Pens, pencils, Post-its—setting out to save on supplies

Denice Bredlow, Fazi Amirahmadi, Deb Hagen-Moe

April 2014—The Department of Laboratory Medicine and Pathology is one of the largest departments at Mayo Clinic, with approximately 3,250 employees who work in 61 specialty labs at seven locations across Rochester, Minn. Throughout this large department, about 300 employees are designated to order supplies for their work units, which consist of laboratory and support staff. Before 2008, there was no standard process for ordering office supplies, which led to inefficient practices and escalating costs over time.

In November 2008, an initial study was conducted to identify the number and styles of office supply items ordered in 2008. The study, completed by our supply chain management analysts, revealed that 7,700 different styles of items, such as pens, tape, and binders, were ordered. This report raised concern that staff may have been ordering office supplies based on personal preference versus need for a specific item. For example, 217 different types of pens were ordered, with a wide range in cost per item, when perhaps only five style options would have been adequate to meet employees' needs. As a result of this review, a nine-person continuous improvement (CI) team, consisting of supervisors and support staff from different divisions within the department, was formed. The CI team incorporated Lean principles to eliminate office supply waste by reducing the number of unique items ordered and standardizing and simplifying the office supply ordering process.

Department leadership directed the team to reduce office supply expenses by five percent for 2009, as defined by Mayo Clinic leadership. In collaboration with departmental supply chain management and a systems engineer, the following data were obtained: office supply costs for 2008, total number of styles of various items (7,700, which includes standard and special-order items), and average time spent per week ordering office supplies per designee (30 to 60 minutes). This provided the benchmark to compare future office supply expenditures, the number of item styles ordered, and the work effort required per week.

We used root cause analysis to analyze the causes of the high cost of office supplies, which revealed there was no standard office supply list from which to order, no standard process for ordering, and no training for those who do the ordering.

As a way to improve the ordering process, the team addressed the three major causes for high supply expenses and suggested the following solutions.

Create a standard office supply list. The CI team reviewed the 2008 office supply raw data. Duplicate items were removed from the list and remaining items were sorted into categories and reviewed for the number of orders per item and number of divisions ordering the same item. We then compared the cost and quantity of similar styles of items. We developed the following criteria to determine which items would be placed on a standard office supply list to be used by everyone within the department: multiple divisions need the item, there is a documented departmental need (item is necessary to perform a specific task as verified by a supervisor), and the cost and quality are acceptable (the lowest-cost item wasn't always the most cost-effective).

The table above provides a sample of the number of items with similar functions that were ordered before and after the improvement phase of the project. This step confirmed our previous suspicion that supplies were being ordered based on preference versus need. For example, in 2008, 29 different styles of clipboards were ordered, when a single plastic style would have met the needs of all users. The number of unique items ordered was reduced from 7,700 to 400.

The team shared its findings with the stakeholders. The stakeholders had the opportunity to review the items that were going to be included and excluded from the standard office supply list, and to offer additional information

about why a particular item was needed based on their work requirements. The team discovered there were situations in which specific office supplies were needed. For example, a certain type of label was needed because it would adhere to frozen blood tubes. To address this, each division created area-specific lists of items needed to perform daily duties but that did not meet the criteria for inclusion on the standard office supply list. The CI team considered all of the feedback it obtained before finalizing the standard office supply list, which is available electronically as a reference for those responsible for ordering supplies.

The team developed a process for updating the list so that it reflects item availability and any item changes on the ordering Web site. For instance, when the supplier of copy paper was changed, the list was updated and the correct ordering information was available on the ordering Web site. Ordering designees understand that the list is not static and that changes may be made at any time, in addition to at the time of its annual review, to ensure that the information is correct at all times.

Create a standard operating procedure for ordering supplies. We created a documented process to ensure everyone would be aware of how supplies were to be ordered. In addition to the new policy, a standard operating procedure was created as a step-by-step guide for ordering, including, for nondesignees, how to look up items on the Web site. We developed a form for requests to order items that were not on the standard office supply list, either as a one-time request or as an ongoing request. Supervisor approval is required before the office supply committee (created from project team members to manage ongoing departmental supply expenditures) can approve the request for addition to either list.

Train personnel who order supplies. A new policy and procedure of this magnitude required a robust training program for the some 300 ordering designees within the department. In a presentation made during work unit and management meetings, we explained not just the changes being made but also the rationale. The goal was to reduce resistance from those accustomed to ordering whatever they preferred without regard to cost or quality. Work unit supervisors, divisional laboratory operation managers, and medical directors were informed in a similar manner.

As part of the training plan, a card called "Did you know?" was created and shared with office supply ordering designees to highlight the project's findings (see box).

As a result of the improved supplies process:

- The department reduced the cost of office supplies by 16 percent in 2009, compared with 2008, which exceeded our goal by 11 percent. In 2010 an additional one percent savings was noted. Savings in 2011 were not as significant because new printers were purchased that required more expensive toner cartridges, but total expenditures remained below the 2008 benchmark. We anticipate an additional reduction in supply expenses due to a departmental initiative to reduce the total number of printers and copiers, which will reduce the number of toner cartridges ordered.
- The standard office supplies list contained 640 items when the project was implemented. This was a 92 percent reduction in items as compared with the 7,700 items in 2008, far exceeding our goal of reducing available office supply items by 50 percent. The monthly cost of nonstandard office supply items dropped by 61 percent from January 2010 to January 2013.

- Ordering designees reported an overall time savings of about 20 hours per week, which translated to a yearly savings of 1,050 staff hours. The significant time savings is attributed to: 1) the creation of a standardized procedure for ordering supplies; 2) the creation of a standard office supply list that is available electronically and updated daily; 3) electronic access to the policy, procedure, workflow, and request form to order nonstandard items; and 4) elimination of conflict between some ordering personnel and the staff who wanted to order nonstandard items.

A successful improvement project requires a plan for sustaining improvements over time, or a preventive maintenance plan. With this in mind, we created the office supply committee to keep the standard office supply list updated and decide whether items will be added to or removed from the list. This committee acts as a resource for the ordering designees, meets monthly to review requests from ordering designees, and exchanges e-mails frequently to review and address ad hoc questions and suggestions.

To make each division and work area accountable for their monthly office supply expenses and orders of nonstandard items, the supply chain management analyst generates two monthly reports. The first report lists the total amount the department spent for office supplies, with information detailing the total amount each division spent, which nonstandard items were ordered, and who placed the order. The report includes a graphic representation of spending trends for the past three to four years and divisional totals. The final report is sent to the department and division administrators and to laboratory operation managers and supervisors for further followup within their division, such as holding people accountable for ordering nonstandard items.

Did you know?

- Mayo standard is to order high-yield toners as they are more cost-effective. Low-yield/refurbished toners have been found to be defective and can cause equipment failure.
- Retractable markers/highlighters can be over $14 more per dozen than markers/highlighters with removable caps.
- Some mechanical pencils are cheaper to throw away than trying to order refill erasers.
- 3×3 yellow sticky notes are $14 cheaper per dozen than 3×3 assorted colored Post-it notes.
- It is better to use a paper towel and water to clean a whiteboard. Whiteboard cleaner can take the finish off the whiteboard after multiple uses.

The second monthly report details orders of nonstandard office supply items, including a section indicating if the order was a one-time or an ongoing request and justification for ordering the item. This report is reviewed at the monthly office supply committee meetings to evaluate whether the item should be added to the standard office supply list or confined to the area-specific list. The committee reviews ongoing requests for nonstandard supplies using the criteria we created. If more than one division is ordering the same nonstandard item, the committee will

consider adding the item to the standard office supply list.

We learned three lessons from this project. Standardization saves time and money and reduces interpersonal conflicts. Cost is not the only consideration when selecting office supplies; quality also needs to be considered. Reducing the number of available office supplies did not have a negative impact on the laboratory's daily work.

[hr]

Denise Bredlow is medical secretary, transfusion medicine; Fazi Amirahmadi is systems engineering manager; and Deb Hagen-Moe is education program coordinator. Other members of the CI team are Annette Bjorheim, Brenda Clark, Joyce Kildahl, Angela Reese-Davis, Rebecca Winslow Rain, Tami Lawler, Jerrad Dietenberger, Megan Rask, and Kari Solak.