Application for 2015 University of California Larry L. Sautter Award for Innovation in Information Technology

Project Title: UC Medical Center Workers’ Compensation Dashboard

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Project Leader(s) and Team Members

The UC Medical Center Workers’ Compensation Dashboard was originally developed for the Workers’ Compensation managers and medical center executive leadership teams (CEOs). As part of the development process, UC Risk & Safety Solutions collaborated with the Environmental Health & Safety directors and medical center workers’ compensation managers, and were able to gather valuable requirements contributing to the success of the project.

The team members listed below made up the core application development team:

• Laryssa Dotson, Scrum Master & BA
• Nicole Vang, Scrum Master & BA
• Connie Oberholster, BI Architect
• Colin Aiken, Developer
• Tony Tang, Developer

Project Description

The UC Medical Center Workers’ Compensation Dashboard illustrates a comparison of Workers’ Compensation claims and losses in an interactive format. Users are able to look at historical data and compare and contrast overall losses across multiple campuses. This historical view allows Workers’ Compensation managers and leadership to identify trends and take the proper actions to reduce claims and losses for each medical center.

The information selected to appear in this dashboard was reviewed and selected by the UC Medical Center Workers’ Compensation managers. Their selection methodology was based on the areas which they determined to have the highest risks or the greatest opportunity for improvement in the area of workers’ compensation.

Project Description

The UC Medical Center Workers’ Compensation Dashboard imports workers’ compensation data from iVos (an insurance processing software platform) and the data is broken down into various categories,
such as total number of claims and injuries by type and function. The dashboard communicates workers’ compensation data in a way that can be quickly and easily understood so that users can gain further insight regarding injuries and workers’ compensation losses across all UC Medical Centers.

In addition to providing a breakdown of information around injuries and claims, the dashboard provides a visual representation of lost work days paid. This information is critical to end users as this directly impacts the bottom line for each campus. By identifying trends related to lost work days, Workers’ Compensation managers and leadership can plan accordingly and make necessary changes in their processes to improve overall business performance.

Lost work days impact various areas within an organization. By identifying specific areas within an organization where lost work days are significant, the end user can take the proper actions and ultimately improve the following areas:

- Lower annual premium;
- Increase productivity and morale;
- Lower labor costs (decrease in replacement employees; overtime, etc.);
- Increase ability to produce quality services;
- Lower safety issues due to adequate staffing and/or adequately trained staff

Dashboard Layout
### Chart and Table Details

<table>
<thead>
<tr>
<th><strong>Table 1 and 2</strong> - Main summary of claims for each campus</th>
<th>The table on the left (Table 1) displays comparative data analysis across campuses for claims incurred. The table on the right (Table 2) displays claims per 100 full-time employees, the number of lost days paid and the number of open claims. This provides a quick analysis of claims and lost work days so managers and leadership can compare losses across campuses and identify areas for improvement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chart 1 - Claims by Department Bar Chart</strong></td>
<td>Displays comparative analysis of claims by department for each medical center. This comparison of departments allows managers and leadership to easily track performance and trends across the campus.</td>
</tr>
<tr>
<td><strong>Chart 2 - Claims per 100 full-time employees Bar Chart</strong></td>
<td>Displays claims per 100 full-time employees for each UC Medical Center. Hover over any medical center to see the key performance indicator ratio=claims 200,000/hours worked. This helps track the overall performance and identify trending of claims for each medical center.</td>
</tr>
<tr>
<td><strong>Chart 3 - Injuries Sustained by Type Bar Chart</strong></td>
<td>Displays the total number of injuries by type for each medical center. This information will help identify the trends related to cause of injuries for workers’ compensation claims.</td>
</tr>
<tr>
<td><strong>Chart 4 - Injuries by Function Bar Chart</strong></td>
<td>Displays the total number of injuries by function for each medical center. This information will help identify which types of work have a higher probability of workers’ compensation claims.</td>
</tr>
<tr>
<td><strong>Trend Comparison Line Graph</strong></td>
<td>Provides a comparative trend analysis of claims reported across all UC Medical Centers. This trend comparison can be changed between monthly, quarterly and annually. You can modify the timeframe by changing the reporting period at the top of the dashboard. This allows Workers’ Compensation leadership to compare and contrast their performance to other campuses and identify areas for improvement.</td>
</tr>
</tbody>
</table>
Innovative

The UC Medical Center Workers’ Compensation Dashboard breaks down data into visually appealing and comprehensive charts and tables. This allows managers and leadership to gain a quick summary of the overall performance of each UC Medical Center. By creating one place where managers and leadership can view total number of claims, details about those claims and a summary of losses, we are able to help end users save time on their reporting efforts and give them insight into workers’ compensation losses. By gaining this insight, managers and leadership can take the necessary steps to improve the overall bottom line for their medical center.

Operational Efficiency

The data is updated every month. However, due to a lag time with the “employee hours worked” data provided to the system, this dashboard shows data with a two month delay. This means that if you are viewing the dashboard in March then you are seeing data that is current up to January.

There is an export function within the dashboard that allows users to quickly export detailed reports to Excel or PDF. This functionality replaces a manual and paper-heavy process that existed prior to the development of the dashboard.

Access to Dashboard

The dashboard is accessible via SharePoint. Due to the sensitive information being shared within the dashboard, users need to receive approval by UC Workers’ Compensation leadership in order to view the dashboard itself. Once they have received approval, the user can request access through SharePoint and the Business Intelligence team will grant the user access to the dashboard.

To request access to the UC Medical Center Workers’ Compensation Dashboard, please contact  erm@ucop.edu.

Collaboration

The UC Medical Center Workers’ Compensation Dashboard was developed with input from UC Medical Center Workers’ Compensation teams. The Business Intelligence team initially received a request to develop a workers’ compensation dashboard from EH&S leadership. Jason Barry, COE, Healthcare Risk and Safety for UC Medical Centers, stepped in and acted as the Product Owner for this effort. Jason was able to provide support and guidance to the Business Intelligence team by utilizing his knowledge and experience around workers’ compensation for all UC Medical Centers. UC Risk & Safety Solutions follows an Agile methodology, and end users were involved throughout the development process of the dashboard.

Project Timeline

The UC Medical Center Workers’ Compensation Dashboard was developed in iterative cycles, beginning in early 2014 and released in February of 2015 to the UC Medical Center Workers’ Compensation leadership teams. Upon release, feedback was continuously collected and the requested
changes/enhancements were added to the backlog. The changes will be implemented during Phase 2 of development (which is currently underway).

Technology Used

The dashboard was built using SQL Server Reporting Services 2012 with SQL Server 2012 as the database and is hosted on a SharePoint portal.