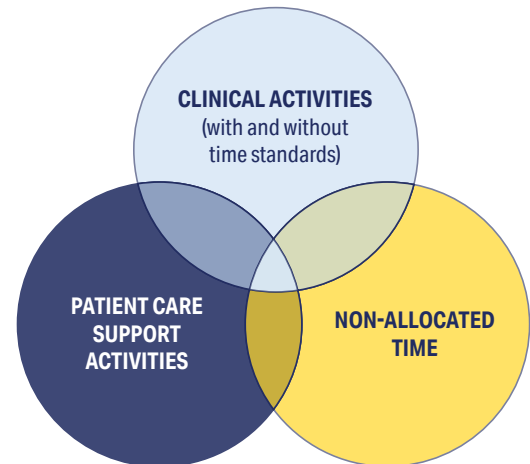
	N	Mean	95% Confidence Interval for Mean		Median	Std. Deviation	Minimum	Maximum
			Lower Bound	Upper Bound				
Adult	251	13.5	12.8	14.2	15.0	5.6	3.0	31.8
Pediatric	182	14.4	13.5	15.2	15.0	5.7	4.0	31.8
Neonatal	180	14.2	13.3	15.1	15.0	6.2	3.0	31.8

Activities that Support the Delivery of Respiratory Care Services

It is critically important to account for the time spent in activities to support the delivery of clinical services when determining staff productivity. Although a detailed list of support activities is provided in the SESG, the Primer includes a general overview. Ignoring the relatively large amount of time required to conduct these clinical activities will result in unrealistically low reported productivity. The approach to accounting for this time can range from reporting and including specific or groups of support activities for which time standards have been developed to defining a standard percentage of working hours that typically account for all patient support activities. Remember, total time worked consists of 3 components:

- the time spent in delivering clinical services,
- time required to conduct the activities to support the delivery of those clinical services,
- non-allocated time.

Time required to provide support activities is typically substantially less than that required to deliver clinical services but substantially more than non-allocated time.



FIXED SUPPORT ACTIVITIES

Many of the activities supporting the provision of direct patient care services or fulfilling administrative responsibilities are often referred to as “fixed activities” because the resources required by each do not vary directly with the volume of services provided. Shift reports and department meetings are examples of fixed support activities for most respiratory care departments. A characteristic of fixed support activities is that they do not vary significantly with the workload and can therefore be identified as a specified number of hours each reporting period. For example, a 30-minute shift report at the start and end of a shift represents one hour per shift of fixed time. The one hour of time will not vary significantly with the workload and is considered a fixed amount of time associated with the therapist’s workday.

Although fixed activities do not vary significantly or in proportion with the workload, they can vary based on other factors such as the number of staff, the number of shifts worked, clinical units assigned, or use of a specific piece of equipment. Such relationships need to be defined and incorporated into the department productivity management system.

VARIABLE SUPPORT ACTIVITIES

It may make sense to treat some support activities as a variable rather than fixed. This should be done when the labor hours spent in support activity directly varies with the volume of clinical activities performed. For example, if calibration of a device is required after a certain number of uses, the frequency of the calibration activity will be driven by the number of times the device is used rather than the time it is in service. In this

instance, the time standard would also be calculated by using the “average time” formula described in the introduction to the “Statistical Methodology for Developing Time Standards”.

INFREQUENT OR EXTREMELY VARIABLE SUPPORT ACTIVITIES

Some activities either occur too infrequently or require extremely variable amounts of time, thus making it impossible to develop and assign an average time to them. An example of such an activity is preparation for a visit from an accreditation agency that may occur only once in several years. Activities like these may be accounted for by using an “actual time”

measurement each time the activity is performed, or they simply may be included in the support fixed time allocation. They can be accounted for as a special note or entry in justifying or reporting labor hours required.

IDENTIFYING SUPPORT ACTIVITIES

The following steps will assist you in developing a comprehensive list of applicable support activities:

1. Identify all activities of the workday that meet the definition of “support activities”.
2. Validate the completeness of the list through staff review and feedback.
3. Refine the list to combine those activities that are similar as well as eliminate those activities that occur infrequently.

If desired, establish time standards for selected tasks or groups of activities. Refer to the document titled “Statistical Methodology for Developing a Time Standards” to establish these standards.

WEIGHTED AVERAGE FORMULA

You may find the weighted average formula below useful in determining the time standards required to conduct selected activities. Developing weighted average formula requires 4 steps:

1. Identify the ratio of events (number of times activity is performed/piece of equipment).
2. Determine the average number of events/pieces of equipment/year (or other specified time period).
3. Determine the actual time per event.
4. Determine total time per piece of equipment (multiply Steps 2 and 3).

Example: Calibration of equipment: this may be required one time per day. Each calibration takes three minutes. Let's assume there are five analyzers always in use.

- $5 \text{ analyzers} \times 3 \text{ minutes} = 15 \text{ minutes}$
- $15 \text{ minutes} \times 365 \text{ days/year} = 5475 \text{ minutes/year}$
- $5475 \text{ minutes/by } 60 = 91.3 \text{ hours per year}$
- $91.3 \text{ hours per year/\# of reporting periods per year} = \text{hours required reporting period}$

The SESG includes pre-configured Excel workbooks in which both Clinical Activities with Time Standards and Support Activities, can be used to estimate clinical hours required and report productivity. In addition, the complete Guide introduces the concept of Value Efficiency in which a value score can be applied to the Clinical Activities with Time Standards as a method to better quantify value



Next Steps

While the primer is intended to get you started in developing data and value driven staffing plans, you can obtain the complete Safe and Effective Staffing Guide through the American Association for Respiratory Care. The SESG Premium Subscription provides the following:

- Clinical Activity Definitions and Time Standards
- Support Activities and How to Account for Them
- Methodology for Development of the Guide
- Methodology for Development of Time Standards
- Data Interpretation Guidelines
- Importance of Time Standards
- Case Studies in Productivity
- Integration of Information Systems
- Value Efficiency Position Statement
- Value Efficiency Position Paper
- User Created Activities
- 5th Edition Time Standard Reference Table
- CPT Code Table
- CPT Code Guide
- Staffing Plan Template
- Annotated/Linked Bibliography
- Excel Productivity Worksheets Pre-Configured with Median Time Standards
- Ongoing Updates and Education Opportunities

FOR SAFE AND EFFECTIVE STAFFING GUIDE SUBSCRIPTIONS TO THE BASIC AND PREMIUM EDITION PLEASE [CLICK HERE](#)

