Gathering and Designing a Multi-Disciplinary Surgical Clinical Ward Handover System at the SAN Hospital

Patrick Mumme

310262135

COMP5703

Information Technologies Project

Semester 1, 2012

under the direction of

Prof. Jon Patrick

June 12th, 2012

Surgical Clinical Ward Handover System

Abstract

Acknowledgements

Contents

Glossary

A Infection by Airbourne.

ACAT **A**ge **C**are **A**ssessment **T**eam.

AD **A**s **D**esired Diet (anything the patients wants to eat).

AIN **A**ssistant **i**n **N**ursing.

AMO **A**ccredited **M**edical **O**fficer.

Analgesia pain medication.

Anti-emetic medication against nausea.

Arthroplasty plastic surgery of a joint.

B **B**owels.

BD twice a day.

BGL **B**lood **G**lucose **L**evel.

Bolus a rounded mass of food or pharmaceutical preparation ready to swallow, or such a mass passing through the gastrointestinal tract.

BP **B**lood **P**ressure.

BSL **B**lood **S**ugar **L**evel.

C infection by contact.

CF **C**lear **F**luids.

CMO **C**areer **M**edical **O**fficer (doctor on call).

Comorbidity other illnesses that a patient has that are not part of the diagnosis but affect the health of the patient and possibly the treatment (ie. Diabetes, Hypertension).

Cont **C**ontinence (bowels).

CVC **C**entral **V**enus **C**atheter.

D infection by droplet.

DW **D**ry **W**eight (weight of patient before breakfast).

Dx diagnosis.

EDD **E**stimated **D**ate of **D**ischarge.

EEN **E**ndorsed **E**nrolled **N**urse. Have completed further medication endorsement. Allowed to administer Schedule 2,3, and 8 medications via all routes except intravenous, epidural, intraventriuclar and intrathecal. Any medication which requires checking prior to administration must be checked with a RN or Midwife. Excluded also from administering fluids or medications via CVC, PICC and femoral lines as well implanted devices or arterial lines.

EN **E**nrolled **N**urse. Nurses undertook 18/24 month course at TAFE or related health facilities). Even more restricted than EEN.

FF **F**ull **F**luids incl. milky drinks.

HITH **H**ospital **i**n **t**he **H**ome.

Hx history.

IDC **I**n-**D**welling **C**atheter.

IM **I**ntra**m**uscular (routed into muscle tissue).

IVC/F **I**ntravenous **C**annula (a catheter that is inserted into a vein for supplying medications or nutrients directly into the bloodstream) / **I**ntravenous **F**luids (fluids given through a vein inserted catheter.

L Light Diet.

LOS **L**ength **o**f **S**tay of a patient.

MO **M**edical **O**fficer.

MRN **M**edical **R**ecord **N**umber.

MRO **M**ethacilin **R**esistant **O**rganism; an organism that shows resistance to Methicillin, a very strong antibiotic.

MRSA **M**ulti **R**esistant **S**taphylococcus **A**ureus; any strain of Staphylococcus aureus that has developed resistance to beta-lactam antibiotics, which include the penicillins (methicillin, dicloxacillin, nafcillin, oxacillin, etc.).

N Neutropenic (very low white blood cell count). Caution must be taken by staff as they could pass something to a patient.

NBM **N**il **B**y **M**outh.

NCR **N**urse **C**are **R**ecord.

ND night shift.

NFR **N**ot **F**or **R**esuscitation.

NG **N**asal-**G**astric Tube.

NP **N**urse **P**ractitioner is a RN educated and authorised to function autonomously and collaboratively in an advanced and extended clinical role. Requires addition 1.5-2 years of study.

NUM **N**ursing **U**nit **M**anager.

OT **O**ccupational **T**herapist.

PAC **P**ressure **A**rea **C**are.

Palliative relieving or soothing the symptoms of a disease or disorder with effecting a cure.

PEG **P**ercutaneous **E**ndoscopic **G**astrostomy tube; tube that is inserted into the stomach to give nutrition.

PICC **P**eripherally **I**nserted **C**entral **C**atheter.

PRN as required medication; these are not part of the patients regular medications).

QID four times a day.

RN **R**egistered **N**urse. a graduate nurse who has been legally authorized (registered) to practice after examination by a state board of nurse examiners or similar regulatory authority, and who is legally entitled to use the designation RN..

Rx treatment pertaining to medication / subscriptions.

S strict precaution (Infection Risk).

SC **S**hower **C**omode (in chair).

SC Fluids **S**ub**c**utaneous Fluids; fluids administered just under the skin and not into a vein.

SH shower.

SP sponge bath in bed.

SPC **S**upra **P**ubic **C**atheter.

ST shower with trolley.

TB **T**owel **B**ath.

TDS three times a day.

TEDS brand of Anti-embolic Stockings that are used to prevent blood clots.

TKVO **T**o **K**eep **V**ein **O**pen.

TL **T**eam **L**eader.

TPN **T**otal **P**arenteral **N**utrition; all nutrition is given through a catheter.

Trainee Consultant/Registrar doctor learning his or her speciality.

U **U**rine **OR** MRO Risk (Unknown Status) mean a risk assumption has been made but not proven.

VTE **V**enous **T**hrombo**e**mbolism; i.e. blood clot in the vein.

Warfarin anticoagulant medicine; nurses need to be aware of patients receiving this due to higher risk of bleeding and in case of bleeds.

1. Introduction

1.1. Client Profile

1.2. Project Description and Scope

1.3. Project Objectives

- Rewrite the current Pay By The Month Service into Java

- Increase resilience, maintainability, extensibility and reporting

- Minimize complexity by using plain Java without application frameworks

1.3.1. Risks

Ref #	Probability	Impact	Description	Mitigation
R.1	Medium	High	Developer overloaded	Increase allotted project time for developer
R.2	Low	High	Communication problems expert in with external systems	Incorporate external system troubleshooting as well as using proof of concepts
R.3	Low	Medium	Unforeseen required feature	Include in current or next iteration. Reveal missed stakeholders

1.3.2. Assumptions

Ref #	Description	Validated By
A.1	External Systems will not change their communications interfaces for the project duration	Adam Reitsma
A.2	Developer, System Test and Production instances will be available for the project	Adam Reitsma
A.3	Testing will be done by developers as well as dedicated testers	Adam Reitsma
A.4	Use of open source third party libraries is allowed	Adam Reitsma
A.5	The bottleneck in terms of performance will be the actual monetary transaction between Suncorp and the bank	Anand Ria

1.3.3. Issues

Ref #	Priority	Description	Owner
I.1	Medium	Late start for project due to waiting for management decisions	Management
I.2	Medium	Legacy system expert is on vacation during iteration 0	Management

1.3.4. Dependencies

Ref #	Internal / External	Description	Date of Impact
D.1	External	The mainframe system must deliver the transaction files to the prescribed destination for PBTM pickup	01/03/2011
D.2	External	Message Broker and Payment Gateway must be running to complete the transaction process	01/03/2011

1.3.5. Client Policy

1.3.6. Constraints

1.3.7. Exclusions

1.4. Anticipated Outcomes / Results for the Project

1.5. Benefits of the Project

2. Methodology

2.1. Overview

2.2. Tools and Skills

2.3. Literature Review

2.4. Scope and Schedule

3. SANSURGIMS

4. Evaluation

4.1. Testing Procedures

4.2. Interpretation of Results

5. Future Work

6. Reflection

6.1. Contribution

6.2. Difficulties

6.3. Lessons Learned

6.4. Future Suggestions

7. Conclusion

7.1. Concluding Remarks

7.2. Strengths and Weaknesses

7.3. A Second Time

7.4. Future Work

A. Appendix

Include the following:

- Roles at SAN wiki page

- Scans of original questionnaires

- Screenshots of SANSURGIMS (Web and Designer)

- Scans of important forms (Nursing Care Record & Patient History)