Benchmarking GI endoscope data

With the attention focused on best practices, evidence-based care, and similar measurements, it is no surprise that the endoscope care questions I’m asked most often revolve around my experiences with other hospitals, endoscopy centers, and office endoscopy practices. What is the average age of GI scopes at other facilities? Is there a typical automated endoscope reprocessor-to-procedure room ratio? What liquid chemical germicide (LCG) is favored in the industry?

They are encouraging questions because they serve as the foundation for improvement. The inquiries also come with an answer—benchmarking.

Whether you’re talking about scope repair and reprocessing or any other clinical, financial, or operational aspect of your GI business, benchmarking allows you to compare your facility’s operation against others. GI-specific benchmarking data can be beneficial when evaluating your day-to-day operational activities or making strategic business and financial decisions.

Grading your operation

Comparing your data against peer facilities enables you to convert numbers into information for more effective management of your GI lab. Below are a few examples from the 2006 Olympus benchmarking data. The discussion is limited to some sample reprocessing and repair findings.

Scope mix

This is an often-discussed issue—too many scopes and you’ve locked up excessive capital; too few and your scopes become overutilized and your procedural volume compromised. The trend we’ve seen in the past year is a migration toward increasing the number of standard scopes per procedure room (2.6 upper scopes per procedure room in 2006, up from 2 in 2005; 3.5 lower scopes per procedure room in 2006, up from 3 in 2005) while the specialty scope numbers stayed static (specialty upper and lower scopes per procedure room at 0.4 and 0.9, respectively) (table).

These numbers will continue to change, but this type of data can help you evaluate your own scope mix, ensuring you’re getting the most mileage out of your capital equipment budget.

Life expectancy

Another issue is how long to keep a scope. If you keep it too long, repair expenditures start to climb while your technology edge is compromised. In our 2006 data, the overall age of all scopes combined within a facility was 3.4 years. If the data for your facility shows the average age of your scopes is 7 years, for example, you might want to look at how your repair expenditures and procedural volumes stack up to your peer group to determine what impact your extended scope aging has on other aspects of your operation.

Acquisition strategy

One use of benchmarking data is that it may challenge you to rethink some assumptions. Perhaps you’ve thought only a small number of GI facilities lease their equipment, or vice versa. In fact, it is split almost down the middle, with about 54% of 2006 respondents purchasing their endoscopes, and the balance acquiring them under a leasing arrangement. Additionally, 55% acquired used equipment. Each
strategy has its pros and cons, so peer-level data like this can encourage you to look at each strategy.

**Chemicals**

With a variety of LCG options available, one interesting finding from the 2006 data was the way participants ranked their reasons for choosing a particular LCG type, with soak time and safety being the most important (37% and 29%, respectively), and compatibility, price, and infection control each having a ranking of 10% or less. If you’re feeling pressured to tighten reprocessing times, these findings indicate you’re not alone.

**Reprocessing time**

Reprocessing takes time—an average of 42.7 minutes, with 2.1 endoscopes waiting 17.6 minutes for reprocessing during peak hours. If your reprocessing times lean to the long side of this benchmark, for example, you might want to consider other metrics in your reprocessing protocols to determine opportunities for improved reprocessing efficiency.

**Repair costs**

Many variables affect repair expenditures and the usable life of the equipment—scope utilization and aging, repair durability, and reprocessing protocols, to name a few. One point appeared to be constant, however. Facilities with repair contracts consistently had lower average repair costs per case (5% or better) than those without a repair contract. If your repair expenditures seem on the high side, you might want to look at the age of your scopes, your repair arrangement, and your reprocessing protocols, among other things, to determine what might be driving up your costs in comparison to your peer group.

**Repair culprits**

In our 2006 data, the 3 most common types of repairs were:

- bending section repairs or replacements
- angulation repairs
- refurbishments.

These also represented the highest percentage of total annual repair expenditures. Data like this can be beneficial when you’re analyzing your scopes’ repair histories. If another type of repair is consuming your repair budget—for example, numerous CCD chip replacements—the anomaly can alert you to a problem in your scope care protocols so you can investigate where in the process the damage is occurring.

**Conclusion**

These examples may help you understand how benchmarking can be useful in assessing your endoscopy services. It’s important to realize that considerable time and resources are required on your part to implement a successful benchmarking program. But the resulting data can provide your facility with helpful information on everything

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**Trends in scope mix per procedure room**

<table>
<thead>
<tr>
<th>Type of scope</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper scopes</td>
<td>2.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Lower scopes</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Specialty upper scopes</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Specialty lower scopes</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Source: 2006 Olympus benchmark data.*
from reprocessing and repair to variables like staffing, mortality rates, and supply costs per case.

In an industry forced to focus on its bottom line, accurate comparative and historical data can help you set realistic goals and monitor progress towards improvement within your area or specialty. Benchmarking is the one way to test the efficiency and effectiveness of your operation and identify opportunities for improvement while serving the needs of your patients.

—Nancy Vacante, RN, BS

Data examples are for illustrative purposes only. Information provided courtesy of the Olympus EndoSite® Benchmarking service, October 2006.

Nancy Vacante is a senior manager of business development for Olympus Medical Systems Group, responsible for directing development of the company’s EndoSite consulting and benchmarking services.

The benchmarking survey

Olympus reported the following information about how its benchmarking study was conducted.

For 2006, the average number of participants per quarter was 50. The 2007 enrollment numbers exceed 100 facilities. The company reports the number of facility participants rather than the number of cases, believing the number of facilities to be most representative.

The data is segmented by facility size, facility type (ambulatory surgery centers performing GI services only, multispecialty ASCs, hospital-based GI labs, and teaching hospitals), geography and patient type (adults, pediatrics, or both). Participants are about evenly divided between ASCs and hospitals.

The survey is a quarterly web-based subscription service payable to and managed by Olympus but hosted and supported by an independent company, PortBlue. Participants are not limited to Olympus customers, though it is likely most are customers. The information is kept confidential, and Olympus personnel do not have access to individual participants’ responses except for 2 employees who manage the service. Olympus says it publishes the de-identified results regardless of whether they appear favorable to the company or not.