Using Benchmarks: The Good, The Bad, and The Ugly

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Benchmarking is defined as the process of comparing the cost, cycle time, productivity, or quality of a specific process or method to another that is widely considered to be an industry standard or best practice.

External benchmarks are available for many common measures in hospital departments and, in general, the ranges of the benchmarks from any source are very similar. The true objective is to really understand how to use the benchmarks.

Benchmarking enables the comparison of a department to a particular standard. Measurement is the cornerstone of assessing the performance of a department. But, the problem is that benchmarks are unidimensional, while real work is not. Optimizing productivity using benchmarks can cause problems if not done correctly. Cutting staff without redesigning workflow and providing management tools can produce short-term dollar savings, but it can also lead to long-term, downstream costs that are bigger than the productivity savings. We recommend using benchmarks as guidelines, not mandates.

Choosing how to get started using benchmarks depends upon many factors. Some hospitals are prepared to undertake a “house-wide” initiative if there is wide-spread acceptance of the need for change. Sometimes it is easier to start with one large department or a few smaller departments, focusing not only on benchmarking and productivity improvements, but on making significant process improvements that enhance quality, patient safety and satisfaction.

Whether you decide to move through your organization department by department or to engage in a hospital-wide productivity improvement initiative, the principals outlined in this white paper apply to either approach.

Benchmarking Terms

Benchmarks should be inclusive, comprehensive, fair, equitable, transparent, and highly communicated. The more the entire organization understands how to use benchmarks and departments work together to change processes (breaking down the silos that may currently exist), the greater success the organization will see. Thus, it is important to create a common set of key definitions.
When it comes to benchmarks, everyone in the organization should speak the same language. Consistent reporting of labor-related metrics requires adopting system-wide definitions for terms such as:

- Direct Care Hours
  Hours spent actually providing observation, care, treatments, tests, etc.

- Productive Hours
  Direct Care Hours plus Management Hours and any other overhead.

- Non-Productive Hours
  Paid time off such as vacation, sick time, family leave.

- Education and Orientation Hours
  Depending on the institution, these can be categorized as either Productive or Non-Productive Hours.

- Total Paid Hours
  Total of all Productive and Non-Productive Hours.

- Workload Unit (WLU) or Unit of Service (UOS)
  Best single measurement of volume for your department.

- Hours Per Workload Unit (HPWLU)
  The number of hours in a given time period divided by the WLU/UOS for that same time period.

- Target/Standard
  Based on the amount of staff hours needed to produce a given volume of service. The term “target” is frequently interchanged with “benchmark” or “standard.”

- Worked Target
  The number of staff hours needed to provide work in a department on a daily basis. This is typically interpreted as Productive Hours—hours that contribute to producing an outcome (both direct and indirect). This drives the daily staffing and scheduling.

- Paid Target
  Based on the Worked Target with the addition of paid time off (PTO), orientation, and education.

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*The worked target is what the manager can control on a daily basis with good scheduling practices and flexing. Education & Orientation are house-wide responsibilities and are generally included in the Paid Target.*
**Determining Appropriate Targets for Each Department**

The goal of labor cost management is to put the right number of qualified people in the right places. This calls for recruiting and retaining the right mix of qualified personnel for the work to be done, and helping them to complete this work within reasonable production targets. Although operational realities contribute to inefficiencies (higher-than-needed staffing levels), so does insufficient management attention.

Sources of inefficiency include scope of service, waste and rework, lack of efficient automation, lack of teamwork, physician timeliness, throughput issues, physical layout including where equipment and materials are kept and dramatic variations in patient volume.

Measuring key indicators for quality, patient safety, and satisfaction (patients, employees, and physicians) is important. The measurements need to be balanced with productivity targets. By viewing all of these areas, a manager can spot where adverse effects may be occurring and make any necessary changes.

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**Examples of Workload and Benchmark Ranges**:  

<table>
<thead>
<tr>
<th>Nursing Unit</th>
<th>Equivalent Patient Days (midnight census + observation hours)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical/Surgical:</td>
<td>7.1 – 9.1</td>
</tr>
<tr>
<td>Step Down Unit:</td>
<td>8.9 – 10.2</td>
</tr>
<tr>
<td>ICU:</td>
<td>15.4 – 20.2</td>
</tr>
<tr>
<td>Emergency Department:</td>
<td>2.16 – 2.86 visits</td>
</tr>
<tr>
<td>Operating Room:</td>
<td>0.093 – 0.130 minutes</td>
</tr>
<tr>
<td>Radiology (all modalities):</td>
<td>1.12 – 1.47 procedures</td>
</tr>
<tr>
<td>Physical Therapy:</td>
<td>0.48 – 0.64 15-minute units</td>
</tr>
<tr>
<td>Laboratory – Billed Tests:</td>
<td>0.152 – 0.217 billed tests</td>
</tr>
<tr>
<td>Environmental Services:</td>
<td>6.23 – 9.98 per 1,000 Sq.Ft./Pay Period</td>
</tr>
</tbody>
</table>

*These are examples and should not be employed without a full understanding of the operational realities of a given department.

*Using the midnight census always creates controversy because it does not take into account the daily activities of admissions, discharges, and transfers (ADT). This is still the nationally accepted way to measure, but ADT intensity must be considered when setting the target.
To understand where your total labor dollars are being spent, it is important to set targets for direct care, total productive and total paid (defined on page 2) hours. Understanding what types of hours are included in each of these targets is important in the development of staffing plans and, ultimately, in building and meeting a budget.

Indirect labor hours, whether defined as productive or paid, are important to benchmark and track. Indirect hours will vary greatly based on the intensity of education and orientation by departments. For example, a nursing unit will require a much higher percentage of indirect hours than a dietary department. Likewise, a critical care unit usually requires a higher percentage of indirect hours than a medical/surgical unit.

**If a department continually exceeds its indirect target, there are a few factors to consider:**

- **High turnover rate** – Review employee satisfaction scores, and work with managers to ensure they are doing everything possible to increase morale and retain good employees.

- **Orientation time** – Review the preceptorship program. If an employee is not doing well after a predefined time for orientation, orientation time should not be extended over and over again.

- **Education** – Many hospitals make the strategic decision to invest in their employees. Investments in education should produce fewer errors, higher patient satisfaction, lower employee turnover, and better succession planning. It is important that these education hours are accounted for in the target, coded correctly in the time and attendance system, and tracked carefully by the managers.
Setting a paid hours target is also important, since paid hours are what really affect your hospital’s bottom line.

Many of the factors that go into determining the paid target are hospital-wide issues and are not easily managed on a departmental level. It is often helpful to look at the hospital as a whole and ask questions like:

1. Is there a culture that deals consistently and effectively across departments with time and attendance issues?

2. Is your Family Medical Leave of Absence (FMLA) policy “abused” by employees?

3. How do you rank among your peers when comparing percentage of staff off on FMLA?

When setting the paid target, it is also important to look at longevity of staff in each department rather than setting an arbitrary percentage of non-productive time for every department.

**Set Staffing Levels to Average Workload**

Productive targets should be determined for individual departments and take into account the following factors that can affect the process of developing a target:

- Case mix of patients
- Degree of complexity of care required by patients
- Cross-training, job function and duties
- Types of treatments
- Technology used for patient care
- Expectations of other hospital departments, patients and physicians
- Departmental configuration
Other considerations:
• Skill mix
• Part-time/full-time complement
• Peaks and valleys (by season, by day, by shift)
• Weekend coverage
• Types of shifts

So now that I have targets, how do I make the most of them?

Utilize tools to help meet the target:
• Build an annual staffing plan for each department based on average workload and the direct, productive and paid targets.
• Build a position control that meets the staffing plan. The position control should:
  o Ensure flexibility for shift and weekend work
  o Clearly demonstrate positions filled and vacancies that should be posted
• Develop a daily/shift-by-shift staffing matrix to show staffing needs for a given workload in departments that flex on a daily or shift-to-shift basis. This helps managers to track variances and reach the appropriate targets.
• Each department manager should develop an action plan that details changes needed for flexing with volume changes.
• Review daily and bi-weekly productivity reports to measure fluctuations in volume and determine whether staffing changes are appropriate.

Adding technology that tracks productivity can enhance the results if preceded by cultural change. But, without the required cultural change, technology alone can be a detractor, taking your eye off real problems. Systems don’t produce results. People who know how and why to use systems produce results.

It is important to incorporate targets into the budgeting process. If a department has not made any major changes (i.e., reconfiguration, new technology to increase efficiency, a change in the types or acuity of the patients), then its current targets (paid and productive) can be used to build its staffing budget. To determine the total FTEs needed for the budget, multiply the projected volume by the paid target. To determine budgeted dollars, individual staff salaries and planned merit increases can be entered. Resist the impulse to meet budget mandates through across-the-board percentage cuts. This approach confuses managers and penalizes those who actively work to meet or beat their targets.
Levers of Change
When a manager is having difficulty meeting a target, consider the following strategies:

- Modify hours of operation.
- Experiment with staggered shifts.
- Accelerate throughput.
- Streamline screen flips.
- Tweak scheduling intervals.
- Improve highly repeated core processes.
- Cross-train to exploit attrition.
- Confront poor performers.
- Demand proper clocking behavior.
- Embrace your time audits.
- Enhance case management.

A combination of minor adjustments can produce quicker results than attempting to change a single factor dramatically. Quick wins are important reinforcers of change.

Moving Forward
In productivity design, every step within every process change should add value to the patients and the financial stability of the hospital. Whether you chose to approach productivity department by department or house-wide, the following strategies will assist you in your productivity transformation process.

- Use departmental workload units that allow valid comparison to national benchmarks.
- Adopt reasonable productivity targets that department managers embrace because they participate in the process.
- Educate managers on the use of tools and other identified areas of opportunity so they can meet targets themselves.
- Change inefficient processes (department and systemic) that have a negative impact on productivity.
- To ensure balance, develop departmental dashboards that include all metrics that managers are responsible to meet (i.e., productivity, quality, satisfaction).