RSI Risk Reduction and RollerMouse

Small Batch Data Review of Seattle City Light Office Workers
Takeaways

• Short term results of risk and pain reduction using RollerMouse.
• Potential long term effects of continual use of RollerMouse.
• Productivity changes with measured employees.
• Company savings.
Initial evaluation

- A standard ergonomic assessment was conducted for each individual.
- The ergonomic assessment for all office workers is now an annual requirement for all City Light employees who spend at least 40% of their week at a workstation.
- Determinations for changes to the workstation are based on an ergonomic review and the employees inputs to the online risk assessment tool.
Employees in the Review

• There were 14 employees that were in this review:

• Their initial risk levels were:
  • 8 High Risk (750 or higher)
  • 5 Medium Risk (300-749)
  • 1 Low Risk (0-299)

• They initially had the following types of input devices (mouse):
  • 6 had a different type of rollermouse
  • 2 were using “ergonomic” style devices with roughly 45 degrees of slant
  • 6 had the standard mouse issued with desktop PC setups
Employees in the Review

• No employees were using an ergonomic keyboard such as the Sculpt, Logitech Wave, or other contoured type keyboard.
• All employees were initially using standard keyboards.
• 8 employees were later transitioned to a keyboard without a 10-key attached due to minimal 10-key usage.
  • 6 Kinesis Freestyle 2 keyboards
  • 2 Evoluent keyboards
• Primary data was taken solely from our online risk management tool.
  • Baselines were each employees initial assessment and evaluation.
  • Additional information was pulled using interviews with both users and supervisors:
    • Quality of work
    • Efficiency changes
    • Perceived comfort levels (verified with the risk tool)
  • Employees were from a variety of job descriptions within City Light:
    • 60% were from Customer Service jobs
    • 30% were DAs or Department Administration
    • 10% were from Engineering
WMSD Complaints

- All 14 employees had discomfort with their shoulders, neck, elbows, and hands to varying degrees.
  - Discomfort levels are measured by the tool as:
    - None
    - Occasional
    - Frequent
    - Constant
- A review of the data showed:
  - All users had elevated levels of discomfort.
  - Level was measured as either frequent or constant.
  - The lone low risk employee was beginning to develop issues.
Changes to the Workstations

• Employees were given the Contour RollerMouse Red because:
  • Elevated shoulder discomfort from reaching for their standard mouse.
  • Prolonged computer work due to the nature of their job tasks.
  • Trial usage of other ergonomic devices did not show any improvement in the affected areas.

• Follow-ups for the employees were done based on Risk levels:
  • High risk were followed up at 30 days.
  • Medium risk were followed up at 60 days.
  • Low risk were followed up at 90 days.
Initial Follow-up Data

- Excellent results using the RollerMouse Red.
- Follow-up assessments from the users showed:
  - 42% decrease in risk scores for High Risk employees.
  - 37% decrease in risk scores for Medium Risk employees.
  - 15% decrease in risk score for the Low Risk employee.
- This number speaks directly to the overall score for the employee.
- This change can also be impacted by other changes that were made to each employee's workstation, however those changes were minimal in scope.
• After 6 months there was an additional 20-33% decrease in discomfort.
  • This decrease was directly related to the affected areas:
    • Shoulders 33%
    • Neck 25%
    • Elbows 27%
    • Hands 20%
• The requirement for annual assessments has shown (only 8 of this 14 have completed to date):
  • A further 15% decrease in discomfort for High Risk users (5).
  • A further 11% decrease in discomfort for Medium Risk (3).
Productivity Changes

• Although difficult to directly measure, our online risk tool does calculate for changes in lost productivity.
• The average loss time for the users of RollerMouse Red prior to issuance was 38 minutes daily.
• After 6 months of usage this number has decreased to 30 minutes.
• This translates to an efficiency increase by this group alone of 347.6 recouped productive minutes.
• That is roughly $287K in recouped productivity (based on avg. salary).
Conclusions

• Short term pain mitigation was evident when the RollerMouse Red was issued and the employees were coached on how to effectively use it.

• Data shows that mid and long term use has continued to show further decreases in both targeted discomfort levels and overall employee risk.

• There were measured productivity increases and decreases in lost or unproductive time for each employee.

• Supervisors and employees were happy with the results from using the RollerMouse Red and the fact that there is a solid ergonomic process to use now.
Questions?
Thank you

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