Voluntary Incident Reporting Tool for a Multi-Facility Environment

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Abstract

As awareness of medical errors increases, innovative solutions are required to address these errors so that healthcare providers can be proactive rather than reactive. The development of an enterprise-wide voluntary incident reporting application will provide a mechanism to organize and prioritize resources toward correction of processes that could endanger patients.

Introduction

The Safety Event System (SES) project began in the second quarter of 2002 as part of an initiative to standardize safety incident data collection across the BJC Healthcare system. Prior to SES, BJC hospitals were using a variety of text and discrete data collection instruments. Some were electronic and others were paper-based. Integration and analysis across these systems was difficult and time consuming. Designed as a multi-facility application, SES standardized incident reporting across BJC and provided us the ability to prioritize interventions.

Methods

User Interface: Users enter information through a web-based application that is integrated with the enterprise master patient index (MPI) and a drug lexicon (Multum Lexicon ©2005) which helps eliminate the need to collect data from multiple sources while improving data accuracy.

Controlled Vocabulary: Data is entered into SES via choices from drop down menus or other integrated data systems thus eliminating free text data entry, and increasing data accuracy.

Standard Codes/Taxonomy: As an enterprise application with a goal of analyses across facilities, it was important to define a taxonomy. SES’ taxonomy was modeled from several emerging standards and can be mapped to the Patient Safety Event Taxonomy (PSET) standard being developed by JCAHO\textsuperscript{1}. The PSET was endorsed by the National Quality Forum (NQF), which represents the consensus of more than 260 health care provider organizations, consumer groups, professional associations, purchasers, federal agencies, and research and quality improvement organizations\textsuperscript{2}.

Reporting: SES uses BusinessObjects\textsuperscript{TM} (San Jose, CA) as the (BI) business intelligence tool to generate reports. Department managers, risk management, and patient safety officers receive daily, weekly, and monthly reports via secure email.

Change Control: A control board with representatives from each interest area was created to manage and prioritize changes within SES.

Results

Table 1 shows the number and types of events reported at different facilities using SES. Users can view these data in a variety of formats (charts and text). Additionally, they can drill down to see more detailed information.

Table 1: 2005 incident counts for some BJC facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Med Fall</th>
<th>TTP</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Hospital</td>
<td>9098</td>
<td>1262</td>
<td>1051</td>
<td>1923</td>
</tr>
<tr>
<td>Community Hospital 1</td>
<td>5269</td>
<td>482</td>
<td>451</td>
<td>1884</td>
</tr>
<tr>
<td>Community Hospital 2</td>
<td>1307</td>
<td>476</td>
<td>697</td>
<td>1287</td>
</tr>
</tbody>
</table>

Med = Medication; TTP = Test, Treatment, or Procedure

Conclusion

Since deployment, SES has had the following successes:

- Integrating safety event information in a more consistent way across the enterprise.
- Showing users safety event information at a finer level of detail.
- Improving efficiencies of the processing and analysis of incident events through data integration and process automation.

References