



**IT IS LISTENING,
CAN YOU HEAR IT?**

Clinical Application

USER FEEDBACK SYSTEM



The Problem

- Clinical Systems are extremely complex
- IT configures and deploys best practices (best guesses) about what users want
- Users don't know to whom to make suggestions for improvements
- Users get frustrated and satisfaction suffers



Purpose

To deploy a simple communications device to allow users an easy avenue for suggestions

- Must be very convenient
- Must be fast as users are very busy
- Must provide feedback to users' submissions
- Must encourage 'a conversation' between users and IT Department
- Must allow retrospective analysis



Vision Statement

- A system in which users can easily communicate with IT
- A system in which IT can also easily communicate with users in ongoing conversation
- Continually expose opportunities for system enhancement, training, or process improvement
- Enhance user satisfaction and productivity



Specific Objectives

Allow users to:

- Offer suggestions, comments, or questions at the moment they experience the wish to do so.
- Spend 20-30 seconds providing the feedback and then returning to their previous tasks.
- Direct comments to system subject matter experts and receive knowledgeable responses within a short period of time.
- Request minor changes to system functionality at the point of failure



Objectives, cont...

Allowing the IT Department to:

- File user input and create tickets to be addressed by subject matter experts.
- Respond to users with acknowledgement of their suggestions
- Request more information or discuss next steps in fulfillment of suggestions.
- Address previously unknown training opportunities.
- Establish and maintain a conversational relationship with users willing to provide suggestions and input
- Establish a knowledge base of suggestions usable for metrics and budgeting for user support and system enhancement.



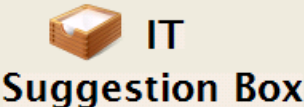
Preferred Approach

- Place device as icon on toolbar or within menu structure
 - Must be easily available at all times
- Device must be simple and quick to use
- Pre-fill user contact data
- Pick list for category of suggestion
- Free text for suggestion text
- 'Please contact me' selection
- Email to help system and to user for acknowledgement



Preferred Approach, cont...

IT is listening, can you hear IT?



IT Suggestion Box

Name, Occupation:

Organizational Unit:

Email Address:

If you need an immediate response to a problem, please call IT Support at 727-555-1212 in addition to or instead of filling out this form.

To allow us to best route your message, the topic of this communication is:

Suggestions/comments/complaints (please DO NOT include patient identifiable information):

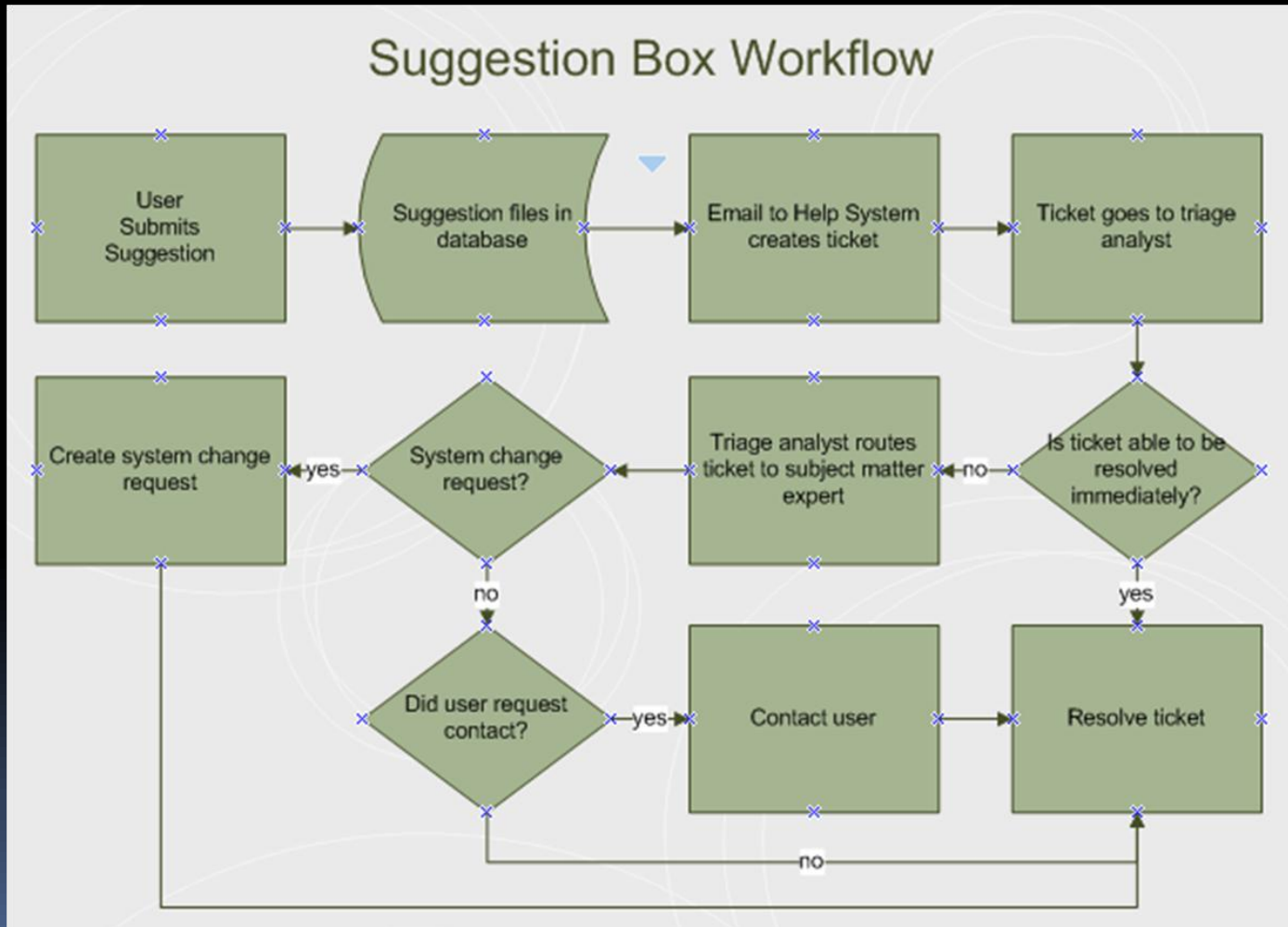
Please add referring md as a new field to my patient list report.

Please contact me for follow up:

Yes
 No



Workflow



Key Stakeholders

- Patients
- Information Technology
- Providers/Clinical Users
- Health Information Management
- Help Desk

Additional Stakeholders

- Project Leader
- Team Member
- Patient Families
- EHR Coordinators
- Trainers
- Troubleshooters
- Support Maintenance
- Organizations
- External Regulatory Agencies
- Payers
- Government
- Taxpayers
- Staff Families
- Support Staff
- Ancillary providers

Expected Benefits

- Enhanced communication
- Improved usability and applicability
- Increased efficiency
- User satisfaction

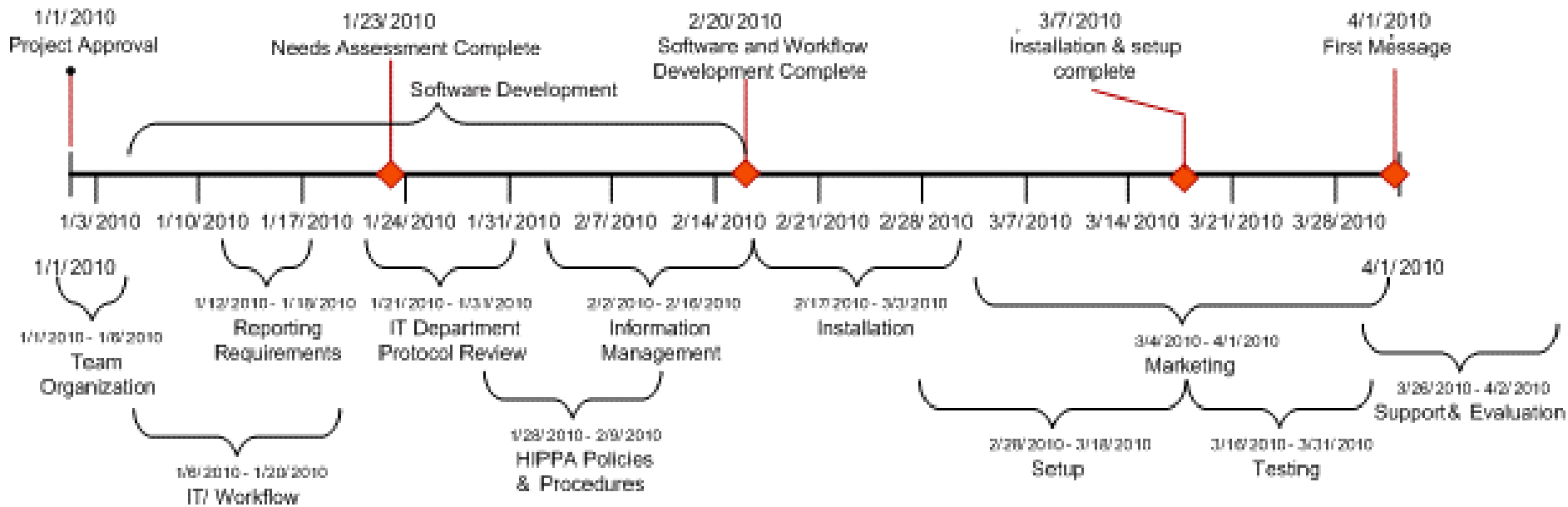
Performance and Progress Measures

- Plan, Do, Study, Act
- Customer satisfaction survey
- Data collation and review

Potential Risks

- User not utilizing system
- Understaffing to support system
- Overstaffing to support system

Timeline & Milestones



Project Management

- Project Manager
- Software Developers
- IT Triage & Referral Leader
- IT Evaluation & Follow up Leader
- Users
- Quality Assurance Leader

Alternatives

- Different from Help Desks
 - Goals
 - Characteristics
 - Integration
- ITIL (Information Technology Infrastructure Library)*
 - Service levels
 - Link between Users and IT

* <http://itmanagement.earthweb.com/service/article.php/3295251>)

Cost Estimates

- The system we are describing is not very complex. On average, a project like this could expect to take between 3 – 4 weeks from start to finish.
- There is not much domain knowledge required, nor will we be requiring any non-standard technology or skills to be used in this system.
- These factors will keep our costs in check.

Cost Estimates

- If you must outsource this project, you have several choices:
 - You could offshore it, for roughly \$10-\$30 per hour
 - You could work through a company that will staff your project for you, at roughly \$75 per hour
 - You could have a company handle the whole project for roughly \$120 per hour
 - Or, you could use an in house staff developer, for roughly \$40 per hour.

Cost Estimates

- Using the most likely option from the previous slide, we will assume we are using a staff developer.
- 3-4 weeks of development time at that rate is between \$4,800 and \$6,400, not including ancillary costs, such as 401k, and health insurance for your employee.

Cost Estimates

- A system of this scale will require minimal maintenance. We have estimated that it will require roughly 5 hours per week to maintain, performing such tasks as server patches, reboots, data backups, and database index rebuilds.
- This adds \$200 per week to our system cost.

Cost Estimates

- Making use of the data entered into our system will be the biggest expense.
 - Help desk costs: 10 hours per week @ \$12 an hour
 - Analyst costs : 10 hours a month @ \$40 an hour

Cost Estimates

- Implementation
 - The design of our system is such that it will be centrally hosted. This means that new software will not need to be sent to all our deployed locations.
 - To implement our system, existing UI's can simply be tweaked to embed a link to our system. There will also need to be a context sharing link established between the 2 systems.
 - It is expected that we can write the context module once, and reuse it in each deployment, at a one time cost of \$320 - \$400.



Cost Estimates

Task	Hours	Rate	Cost
Develop and Test System	120 - 160	\$40	\$4,800 - \$6,400
Deployment	8-10	\$40	\$320 - \$400
Total	128 - 170	\$40	\$5,120 - \$6,800
Additional hardware or software licenses	-	-	\$0 - \$6,000
Help Desk	10 / week	\$12	\$120 / week
Analyst	10 / month	\$40	\$400 / month
Programmer	5 / week	\$40	\$200 / week
Total for 1 year of maintenance	65 / month	-	\$20,160
<u>Grand Total for project in year 1</u>			<u>\$25,280 - \$26,960</u>



Sources of funding

- This project will not generate a revenue stream of its own.
 - Could be considered to pay for itself with more efficient workflows and a UI
- The results of the suggestion analysis could be studied and published under a grant to help defray costs.



IN CONCLUSION

It is the *vision* to understand our users and their needs that we seek.

The Suggestion Box is a tool to support that vision and understanding.