



BUSINESS CASE

AUTOMATED DISCHARGE PHONE CALL MANAGER SYSTEM

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Revision History

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3	04/25/05	L Gayten	Third Draft
4	05/20/05	L Gayten	Fourth Draft
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1.0 Problem Statement/Business Opportunity

Internal Customer(s)/Business Sponsor(s)

Internal Customer(s)/Business Sponsor(s)
<p>The Department of Case Management and the Resource Center under the direction of Jean Barrett Blake, Director, Patient Care Services, Director, Case Management and Access will serve as “project champion” for this initiative.</p> <p>Project implementation will be on a phased approach defined as follows:</p> <p>Phase 1 – Mitchell and Comer Hospitals Phase 2 – Emergency Department (ED) Phase 3 – Ambulatory (DCAM)=</p> <p>P</p> <p>The other customers that will benefit from this project will initially be inpatient treatment areas represented by patient care delivery, support services and ancillary support, Case Managers, Physicians, and Residents. As the system is deployed to other areas of the hospital, the customer base will grow to include ambulatory and ED treatment areas and teams.</p>

Rationale/Motivation for Project

Rationale/Motivation for Project

Currently, an average of 100 adult patients are discharged from Mitchell Hospital on a daily basis. Discharge calls have been identified as a “must have” for the Achieving Breakthroughs performance improvement /customer service initiative.

The process is currently a manual one, requiring each Case Manager to access on a daily basis the Patient Communication Management database that is accessible on a shared network drive. From this database, patients that have been discharged within the past 24 hours are identified. The Case Manager places the discharge follow-up phone call, and documents the responses on a paper log sheet that is generated by the Patient Communication Management database. Information gathered on the log sheet is forwarded to the Resource Center Staff, who then transcribe the collected data back into the Patient Communication Management database. Hard copy reports of this information are printed and distributed to the inpatient Care Center Directors throughout the hospital for review and follow-up as necessary. .

The current process requires greater than 16 hours per week in clerical time to collect, transcribe, and collate results. Discharge calls take an average of 4-6 minutes per call, and then the Nurse Case Manager must write a separate e-mail to managers if items require follow-up, or to staff have been recognized by patients as having provided very good service.

Metrics as to the number of calls attempted and the number of calls successfully made to patients are hand tallied by the Resource Center on a monthly basis, requiring 3-4 hours of time per month.

Currently, there is no mechanism in place to ascertain if follow-up action is performed once a problem or issue is identified. This is partially addressed in the new software, as it provides notification to the patient care treatment team member(s) via email. However, at present, there does not exist a mechanism in the Discharge Call Manager System to ensure follow-up and resolution. Request has been made of the Studer Group to revisit this so as to provide a means within the application where follow-up action items can be tracked.

The system allows for standardization of survey questions as well as customization by unit, thereby allowing for specific key words and indicators to be addressed by the Case Managers (i.e., pain management, call light response, discharge instructions, likelihood of recommending UCH, patient perception that care and treatment plans have been coordinated across disciplines.)

Business Objectives/Benefits

Business Objectives/Benefits
<p>Currently, the entire Adult Case Management staff of seventeen (17) completes the discharge phone call follow-up process. With the implementation of the Automated Discharge Call Manager System, the workflow will be restructured limiting the number of case management staff responsible for placement of the discharge phone calls to 2-4. This change in workflow will enable the remainder of the case management staff to focus their attention on increased case management functions.</p> <p>Potential measurable benefits identified with the implementation of this system include:</p> <ul style="list-style-type: none">○ Automation of a manual process that will streamline, standardize, and simplify the overall work activities and increase efficiencies, eliminate cycle of re-work. Proposed metric: Collective average completion/cycle time per case (Resource Center and Case Managers) measured against Current State and Future State○ Improve communications across teams in the management of patient care Proposed Metric: Measure delivery time of survey results to parties in current state versus future state○ Increase productivity by optimization of resources Proposed Metric: Measurement of timesavings for administrative and nursing staff that will allow them to focus their attention on other job related functions.

Alignment with UCHHS and IS Strategic Plans

Alignment with UCHHS and IS Strategic Plans

Integration of Demographic data from Registration System: By means of a night batch extract from Last Word, patient demographic and relevant discharge data will be fed into the Discharge Call Manager System.

Leveraging of Information Technology: Use of the Discharge Call Manager System will be a vehicle in identifying opportunities for performance improvement and measurement of patient satisfaction as part of the “Achieving Breakthroughs” initiative.

It will also serve as a vehicle for reward and recognition opportunities for all staff members interfacing with patients.

2.0 Solutions Concept/Business Benefits

Vision Statement

Vision Statement
<p>This process will automate the recording of the outcomes of the discharge calls, allow for data collection and trending of customer service issues, and assist in closing the loop for issues that require follow-up. The system also serves as a vehicle for reward and recognition for employees.</p> <p>Survey questions can be customized by each specialty unit, thereby maximizing the impact of the discharge calls relative unit-specific 90 day action plan for improving patient satisfaction (pain, call lights, evidence of interdisciplinary team in the management of patient care issues), and encourage discharged patients to complete the Press Ganey survey received in the mail.</p>

Goals/Scope

Goals (Include Scope)
<p>The goals for this project include:</p> <ul style="list-style-type: none"> • To assist users (Case Managers) with contacting recently discharged patients • To record information about the patient’s stay and current condition • To send email notifications to various interested parties regarding the patient’s comments and needs. • To provide mechanism that will trigger and ensure follow-up on reported issues • This system will provide management reports that will provide data to analyze opportunities for improvement in patient satisfaction. • To provide reward and recognition opportunities for staff <p>The system will be deployed in a phased approach, with the initial scope confined to Mitchell and Comer inpatients. Subsequent phases will include Emergency Department, with the final phase being the DCAM/Ambulatory care centers.</p> <ul style="list-style-type: none"> • Phase 1: Mitchell and Comer inpatients • Phase 2: Emergency Department • Phase 3:DCAM /Ambulatory care centers

Project Benefits

Project Benefits

The following key benefits have been identified from implementation of the Discharge Call Manager System:

- Increase productivity of Case Manager and Resource Center staff
- Provide efficient process for documentation of discharge phone calls
- Provide mechanism for automated communication via email to patient care areas and support services for problems and/or issues requiring follow-up and resolution
- Provide management reporting to identify areas for improvement
- Reduce current manual interventions and processes
- Standardization of discharge phone call process
- Provide mechanism that ensures follow-up by treatment parties of reported issues
- Provide reward and recognition opportunity for staff

Acceptance Criteria

Acceptance Criteria

The acceptance criteria for this project is:

- The successful implementation of the Beta format of the Discharge Call Manager System in accordance to PMO methodologies.
- Integration of pertinent patient demographic, discharge disposition, and physician data from Last Word (Registration) system.
- The ability to run management reports provided by the Studer Group
- The contractually agreed upon performance warranties are met

Persons in the Acceptance Process:

- Jean Blake, Business Sponsor
 - Kristen Kalebich, Resource Center
 - Denise Haritos, Project Manager
 - Lynn Gayten, Manager, Clinical Applications
 - Nora Ellis, Director, Clinical Applications
 - Representative(s) from Case Management Team
-
- The testing team for the mandatory scope will be made up of business users from Case Management and the Resource Center
 - The Studer Group will perform onsite system installation and configuration, ensure performance and integration of registration data from Last Word adheres as expected, and provide onsite training and support
 - Lynn Gayten will validate that the project has proceeded based on the scope and plan.
 - Lynn Gayten and Nora Ellis will make key decisions associated with the scheduling of this project in relation to other IS projects.
 - The project sponsor, Jean Blake, will complete final sign-off.

Definition of Completion:

The project will be considered complete when all assigned Case Management and Resource Center Staff have been trained and the select group of Case Managers begin utilization of the system, and the Resource Center begin utilization of system generated reports.

Critical Success Factors

Critical Success Factors

The key elements that will determine the success of the project will be:

- The quality of training and use of the system by all business units/users (Resource Center and Case Management) as appropriate
- Ability to print management reports from the Discharge Call Manager System on demand
- Ongoing nightly import of discharged patient data from Last Word Patient Registration System
- Portability of access to system via UCH Intranet
- Regular maintenance by Resource Center Staff of UCH internal e-mail addresses housed within the application
- System's adherence to response time measurements as per contractual performance warranties.

Customer Profile Customers Impacted

Customers Impacted

The end users will be the Department of Case Management and administrative staff within the Resource Center.

The staff in all inpatient care delivery areas or nursing units; support and ancillary service areas for Mitchell and Comer hospitals will be impacted as a part of the follow-up process of the calls placed by the assigned case managers. The management staff of the areas noted below will be responsible for responding to the comments and issues of the recently discharged patients that have been elicited by the case management staff as a result of the patient surveys administered.

Customer Needs

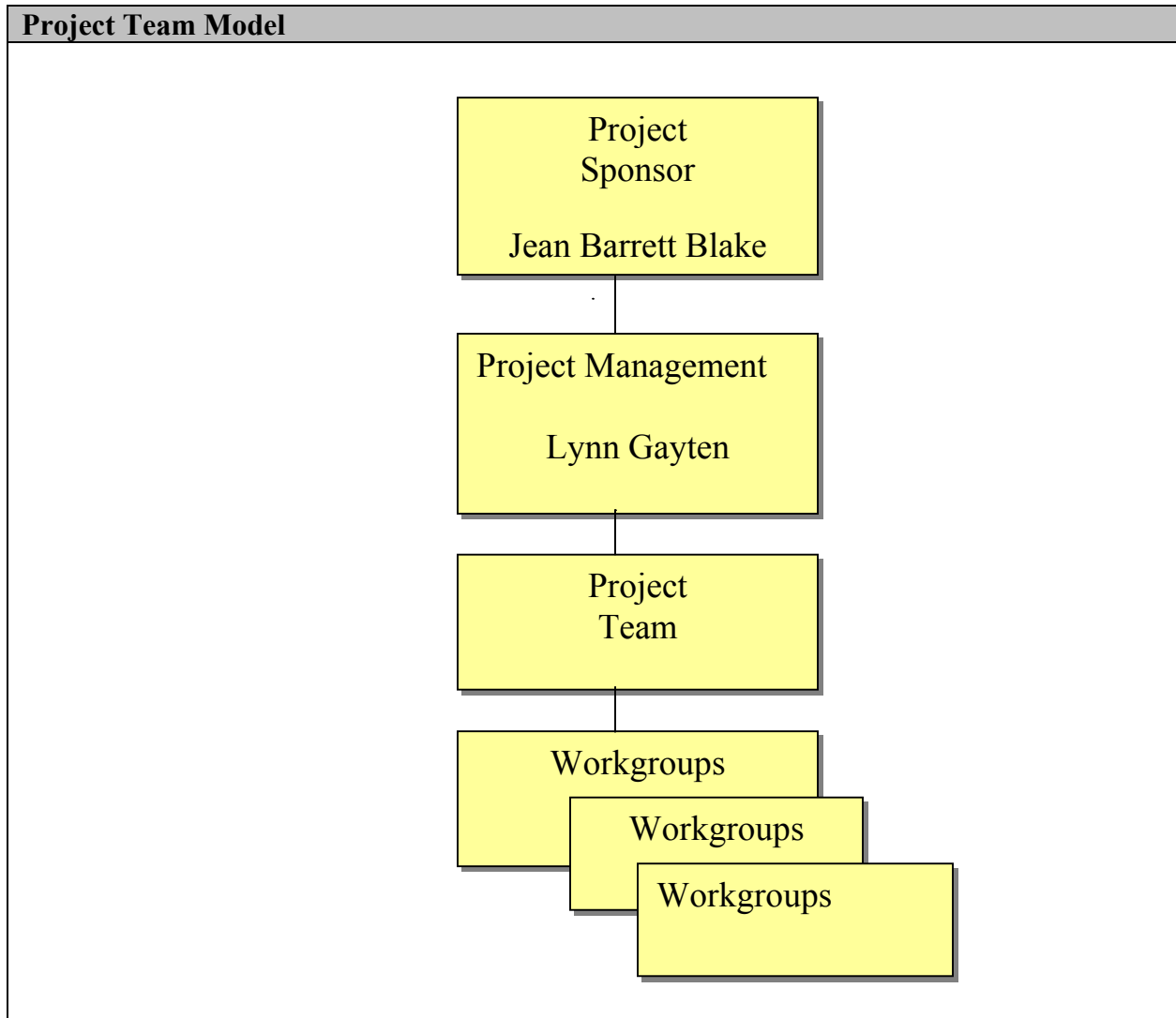
Customer Needs

Customer needs include:

- Onsite training and coaching by the Studer Group to ensure all designated staff are able to use the system effectively
- Ongoing help desk support during normal business hours, Monday through Friday to ensure consistent adoption of application standards.
- Awareness training for clinical staff impacted by changed discharge phone call process

3.0 Project Structure

Project Team Model



Preliminary Schedule

Preliminary Schedule
<p>Project implementation will be on a phased approach defined as follows:</p> <p>Phase I – Mitchell and Comer Hospitals (July-August) Phase 2 – Emergency Department (ED) (TBD) Phase 3 – Ambulatory (DCAM) (TBD):=</p> <p>Ⓟ</p>

Resource Requirements

Resource Requirements				
Level	# Of Resources	Total Hours	Rate	Cost
Project Manager	1		N/A	N/A
Programmer/Developer	1		N/A	N/A
Analysts (Network, Security, Application (LW), Clinical Applications	5		N/A	N/A
Consultants (Studer)	4		N/A	N/A
Trainers (Studer)	2		N/A	N/A
Department (Case Management) Subject Matter Experts	3		N/A	N/A
Total	16			

One-Time Capital Costs

One-Time Capital Costs		
Item	Cost Estimate	Contingency
Hardware – SQL Server	\$ 5400.00	0
Hardware– Web Server	\$ 5000.00	
SQL Licenses (\$32.00/user)	\$3200.00	
Operating Systems	\$ 523.00	
Total	\$ 14,123.00	0

Long-Term/Recurring Life Cycle Costs

Long-Term/Recurring Life Cycle Costs		
Item	Cost Estimate	Contingency
Maintenance contract costs Year One (annual)	NONE	0
Maintenance contract costs Year Two (annual)	NONE	0
Maintenance contract costs Year Three (annual)	NONE	0
Total	NONE	0

Key Assumptions

Key Assumptions
<ul style="list-style-type: none"> • Case Management department will provide sufficient staff for process assessment and design phases and for testing phase. Unavailability of key users will delay project or result in less than acceptable quality reviews • The Patient Communication Management Database, which is the existing tool used to record and log discharge phone calls will be replaced by the Discharge Phone Management System. Additionally, the new system will initially house four (4) canned reports with additional reports to be identified UCH with subsequent development by Studer. UCH will continue to work with Studer as part of the beta site agreement in the collaboration of new reports within the system. • Onsite presence of Studer Group for installation of software application and appropriate configurations and setup with collaboration from IS Network Services and Data Security. • Onsite presence of Studer group for training and deployment • IS resources from Data Security, Network Services, and Financial Systems will be available during the project for Construction Phase (including Testing). Loss or unavailability of such skills has the potential for delay of project deliverables.

4.0 Risk Analysis

Impact on Current Systems

Impact on Current Systems
<p>This project will not impact any current IS systems:</p> <ul style="list-style-type: none">• HL7/ADT interface will not be used.• The patient and demographic data for discharged patients will be exported nightly from the Last Word Registration system via batch mode into the Discharge Call Manager System.

Risk Management

Risk Management
<ul style="list-style-type: none"> • Risk: Memory size and storage (by Phase three of the project; ½ million out patients visits per year will need to be stored as well as 300,000+ inpatient discharges and 70,000+ ER visits. <p>Mitigation: Have asked Studer to obtain application server sizing statistics from facilities where product is currently deployed, i.e., Sacred Heart and Cleveland Clinic for UCH to use as a measure for our server build.</p> <ul style="list-style-type: none"> • Risk: Accuracy of data housed in Registration System (Last Word) of discharge related data relative to physicians, discharge disposition, diagnosis, destination, etc that will be exported into Discharge Call Manager System cannot be guaranteed. <p>Mitigation: Resource Staff to have access and training in Last Word as a stopgap measure to address incorrect physician and discharge disposition data. Incorrect demographic data will be routed to Admissions for correction</p> <ul style="list-style-type: none"> • Risk: Studer will provide a link within the notification email to Patient Care Directors for follow-up on resolving identified patient issues. This link will point the user, i.e., Patient Care Directors into the system to view the comments on the patient issue. It will be incumbent upon the Patient Care Director or designee to access the link as part of closing the loop on the issue. • Mitigation: Resource identified within project team (i.e., Director of Nursing Informatics) to serve as a liaison to the Patient Care Directors to facilitate follow-up on issues identified within the system. • Risk: Potential contention for IS resources <p>Mitigation: Plan to engage IS management team during planning stages of project to assess resource requirements and secure commitment of availability.</p>

5.0 Glossary

Terms of contracts, vendor contact information

Contacts

6.0 Appendix

Related Project History

Related Project History
None

Alternatives Discussion

Alternatives Discussion
No alternative products or solutions were considered.

7.0 Business Case Approvals

Denise Haritos
Project Manager

Date

Lynn Gayten
Manager, Clinical Applications

Date

Jean Blake
Business Sponsor/Customer(s)

Date

W. David Koch
Director, Clinical Applications

Date

Jamie O'Malley
Vice-President, Chief Nursing Officer

Date

Eric Yablonka
Vice-President and CIO

Date