**Soarian Financials to SPOK (Amcom)**

**ADT Interface**

**Version 1.1**

**Prepared By: Levy Lazarre**

**Date: 5/23/2016**

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# **Document Control**

## Resources

|  |  |  |
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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
| V1.0 | 6/22/2015 | Levy Lazarre | Originally Created |
| V1.1 | 5/23/16 | Levy Lazarre | Updated IP and Port Information for enterprise project; added new requirement: FR.2016.1.0 |
|  |  |  |  |
|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to provide a succinct description of the HL7 ADT interface from BayCare Soarian Financials to Spok (Amcom) Smart Center at Baycare hospitals. It is intended to be a guide to the different message types, segments, and fields present in the interface. It should be used by integration, application, or system analysts who need to be familiar with the interface.

## 1.2 Project Scope

The transportation of HL7 ADT transactions from Soarian Financials to Amcom Software HL7 interface via a standard MLLP connection as **ADT\_A..** messages.

The goal of the Spok HL7 interface is to collect patients’ demographic information for the purpose of mapping room numbers to specific telephone extensions and allow the Call Center Operators to route phone calls to the patients, using the Smart Center GUI.

This document is not concerned with the interaction of SPOK with other systems like Lawson; only the ADT interface is in the scope.

Spok Activations & Milestones in 2016

St. Joseph’s - 1

5/23 – 100% Onsite Tech Week 1 – Bonnie Knighten-Sutton

5/31  - Training – Matt Anderson

6/6 – 50% Remote Testing Tech Week 3 – Tim Harrison

6/14 – 100% Onsite Go-live – Tim Harrison

6/20 – 50% Remote Post Support – Tim Harrison

St. Joseph’s North/South – 2  (South has 2 PCs that are “Ghost PCs”)

5/31 – 100% Onsite Tech Week 1 – Adam Nehl

6/13 – Training – Jennifer Penney

6/20– 50% Remote Testing Tech Week 3 – Tim Harrison

6/28 – 100% Onsite Go-live – Adam Nehl

7/5   – 50% Remote Post Support – Tim Harrison

Morton Plant - 3

6/6 – 100% Onsite Tech Week 1 – Adam Nehl

6/27 – Training – Doug Heffernan

6/27 – 50% Remote Testing Tech Week 3 – Tim Harrison

7/5 – 100% Onsite Go-live – Adam Nehl

7/11 – 50% Remote Post Support – Tim Harrison

South Florida Baptist – 4

6/27  – 100% Onsite Tech Week 1 – Wendy Miller

7/5 – Training – Doug Heffernan

7/11 – 50% Remote Testing Tech Week 3 – Bobby Schlueter

7/19 – 100% Onsite Go-live – Wendy Miller

7/25  – 50% Remote Post Support – Bobby Schlueter

St. Anthony’s - 5

7/5  – 100% Onsite Tech Week 1 – Wendy Miller

7/11 – Training – Doug Heffernan

7/18  – 50% Remote Testing Tech Week 3 – Bobby Schlueter

7/26 – 100% Onsite Go-live – Bonnie Knighten-Sutton

## 1.3 Terminology Standards

MLLP – Minimum Lower Layer Protocol. A standard protocol built on top of TCP/IP and used to frame HL7 messages.

### 1.3.1 Acronyms

**Smart Center**. The GUI available to the users to display the patient information and perform administrative tasks.

**Smart Console**. Also includes a standard patient window and allows the operators to perform various tasks and searches.

### 1.3.2 Glossary

## 1.4 Document References

**Spok Interface Specs:**

HL7 Worksheet.doc

# *2.* Diagram

# 3. Requirements

## 3.1 Functional Requirements

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2014.1.0 | Send all inpatients to Amcom | Room and bed numbers have been mapped to specific phone extensions in the software. |
| FR.2014.2.0 | Send all ED patients to Amcom | Nursing stations have been mapped to specific phone extensions in the software. Calls to a patient will be routed to the nursing station extension. |
| FR.2014.3.0 | Send bedded outpatients to Amcom. | Only bedded outpatients like observation patients (WHH, WHW) or urgent care patients at WHW should be sent to Amcom. Regular outpatients should be filtered out. |
| FR.2014.4.0 | Confidential Status | Amcom needs to display the VPI (Visit Protection Indicator) aka Confidentiality Status or Publicity Status. Soarian sends specific values in PV1.16, Spok expects them in PV2.22. |
| FR.2014.5.0 | VIP Status | The Smart Console must display whether a patient is a VIP or not. Soarian sends specific values in ZPT.2 and they can be used to turned a flag on or off in PV1.16 for Amcom. |
| FR.2016.1.0 | Suppress updates after  discharge | To prevent discharged patients from showing up in the Spok Smart Center or Console after the records have been edited in  Soarian. |

## 3.2 Non-Functional Requirements

|  |  |  |
| --- | --- | --- |
| **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.

### Inbound to the BayCare Cloverleaf

* No inbound since this is a one-way outbound interface from Cloverleaf to Spok

### 3.3.2 Outbound to the BayCare Cloverleaf

### 3.3.3 Inbound to the Vendor

### 3.3.4 Outbound to the Vendor

* TCP/IP MLLP
* TEST: IP 10.44.184.53 Port 23005
* PROD: IP 10.44.184.53 Port 23006

### 3.3.5 Inbound to the BayCare Cerner

### 3.3.6 Outbound to the BayCare Cerner

# 4. HL7 Messaging

## 4.1 Messaging Format

### 4.1.1 Segments

The segments utilized for this interface are:

MSH

EVN

PID

PV1

PV2

**No diagnosis information is passed to Spok (no need to know).**

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*EVN – Event segment*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*ORC – Common Order segment*

*IN1 – Insurance segment*

*[{ – Start of optional, repeatable group*

*}] – End of optional, repeatable group*

### 4.1*.*2 Messaging Event Types

Below are the messages types necessary for this integration

|  |  |
| --- | --- |
| **Event Type** | **Description** |
| ADT^A01 | Admit a Patient |
| ADT^A02 | Transfer a Patient |
| ADT^A03 | Discharge a Patient |
| ADT^A04 | Register a Patient |
| ADT^A06 | Transfer an Outpatient to Inpatient |
| ADT^A07 | Transfer an Inpatient to Outpatient |
| ADT^A08 | Update Patient Information |
| ADT^A11 | Cancel Admit |
| ADT^A13 | Cancel Discharge |

### 4.1*.*3 Cloverleaf Configuration Files

The following Cloverleaf configuration files were used:

Xlate: soarf\_spok\_adt.xlt

Variants: HL7 2.6 Soarian and HL7 2.3 comp

TCL filters: tpsAdvHL7Filter.tcl

### 4.1.4 Cloverleaf Site Location

TEST: soarf\_adt\_ent\_18

PROD: soarf\_adt\_ent\_18

## 4.2 Data Transformation Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Description** | **HL7 Field Loc.** | **Required Y/N** | **Data Type** | **Length** | **Notes** |
|  | MSH:XX.XX |  |  |  |  |
|  |  |  |  |  |  |

## 4.3 Sample Message

MSH|^~\&|||||201501270823||ADT^A01|d021f1a7-256b-435e-8|P|2.7

EVN|A01|201501270823

PID|1||2104706435^^^BCHS^MR||SOUTH13^GIRL-CLINICAL13||20150127|F||||||||||1100094914

PV1|1|I|A2W^2122^B^SJS|Ne|||||||||||||||5100109936^^^504^VN|||||||||||||||||||||||||201501270710

# **5. Testing**

## 5.1. Unit Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
| Send at least one of each HL7 ADT message type from Soarian. | Message is processed correctly by Spok and the data filed in the Spok database. |
| Send a patient with confidentiality status in Soarian. | The VPI flag is on and the reason is displayed in the Smart Center. |
| Send a patient with a VIP status in Soarian | The VIP status is displayed as “Y” in the Smart Center. |
| Send a patient with a status of a status of “Deceased” in Soarian. | The “Death Indicator” is displayed as “Y” in the Smart Center. |
|  |  |

## 5.2 Integrated Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
| Follow a patient from admission, transfer, to discharge in Soarian. | Patient movement is reflected accurately in the Smart Center. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## 5.3 Testing Approvals

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

### 

## 5.4 Piloting

## 5.5 Approvals

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

# 6. Deployment / Implementation Model

# Appendix A: Risks and Concerns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** |  |  | | |  |  |  |  |
| **Number** | **Risk / Concern** | **Comment** | **Mitigation** | | |  |  |  |
| RC.2014.1.0 | Room / Bed number is not available in Soarian for newly registered ED patients. | Concern expressed by the users. | | The change in workflow has been explained to the Manager (Tim Jay) and the Call Center Operators. They can get a census of all ED patients by searching for patient class of “E”. | |  |  |  |

# 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.2014.1.0 |  |  | |  | |  |  |  |

* End of document