Case Study

Title: Facility Assessment Leads to Reduced Linen Utilization

Author: John Savage
Textile Management Consultant

BACKGROUND

This 360,000 square foot modern Medical Center in the Northeast region opened its doors to the community in 2012. They’ve earned LEED or Leadership in Energy and Environmental Design NC Silver certification for its use of sustainable, high efficient cost-saving materials.

Patients have access to a full range of medical care and surgical interventions delivered by a highly skilled medical team. This year, the Medical Center celebrated its fifth anniversary. In the past five years they have delivered 9,548 babies, treated 45,985 adults and served 750,282 outpatient visitors.

In July of 2017, Standard Textile’s regional linen management consultant was requested by materials management to conduct a facility wide linen analysis. The directive from materials management was to find opportunities to improve linen utilization practices and procedures while reducing cost in the linen department.

OBJECTIVE

Standard Textile’s linen management consultant completed the facility analysis of the laundry/linen system. The analysis consisted of interviewing patient care staff, observing linen practices and procedures, and collecting benchmarking information. To supplement the onsite facility analysis, a departmental survey was conducted. The analysis was presented to materials management and indicated many opportunities to achieve their desired goal.

The analysis identified:

1. Pounds per patient day were 23.39 based on current linen usage.
2. Patient care staff throughout the facility was either unaware or had no consistent bed change policy on their floor.
3. Linen was hoarded / stored in patient rooms for convenience.
4. Majority of the staff were unaware of the linen discard bag.
**STRATEGY**

To assist with implementing Standard Textile’s recommendations, the Medical Center formed a group called the Rapid Decision Team which consisted of members from administration, infection prevention, patient care staff, materials management, linen department and Standard Textile consultants. The Rapid Decision Team would be accountable for executing the recommendations set forth by Standard Textile. The participation of hospital administration and key players was crucial to moving forward with the implementation process.

**Bed Change Policy**
Developing a consistent bed change policy was top priority for the Rapid Decision Team. It was clear from interviewing patient care staff and monitoring current practices that it was not universal practice. Input from nursing assisted in the development of the new bed change policy. While developing the bed change policy, the Rapid Decision Team decided to review their current linen products to ensure the quality and products currently being used were conducive. The team evaluated alternates and made changes that best fit the needs of the end users and helped streamline their product mix.

Highlights from the bed change policy include:

- Linen changes occur on Tuesdays, Thursdays, and Saturdays.

Or

- As requested by patient, family member or clinician.

- Standardized bed makeup for all discharged beds including:
  - Incontinent pad usage
  - Pillow usage
  - Draw sheet / lifter sheet
  - Ambulance Packs

- Posting wall clings in all patient rooms explaining the bed changing policy to patients.

**Wall cling posted in patient rooms:**

The Medical Center is committed to a sustainable and healthy environment. For your comfort, we straighten bed linens each day and change bed sheets, pillowcases and blankets as needed. Bed changes can be performed more frequently at your request. We also provide a clean towel, washcloth and patient gown each day, or more often if you wish. Please let us know your linen needs.

Thank you,

The Staff
Clean Linen Discharge Audit Analysis

During Standard Textile’s facility analysis, patient care staff confirmed that clean linen is often kept in patient rooms for convenience. The amount of linen stored in patient rooms differed from floor to floor with some floors having excessive amounts of linen. This clean linen is considered soiled when the patient is discharged and must be removed for cleaning. It was noted during these discharges that approximately 3.96 pounds of clean linen was in the patient rooms at the time of discharge. These findings were explained, and patient care staff were educated during nurse managers meetings and staff huddles. In addition, the Rapid Decision Team utilized newsletters, e-mail and bulletin boards to communicate. The goal of the clean linen audit was to educate staff and bring awareness to the potential savings by changing their current linen practices.

Reject Linen / Discard Bag

The departmental survey revealed that 49 percent of employees stated clean unusable, damaged or stained linen is placed in the soiled linen bag. This improper practice not only increases cost but poundage as well. To educate the staff on the proper handling of linen, the Rapid Decision Team conducted a mobile linen awareness presentation throughout the facility. In conjunction, Standard Textile performed a linen awareness program onsite which all hospital employees could attend. The purpose of the linen awareness program was to heighten employee awareness about the new bed change policy and proper handling of linen including utilizing the reject/discard bag instituted by the Rapid Decision Team.

RESULTS

By developing a coordinated approach to addressing linen utilization needs, the Rapid Decision Team was very successful. The cumulative effects of the team’s efforts resulted in a 2.06 pound per patient day reduction. Pounds per patient day is a key metric that is used by linen management to determine how well a facility is performing. The steady decrease in pounds per patient day saved $7,602 over a three-month period. The charts below illustrate the reduction in PPD.
The following calculation provides an explanation of the annualized cost savings which equates to $30,408.

<table>
<thead>
<tr>
<th>Reduction in PPD</th>
<th>2017 Annualized Patient Days</th>
<th>Pounds Reduced</th>
<th>Processing Cost</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.06</td>
<td>X</td>
<td>$89,437</td>
<td>$0.340</td>
<td>$30,408</td>
</tr>
</tbody>
</table>

**CONCLUSION**

The partnership between Standard Textile and the Medical Center’s Rapid Decision Team proved to be very effective. By having the proper resources and members, the team effectively achieved their goal of reducing linen usage which resulted in cost savings for the facility. The staff have been educated and are now more knowledgeable on the protocol for linen usage. Overall, the goal was reached by decreasing linen usage. If we continue to follow up and analyze the linen department along with ongoing education plans, we are confident the Medical Center will be satisfied and on track for years to come.