

Developing Time Standards-Collecting Data

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Getting started - prioritize!

Although it is ideal to have time standards for as many clinical and clinical support activities that lend themselves to measurement as possible, focus first on developing and refining those which take up most of your staff's time. For example, it is not unusual in general medical and surgical hospitals for the activities associated with mechanical ventilation and aerosol therapy to consume 50% or more of the clinical time spent by respiratory therapists. When asked why he robbed banks, a famous 20th century bank robber explained "...because that's where the money is!" The same logic holds here. Develop a list of the activities most commonly performed by your staff, rank them in order of estimated time required by the staff, and work down the list developing or refining the time standards of each.

Methods for determining the time required for an activity

Methodologies in which start and stop times are captured for each activity are most accurate. These include:

- The direct observation of a caregiver by another individual that logs start and stop times
- The capture of start and stop times from patient documentation systems into which practitioners enter data
- The capture of start and stop times by practitioners
- Expert opinion of those who have performed the task.

Be specific about what is being measured for each activity.

First, carefully define the components of the each activity you wish to measure. Historically, a “threshold to threshold” approach has been useful for developing time standards for direct patient care procedures. The standard of care for many of direct care procedures includes the list of activities performed prior to, during, and following most clinical activities listed below. If this list of activities is applicable to the activity being measured, the amount of time they require is included in the development of the total time to perform these tasks.

Tasks Performed Before Seeing the Patient

- Verify physician’s order for correctness and completeness.
- Ensure presence and continued relevance of current care plan.
- Follow relevant infection control activities (hand washing, glove, gown, mask, etc.).
- Prepare relevant equipment and supplies.
- Confirm patient identification per institutional policy.

Tasks Completed Prior to Beginning Activity

- Explain purpose and goals of intended activities to patient.
- Provide patient/family education as required.

Perform Activity, Monitoring and Coaching the Patient as Required

Post-treatment Tasks

- Make pertinent observations and measurements.
- Assess impact of care/treatment in achieving desired outcomes.
- Record observations and assessments as required and appropriate.
- Ensure appropriate communication with other health care workers.
- Clean, store, and discard equipment, as appropriate.

Get your staff involved

Although the classic method of establishing time standards is having a management engineer observe and time the delivery of a service, that isn’t likely to happen in today’s healthcare environment. Instead staff can report the time they spend on the specified activities. To do this successfully they must (1) know what they are expected to measure, (2) when to start and stop the clock, and (3) have a means of easily documenting and reporting their activity times. Although documentation using existing reporting systems is definitely a time saver, data can be easily gathered with a simple formatted worksheet that describes what is to be measured and contains defined fields into which they are to enter data. These fields will include at minimum, Procedure Name, Start Time, End Time, and a calculated field for Activity Duration.

If your staff are gathering data on multiple activities a spreadsheet is a great way to organize the work. The names assigned to activities must be consistent and related

activities should be grouped together (e.g medicated aerosol activities would include small volume nebulizers, BANs and MDIs) Procedure numbers can also be used for activity identification or if using a handheld electronic device, you can configure a predefined drop down list to select from. To minimize calculation errors, format the time entry and time calculation columns "time". Duration is calculated by subtracting the start time from the end time. The Example Worksheet For Establishing Time Standards provides an example of how a spreadsheet can be formatted to facilitate staff reporting activity times.

Use a solid statistical methodology to determine you time standards.

When you have your activity data it is time to determine the time standard you will adopt for each activity. The statistical methodology is described in the AARC reference document: **Methodology for Developing Time Standards**.

Get administration buy in

This is one of the most important things you can do! When you are developing or refining time standards (particularly for activities that consume much staff time) discuss the process you are using and review the resulting time standards with your administration. Your administrative officer must believe your time standards are accurate and acknowledge their validity. Their belief in the accuracy of the time standards and the process of developing them when used as part of a valid productivity system will increase the confidence of your administration in your staffing levels. Additionally if a consulting firm declares your staffing levels to be inappropriate, your administrator will be armed with information about the basis of your staffing level and better prepared to evaluate the claims of consultants.