**Soarian Scheduling to iHeal (Healogics)**

**Scheduling Interface**

**Version 1.0**

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# **Document Control**

## Resources

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## Project Distribution List

## Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Modifier** | **Description** |
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|  |  |  |  |

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to provide a succinct description of the HL7 Scheduling interface from BayCare Soarian Scheduling to Healogics iHeal. 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 Scheduling transactions from Soarian Scheduling to Healogics HL7 interface engine via a standard MLLP connection as **SIU\_S..** messages.

The goal of the Healogics HL7 interface is to create, modify, or cancel wound care appointments in iHeal based on data received from Soarian

## 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

**iHeal (or i-heal)**. Healogics wound care specific Electronic Medical Records (EMR) platform used to document all aspects of wound care treatment (scheduling, clinical evaluation, progress notes, treatment plans…)

### 1.3.2 Glossary

## 1.4 Document References

**Healogics ADT Interface Specs:**

iHeal Scheduling Interface Documentation\_1.2.pdf

# *2.* Diagram

# 3. Requirements

## 3.1 Functional Requirements

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| FR.2015.1.0 | Send only wound care patients to iHeal | Only patients registered with the hospital service of “WHC” should be sent to iHeal. The filter must be implemented on the customer side of the interface. |
| FR.2015.2.0 | Reformat phone numbers | In iHeal, there is no distinction between Home, Business or Cell Phone numbers. iHeal only uses two phone numbers, that they call Phone 1 and Phone 2. Format like (727)123-4567 |
| FR.2015.3.0 | Phone numbers locations. | For the purpose of this implementation, send Home and Work phone numbers, and email address in PID.13; send Cell phone number in PID.14. |
| FR.2015.4.0 | Reformat SSN | Remove all dashes from the SSN. Format like 999999999. |
| FR.2015.5.0 | Physicians locations in HL7 | Per vendor request, send Attending Physician in PV1.7, Referring Physician in PV1.8, and Consulting Physician in PV1.9. |
| FR.2015.6.0 | Move appointment ID | Soarian sends its appointment ID in SCH.2, should be in SCH.1 for Healogics. |
| FR.2015.7.0 | Resources | In Soarian Scheduling, the resource in AIG.3 can be personnel (doctor, nurse), or a room, or a piece of equipment. If the resource type is a room, it will be mapped within the Healogics interface to a specific room within that particular wound care center. The mapping occurs within a table in the iHeal interface engine. |

## 3.2 Non-Functional Requirements

|  |  |  |
| --- | --- | --- |
| **Cloverleaf** |  |  |
| **Number** | **Requirement Name** | **Requirement Description** |
| NFR.2015.1.0 | Translation Tables | Translation for fields like race, ethnicity, language, religion, etc. is done on the vendor side. Acceptable values spreadsheet from Soarian must be provided to the vendor. |
|  |  |  |

## 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 Healogics

### 3.3.2 Outbound to the BayCare Cloverleaf

### 3.3.3 Inbound to the Vendor

### 3.3.4 Outbound to the Vendor (Via VPN)

* TCP/IP MLLP
* TEST: IP 206.210.91.170 Port 9895
* PROD: IP 206.210.91.170 Port 9893

### 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

SCH

PID

PV1

AIS

[{NTE}]

AIL

[{NTE}]

AIG

[{NTE}]

**No diagnosis information is passed to iHeal.**

*Message Construction Notes:*

*[Square Brackets] – Optional*

*{Curly Brackets} – Repeatable*

*MSH – Message Header*

*SCH – Scheduling Activity Information*

*PID – Patient ID segment*

*PV1 – Patient Visit segment*

*AIS – Appointment Information segment*

*AIS – Appointment Information segment*

*AIL – Appointment Information: Location Resource*

*AIG – Appointment Information: General Resource*

*[{ – 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** |
| SIU^S12 | New Appointment |
| SIU^S13 | Appointment Rescheduling |
| SIU^S14 | Appointment Modification |
| SIU^S15 | Appointment Cancellation |
| SIU^S18 | Addition of Service/Resource on appointment |
| SIU^S19 | Modification of Service/Resource on appointment |
| SIU^S20 | Cancellation of Service/Resource on appointment |
| SIU^S26 | Patient did not show up for scheduled appointment |

### 4.1*.*3 Cloverleaf Configuration Files

The following Cloverleaf configuration files were used:

Xlate: soars\_healogics\_siu.xlt

Variants: HL7 2.6 Soarian

TCL filters: tpsAdvHL7Filter.tcl

### 4.1.4 Cloverleaf Site Location

TEST: soars\_siu

PROD: soars\_siu

## 4.2 Data Transformation Requirements

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

## 4.3 Sample Messages

MSH|^~\&|SOARIAN^SCHEDULING|SFB|WoundExpert|SFB|201510191423||SIU^S12||P|2.4

SCH|29048||||SCHEDNEW\_ACK||^TEST||120|MIN||007199^Fox^Danny||||^Meyer, Earlene J.^^EJM||||^Meyer, Earlene J.^^EJM

PID|1||2104716404||HEALOGIC^TEST1^^""^""^""||19820605|F|||3986 ABC RD^""^Palm Harbor^FL^34683^USA||||EN|||6000008751

PV1||O|SFB||||007199^Fox^Danny|000000^UNKNOWN^DOCTOR||WHC||||||||||||||||||||||||||||||||||201510210800

AIS|1|A|WCHBOTREAT^Wound HBO Treatment|201510210800|||120|MIN||||1716

NTE|1||""|REFAUTH

AIL|1|A|SFBH^^^^^^^^South Florida Baptist Hospital

**AIG|1|A|BARROMD^Ronald Barbour MD|DOCTOR**||||201510210800|0|MIN|120|MIN||BOOKED

MSH|^~\&|SOARIAN^SCHEDULING|MPH|WoundExpert|MPH|201510191414||SIU^S14||P|2.4

SCH|28995||||SCHEDINTFCAPPTATTEND||^TEST||45|MIN||010186^Butler^Madelyn||||^Meyer, Earlene J.^^EJM

PID|1||2104716401||HEALOGIC^TEST10^^""^""^""||19780403|F|||562 JIM REDMAN PRKWY^""^Plant City^FL^33566^USA||||EN|||6000008748

PV1||O|MPH||||010186^Butler^Madelyn|000000^UNKNOWN^DOCTOR||WHC||||||||||||||||||||||||||||||||||201510191414

AIS|1|U|WCVISITEST45^Wound Visit 45 Min|201510191000|||45|MIN||||1713

NTE|1||""|REFAUTH

AIL|1||MPHVP^^^^^^^^MP Heart and Vascular Pavilion

**AIG|1||ALLREMD^Reynald Allam MD|DOCTOR**||||201510191000|0|MIN|45|MIN

MSH|^~\&|SOARIAN^SCHEDULING|SJH|WoundExpert|SJH|201510191435||SIU^S14||P|2.4

SCH|29058||||SCHEDINTFCREVISEATTNDR||^TEST||120|MIN||007199^Fox^Danny||||^Meyer, Earlene J.^^EJM||||^Meyer, Earlene J.^^EJM

PID|1||2104716398||HEALOGIC^TEST7^^""^""^""||19780403|F|||123 MAIN ST^""^New Port Richey^FL^34655^USA||||EN|||6000008745

PV1||O|SJH||||007199^Fox^Danny|000000^UNKNOWN^DOCTOR||WHC||||||||||||||||||||||||||||||||||201510210930

AIS|1|U|WCHBOTREAT^Wound HBO Treatment|201510210930|||120|MIN||||1710

NTE|1||""|REFAUTH

AIL|1||SJMAB^^^^^^^^St Josephs Hospital MAB

**AIG|1||SJMABHBO1^SJMAB HBO Chamber 1|EQUIP**||||201510210930|0|MIN|120|MIN

MSH|^~\&|SOARIAN^SCHEDULING|SJH|WoundExpert|SJH|201510191436||SIU^S12||P|2.4

SCH|29059||||SCHEDNEW\_ACK||^TEST||30|MIN||007199^Fox^Danny||||^Meyer, Earlene J.^^EJM||||^Meyer, Earlene J.^^EJM

PID|1||2104716399||HEALOGIC^TEST8^^""^""^""||19780403|F|||1618 PINE AVE^""^Plant City^FL^33566^USA||||EN|||6000008746

PV1||O|SJH||||007199^Fox^Danny|000000^UNKNOWN^DOCTOR||WHC||||||||||||||||||||||||||||||||||201510210900

AIS|1|A|WCVISITEST30^Wound Visit 30 Min|201510210900|||30|MIN||||1711

NTE|1||""|REFAUTH

AIL|1|A|SJMAB^^^^^^^^St Josephs Hospital MAB

**AIG|1|A|SJMABWCNUR^SJMAB Wound Care Nurse|NURSE**||||201510210900|0|MIN|30|MIN||BOOKED

# **5. Testing**

## 5.1. Unit Testing Scenarios

|  |  |
| --- | --- |
| **Scenario** | **Expected Result** |
| Send at least one of each HL7 Scheduling message type from Soarian. | Message is processed correctly by iHeal and the data filed in the iHeal database. |
| Schedule several test patients with the “WHC” hospital service in Soarian. | All patients are passed to iHeal and the demographics are correct in the application. |
| Schedule some patients with a hospital service other than “WHC” in Soarian. | The SIUs are blocked by the Cloverleaf filter and the appointments are not available in iHeal. |
|  |  |
|  |  |

## 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

## 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 |  |  | |  | |  |  |  |

# 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