

## Central service

# A scorecard for sterile processing metrics

**H**ow does your sterile processing department (SPD) know it's on track? At MedCentral Health System, based in Mansfield, Ohio, managers and staff track performance with a color-coded scorecard. The scorecard is built around 5 pillars, which reflect the health system's mission:

- quality
- customer service
- innovation
- teamwork
- finance.

The pillars are similar to those advocated by the Studer Group, a consulting firm focused on service and operational excellence ([www.studergroup.com](http://www.studergroup.com)).

Each department selects metrics to monitor for each pillar. The scorecard includes a goal for each metric, as well as "industry best" scores and industry averages. The colors show at a glance how the department is doing on meeting its goals (chart).

The SPD's scorecard has been in effect for about a year. Data are captured manually, compiled in a spreadsheet, and summarized on the scorecard. The SPD manager, David Narance, RN, BSN, CRCST, explained the metrics and how they're used in managing the department.

### Service and quality

#### *Metrics:*

- Tray problems: Trays with problems as a percentage of total trays processed.
- Trays with special services: Trays flash sterilized as a percentage of total trays processed.

Tray problems, which are recorded in a log, include trays coming back to SPD with issues such as a sharp left on a handle, gross soilage, or a missing instrument. Included are problems that originate in SPD, such as forgetting to include a sterilization indicator in a set or using the wrong type of sterilization process. The metric hovers in the 2% to 3% range.

For the second metric, which focuses on flash sterilization, the stretch goal is to stay below 1%. In December 2007, MedCentral's average was 0.48%, compared with about 6% several years ago, Narance says.

Professional guidelines advise avoiding flash sterilization. If it is necessary in certain circumstances, strict guidelines must be followed. If the flash sterilization percentage goes up, Narance and his team investigate. An increase might indicate, for example, the need for more instrumentation or an adjustment to the surgical schedule.

### Customer service

*Metric:* Sterile reprocessed trays per adjusted productive manhour.

This metric is defined as the number of trays processed per hour worked by staff assigned to tray production for the reporting period. The metric is an overall average for all trays, including large neurosurgical and cardiothoracic sets as well as smaller sets. Allowed break times and lunch are subtracted from man-hours worked.

## MedCentral Health System

### Materials management/sterile reprocessing 2007 scorecard

#### Scoring criteria

| Key measure      |  | Oct 07    | Nov 07    | Dec 07    | Stretch goals |           |          | Goal met | Action required | Industry best     | Industry average |
|------------------|--|-----------|-----------|-----------|---------------|-----------|----------|----------|-----------------|-------------------|------------------|
| Quality          | Tray problems  | 2.98%     | 2.68%     | 3.48%     | 1.0%          | 1.5%      | 2.0%     | 3.0%     | 4.0%            | 3.0%              | 5.0%             |
|                  | Trays "special service"                                    | 0.76%     | 1.29%     | 0.48%     | 0.5%          | 0.8%      | 1.0%     | 2.0%     | 3.0%            | 2.0%              | 5.0%             |
| Customer service | Sterile reprocessing trays per adjusted productive manhour | 2.58      | 2.72      | 2.64      | 3.10%         | 3.03%     | 2.96%    | 2.90%    | 2.78%           | 3.10%             | 2.80%            |
| Innovation       | Innovation Station ideas submitted (start June 07)         | 2         | 1         | 0         | 4             | 3         | 2        | 1.0      | 0               | 3 per person/year |                  |
|                  | Innovation Station ideas approved                          | 1         | 0         | 0         | 0.95          | 0.8       | 0.75     | 0.5      | 0               | 50%               |                  |
| Teamwork         | Recall clerk on-time response rate                         | 82%       | 81%       | 81%       | 100%          | 99%       | 98%      | 97%      | 96%             | 100%              | 78%              |
| Finance          | Combined departmental budget over/under                    | Under 21% | Under 21% | Under 22% | Under 15%     | Under 10% | Under 5% | Neutral  | Over 10%        |                   |                  |

|  |                |  |                             |
|--|----------------|--|-----------------------------|
|  | Exceeding goal |  | Opportunity for improvement |
|  | Met goal       |  | Action required             |

Source: MedCentral Health System, Mansfield, Ohio.

Narance selected a goal of 2.9 with a stretch goal of 3.0 after consulting several sources. He refers to a study published a number of years ago by Kimberly-Clark when it introduced its One-Step sterilization wrap in addition to information from the literature and other sources. He acknowledges some guesswork is involved in setting the goals. Setting the goal too high or too low might cause his superiors to think the department is over- or understaffed. Yet having a metric to monitor is useful because it can also suggest if there are other issues, such as peel-pouching too many items or the staff being tied up with other activities and not getting to the sets in time.

"Some days we meet or exceed the goal. On other days, like heavy orthopedic days, we may not," he says.

#### Innovation

##### Metrics:

- Ideas submitted by staff
- Ideas approved.

These metrics monitor a new systemwide program called Innovation Station, which encourages employees to submit ideas for improvement and tracks the organization's response. Employees can submit ideas online that are intended to improve safety and/or reduce costs. The objective is to give employees and managers an avenue for offering suggestions and receiving feedback from their superiors. The ideas are evaluated by a committee.

One SPD idea, which saved about \$5,000 a month, was to renegotiate the rental

contract for continuous passive motion (CPM) machines. The new vendor provides a certain number of machines and charges only when the machines are actually used. The average monthly rental cost is \$230 to \$250 a month, compared to about \$5,300 previously.

Another idea adopted was to appoint a lead technician for SPD. The lead technician makes up the staff schedule and has the authority to adjust the schedule and reassign staff if Narance is absent.

A suggestion that helped boost SPD productivity is to have housekeeping staff rather than SPD staff clean bedside commodes. Before, the SPD staff had to travel to the patient unit when cleaning was needed, sometimes taking them away from tray assembly. Yet another idea that was accepted and awaits budgeting is to install keypad access to the SPD department to control entry to the area.

### **Teamwork**

*Metric:* On-time response to recall notices.

As MedCentral's recall coordinator, Narance is responsible for receiving the weekly recall notices from ECRI Institute and forwarding them to the appropriate departments. Recipients are expected to acknowledge the notices within 48 hours. Narance tracks the on-time response rate monthly. The rate hovers at around 80%, a big improvement from 55% when he began tracking it. For departments that don't respond, he contacts the appropriate VP.

"We've made the recipients stakeholders in patient safety," he says, noting that the response rate is reported to the health system's board of directors.

### **Finances**

*Metric:* The department's budget variance, which must be managed to within 10%.

Narance, who manages 2 departments, says both budgets are within range. One department is \$180,000 under budget because of a process change for freight and shipping charges. Previously charged to SPD, these costs are now charged to the department placing the order, such as the lab, cath lab, or OR.

"Having this under the SPD budget made it easy for accounting, but there was no accountability," he says. "Now when a department orders something overnight, the charge is on their budget."

Narance informs the staff about the department's budget status to keep them aware of costs and the potential impact of their requests, such as the purchase of new ergonomic chairs for their workstations.

### **Data collection**

SPD data is collected by hand daily using a worksheet that tallies the number of OR trays, peel packs, sterilization loads, tray problems, tray changes, and so forth. Narance estimates the worksheet takes about 15 minutes to complete. He compiles the data into spreadsheets weekly, which takes 1 to 2 hours a week. The pertinent data is reported on the scorecard monthly.

Though it takes time to record and compile the data, it's an invaluable management tool, he says, noting, "The data can save the day. It helps you to manage and justify decisions." It also helps keep the staff engaged and attuned to the department's performance. ♦