**TeleTracking ADT Requirement**

**Version 1.2**

**Prepared By: Tony McArtor & Art Schwartz**

**Date: 8/8/2018**

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# **Document Control**

## Resources

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Email** |
| Terri Norton | Teletracking Systems Analyst Sr. | Terri.norton@baycare.org |
| David Fernandez | Teletracking Systems Analyst | David.fernandez@baycare.org |
| Tony McArtor | Enterprise Integration Analyst, Sr. | Tony.mcartor@baycare.org |
| Art Schwartz | Enterprise Integration Analyst, Sr. | Art.schwartz@baycare.org |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 5/20/2016 | Lois Whitley | Originally Created |
| V1.1 | 6/1/18 | Art Schwartz | Updated |
| V1.2 | 08/08/2018 | Stephen Mattei | Added filter logic |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The Purpose of this document is to outline the Admission, Discharge and Transfer interface requirements for the Enterprise TeleTracking application.

## 1.2 Project Scope

Integration for this application includes an ADT interface from Soarian and an bidirectional Orders interface with Cerner. This scope of this project was to roll out a standard version of this application to all BayCare Facilities.

## 1.3 Terminology Standards

### 1.3.1 Acronyms

**ADT** – Admission, Discharge and Transfer

### 1.3.2 Glossary

**TeleTracking** is the vendor name.

**Capacity Management Suite** is the system comprised of Patient Tracking Portal, PreAdmitTracking with electronic bedboard, TransportTracking and BedTracking.

## 1.4 Document References

HL7 Interface Software Specifications Guide for the Capacity Management Suite

TeleTracking Interfaces

# 2. Drawing

# 3. Requirements

## 3.1 Functional Requirements

Provide detail for the below functional requirements. The message transformation requirements for the components defined in this specification should be specified in section 4.2 of this document.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2017.1.0 | Infection Control | Only on A01 and A04 send isolation codes. After the initial send Only Cerner updates clinical data. |
| FR.2018.2.0 | Filter Updates After Discharge | We do not send A08, patient update, messages to Teletracking if there is a discharge date present in PV1:45. |
| FR.2018.3.0 | Filter ED | Filter any messages where hospital server \ PV1:10 = MRP and Patient Type \ PV1:18 equals E |

## 3.2 Non-Functional Requirements

Provide concise detail for the below non-functional requirements. The below requirements must be evaluated for every project.

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.20XX.1.0 | Click here to enter text. | Click here to enter text. |

## 3.3 Messaging Protocols

Below are listed the details for the messaging protocols that will be leveraged for this integration. Please see the reference document located on the Integration SharePoint server: <insert link to document here>

### 3.3.1 Inbound to the BayCare Cloverleaf

* TCPIP

### 3.3.2 Outbound to Vendor

* TCPIP

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

PID

[MRG]

PV1

PV2

[{OBX}]

{ZPT]

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*MRG – Merge segment*

*PV1 – Patient Visit segment*

*PV2 – Patient Visit Additional Information segment*

*OBX – Observation segment*

*ZPT – Misc. patient data*

### 4.1*.*2 Messaging Event Types

Below are the messages types necessary for this integration

|  |  |
| --- | --- |
| **Event Type** | **Description** |
| A01 | Admit a Patient |
| A02 | Transfer a Patient |
| A03 | Discharge a Patient |
| A04 | Register Outpatient – in a bed |
| A05 | Pre-Admit |
| A06 | Transfer Outpatient to Inpatient |
| A07 | Transfer Inpatient to Outpatient |
| A08 | Update Patient Information |
| A10 | Patient Arriving |
| A11 | Cancel Admit |
| A13 | Cancel Discharge |

### 4.1*.*3 Cloverleaf Configuration Files

For each HL7 interface specified in Section 2 of this document, identify the Cloverleaf Configuration Files: Variants, TCL Scripts, Xlates, etc.

Soarf\_teletrac\_adt.xlt

### 4.1.4 Cloverleaf Site Location

Teletrck\_24

## 4.2 Data Transformation Requirements

| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| Field Separator | MSH.1 |  |  |  | copy |
| Message Header – Sending Application | MSH.3 | Y |  |  |  |
| Sending Facility | MSH.4 |  |  |  | Copy  Copied to variable @fac |
| Receiving Application | MSH.5 |  |  |  | Defaulted to “TELE” |
| Receiving Facility | MSH.6 |  |  |  |  |
| Date / Time of Message | MSH.7 |  |  | 14 | YYYYMMDDHHMMSS |
| Message Type | MSH.9 |  |  |  | Trigger Event (ADT^A01) |
| Processing ID | MSH.11 |  |  |  | Defaulted to “P” |
| Version ID | MSH.12 |  |  |  | Copy |
| Transaction Code | EVN.1 |  |  | 3 | Code must correspond to the trigger event on the message header |
| Recorded Date / Time of Event | EVN.2 |  |  | 13 | YYYYMMDDHHMMSS |
| Date / Time Planned Event | EVN.3 |  |  |  | Copy |
| Operator ID | EVN.5 |  |  |  | Copy |
| Patient ID | PID.3 |  |  |  | Pathcopy |
| Patient Name | PID.5 |  |  | 50^50^30^10^50 | Components: <family name>^<given name>^<middle initial or name>^<suffix>^<prefix>^ <degree> |
| Birth Date | PID.7 |  |  | 8 | Copy |
| Sex | PID.8 |  |  | 1 | Copy |
| Address | PID.11 |  |  | 100 | Mailing Address of Patient  Components: <street address>^<other>^<city>^<state>^<zip code>^<country>^ <type>^<other geographic> |
| Phone Number - Home | PID.13 |  |  | 25 | Patient phone number sent in separate components by Soarian; components need to be concatenated together to populate PID:13.1 in the expected format (XXX) XXX-XXXX. Soarian primary phone number is the only phone number that we grab from the original record |
| Phone Number – Business | PID.14 |  |  |  | Copy |
| Patient Acct Number | PID.18 |  |  |  | Copy |
| Merge segment | MRG |  |  |  | Pathcopy |
| Admitted Location | PV1.3 |  |  | 50^50^50^50 | NS^Room^Bed^Facility  For SJH remove dashes |
| Admission Type | PV1.4 |  |  | 50 | Circumstance under which the patient was admitted |
| Prior Location | PV1.6 |  |  | 50^50^50^50 | For transferred patients; contains prior patient location  Send Facility in PV1 6.4 for XT version, ONLY if PV1 6 isn't blank (per vendor request)  Copy @fac to 4th subfield |
| Attending Doctor | PV1.7 |  |  | 50^50^30^10^50 | If PRDOC  ID^Last Name^First Name^ MI^ Suffix  concat fac id in front of doc# |
| Hospital Service | PV1.10 |  |  | 50 | Treatment or type of surgery the patient is scheduled to receive |
| Name Representation Code | PV1.14 |  |  |  | Copy |
| VIP indicator | PV1.16 |  |  |  | If 2(0).ZPT(%s2).#1(0) =BC CONSID and 2(0).ZPT(%s2).#2(0) contains =Foundation  Hard Code V |
| Admitting Doctor | PV1.17 |  |  | 50^50^30^10^50 | If PRDOC  ID^Last Name^First Name^ MI^ Suffix  concat fac id in front of doc# |
| Patient Type | PV1.18 |  |  | 50 |  |
| Servicing facility | PV1.39 |  |  |  | Copy @fac |
| Admit Date / Time | PV1.44 |  |  |  | Copy |
| Discharge Date / Time | PV1.45 |  |  |  | Copy |
| PV2 segment | PV2 |  |  | 255 | Pathcopy |
| Admit Reason | PV2.3 |  |  |  | Copy |
| Transfer Reason | PV2.4 |  |  |  | If A01 or A04  If 2(0).ZPT.#1(0) eq =BC CONSID  Copy ZPT#2 |
| Patient Valuables | PV2.5 |  |  |  | If( 2(0).ZPT(%s2).#1(0) eq =PT\_LIMITATIONS && 2(0).ZPT(%s2).#2(0) eq =TR)  or  (2(0).ZPT(%s2).#1(0) eq =PT\_LIMITATIONS && 2(0).ZPT(%s2).#2(0) eq =PV)  Copy ZPT.5 |
| Special program code | PV2.18 |  |  |  | If ZPT.1 =2HIE  Copy from ZPT.2 |
| Visit Publicity Code | PV2.21 |  |  |  | If OBX.3 = 2PTPORT copy from OBX.11 (Observation result Status) |
|  |  |  |  |  |  |

## 4.3 Sample Message

From Soarian

MSH|^~\&|SOARF|NBY|||201806010623||ADT^A02|df3e20e7-d1ca-4898-b449-4abdda61d4d1|P|2.7||2

EVN|A02|201806010623||XFR|rxc66472|201806010622|9014

PID|1|810068210^^^900000^PN|7000057633^^^BCHS^MR||TESTING^NBTESTING^^^^^L^^^20180531||19890101|F||White|5468 MAIN STREET^^Tampa^FL^33611^USA^M^^Hillsborough^^^20180531||||EN|S|Catholic|6000087771^^^BCHS^VCD^^20180531||||Non HIS or LAT||N|0|||||N|N

PD1||||||||N

PV1|1|E|ERHN^EOSV^29^NBY|Emergency||ERHN^ED01^01^NBY|016643^Smith^Alan^A^^PRN^1821130972^NPI^03626^PRDOC^NBY^^^^onecall^50A0|||ERD|||N|RP|||016643^Smith^Alan^A^^PRN^1821130972^NPI^03626^PRDOC^NBY|E|5400000017^^^504^VN^^20180531|Self-pay|||||||||||||||||||9014|||||201805311358|||||||V

PV2|||^TESTING||||~~~~false||||||0||N||||||N||NB ED^L^1319^^^900000^XX~^^1437135811^^^900004^NPI|Checked in|||||||N|||||N||W

ROL||UC|PP|555555^No^PCP per pt^^^PRN^^^55555^PRDOC^NBY|201805311359||||Phys

ROL||UC|AT|016643^Smith^Alan^A^^^MD^^183^L^^^PRN^^^^20171113~3891^^^^^^^^900000^^^^DN~ME44988^^^^^^^^195^^^^LN~1821130972^^^^^^^^900004^^^^NPI~03626^^^^^^^^769^^^^PRN~05570^^^^^^^^777^^^^PRN~R9766^^^^^^^^745^^^^PRN~05570^^^^^^^^779^^^^PRN~05570^^^^^^^^2127^^^^PRN~05570^^^^^^^^781^^^^PRN~R9766^^^^^^^^748^^^^PRN~03626^^^^^^^^771^^^^PRN~05570^^^^^^^^783^^^^PRN~03626^^^^^^^^772^^^^PRN~03626^^^^^^^^737^^^^PRN~03626^^^^^^^^684^^^^PRN~03626^^^^^^^^1316^^^^PRN~1^^^^^^^^2134^^^^PRN~03626^^^^^^^^775^^^^PRN~79724^^^^^^^^2077^^^^PRN~03626^^^^^^^^581^^^^PRN~09766^^^^^^^^1505^^^^PRN~R9766^^^^^^^^757^^^^PRN~79724^^^^^^^^2078^^^^PRN~03626^^^^^^^^1325^^^^PRN~79724^^^^^^^^2076^^^^PRN|201805311358||||Phys|||^WPN^PH^^0^727^3432741~^WPN^PH^^0^727^6925760~^ORN^FX^^0^727^3432814

ROL||UC|AD|016643^Smith^Alan^A^^^MD^^183^L^^^PRN^^^^20171113~3891^^^^^^^^900000^^^^DN~ME44988^^^^^^^^195^^^^LN~1821130972^^^^^^^^900004^^^^NPI~03626^^^^^^^^769^^^^PRN~05570^^^^^^^^777^^^^PRN~R9766^^^^^^^^745^^^^PRN~05570^^^^^^^^779^^^^PRN~05570^^^^^^^^2127^^^^PRN~05570^^^^^^^^781^^^^PRN~R9766^^^^^^^^748^^^^PRN~03626^^^^^^^^771^^^^PRN~05570^^^^^^^^783^^^^PRN~03626^^^^^^^^772^^^^PRN~03626^^^^^^^^737^^^^PRN~03626^^^^^^^^684^^^^PRN~03626^^^^^^^^1316^^^^PRN~1^^^^^^^^2134^^^^PRN~03626^^^^^^^^775^^^^PRN~79724^^^^^^^^2077^^^^PRN~03626^^^^^^^^581^^^^PRN~09766^^^^^^^^1505^^^^PRN~R9766^^^^^^^^757^^^^PRN~79724^^^^^^^^2078^^^^PRN~03626^^^^^^^^1325^^^^PRN~79724^^^^^^^^2076^^^^PRN|201805311358||||Phys|||^WPN^PH^^0^727^3432741~^WPN^PH^^0^727^6925760~^ORN^FX^^0^727^3432814

OBX|1|NM|9272-6^Apgar 1^LN||0

OBX|2|NM|9274-2^Apgar 5^LN||0

PDA||||||N|||N

ZPV|||||||||||||||||||||||||||||||||||||||||||||||||""|BCBCE2REV1015LK|||||||||||^^mostCurrEncTypeCd^mostCurrEncTypeCd^OP||||||||5400000017^^No SCD^504^ZAVN^^20180531||201805311358

ZID|7000057633^^^504^MR^^20180531~810068210^^^900000^PN^^20180531

To Teletracking

MSH|^~\&|SOARF|NBY|TELE||201806010623||ADT^A02|df3e20e7-d1ca-4898-b449-4abdda61d4d1|P|2.7EVN|A02|201806010623|||rxc66472PID|||7000057633^^^BCHS^MR||TESTING^NBTESTING||19890101|F|||5468 MAIN STREET^^Tampa^FL^33611^USA^M^^Hillsborough^^^20180531|||||||6000087771^^^BCHS^VCD^^20180531PV1|||ERHN^EOSV^29^NBY|Emergency||ERHN^ED01^01^NBY|NBY03626^Smith^Alan^A^^^^^1325|||ERD||||RP|||NBY03626^Smith^Alan^A^^^^^1325|E|||||||||||||||||||||NBY|||||201805311358PV2|||TESTING^TESTING||||~~~~false||||||0||N||||||N||NB ED^L^1319^^^900000^XX~^^1437135811^^^900004^NPI|Checked in|||||||N|||||N||W

# **5. Testing**

## 5.1. Unit Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 5.2 Integrated Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 5.3 Testing Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| **Testing Phase** | **Date** | **Department** | **Team Member** |
| PH1.UNIT |  |  |  |
| PH1.INTEGRATED |  |  |  |

### 

## 5.4 Piloting

List the facilities and associated networks in scope for pilot testing.

## 5.5 Approvals

|  |  |  |  |
| --- | --- | --- | --- |
| **Testing Phase** | **Date** | **Department** | **Team Member** |
| PH1.0 |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 6. Deployment / Implementation Model

Provide the detail as to how to deploy the solution defined in the IDBB from both the BAYCARE and vendor perspective.

# Appendix A: Risks and Concerns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2013.1.0 |  |  | |  | |  |  |  |

# Appendix B: Issues List

This is a dynamic list of the open issues related to the IDBB that remain to be solved, including but not limited to TBDs, pending decisions, information needed, conflict awaiting resolution, and the like.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Issue** | **Comment** | **Fix** | | |  |  |  |
| I.2013.1.0 |  |  | |  | |  |  |  |

* End of document