

## Case Study: IT System User Interaction Optimization



<b>Abstract:</b>	Systems evolve over time as new functions are added and users interaction patterns change as they gain experience using an application. Even the best of systems can be improved and offer opportunities for process improvement. BI analysts were asked to examine how clinicians were using the VHA's Vista CPRS system and to identify optimizations that would result in user timesavings.
<b>Outcomes:</b>	<ul style="list-style-type: none"> <li>• Potential time-savings of 28 minutes per day for each clinician using the system</li> <li>• Improved user satisfaction</li> <li>• Fewer medical errors, improved quality of care</li> <li>• Simple, easy to implement system changes</li> </ul>
<b>Lessons Learned:</b>	<ul style="list-style-type: none"> <li>• Observe users in the "wild" to identify HCI optimizations</li> <li>• Use simulations tools to overcome the "analysis barriers"</li> <li>• Iterate, Iterate, Iterate</li> <li>• Small teams can achieve outsized results</li> <li>• Failing early significantly reduces costs and delivers a better product</li> </ul>
<b>Challenges:</b>	<ul style="list-style-type: none"> <li>• How to identify and assess HCI opportunities</li> <li>• How to model realistically model the system within existing design constraints</li> <li>• Ensuring compliance with HIPAA and privacy protections</li> </ul>
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