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HL7 Appointment Specifications

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Version 1.1

Revision History

1. Added appointment specifications

The purpose of this document is to specify diagnosis data import to CAREWare through its HL7 Socket Interface. CAREWare can import appointment data through SIU HL7 message types. It will process SIU message events S12 (new appointment), S13 (rescheduling), and S14 (modification).

Table 1.0 CAREWare's Appointment/Service fields

Field	Description	Note
ca	subservice code	
Filler Status Code	filler code	
Appointment Schedule ID	ID that is associated with the appointment	If a matching ID exists in a CAREWare record, the import performs an update instead of an insert.
Appointment Time	appointment time	
Qty	Service Quantity	Optional field, if added, will use value. If not added, CAREWare will use the quantity set by the contract item.
Dgn Def	diagnosis definition code	If available, CAREWare adds a diagnosis record
Diagnosis Type	diagnosis type code	
Dgn Date	diagnosis date	

How CAREWare processes an HL7 message

Once the HL7 indexes are set to active, CAREWare will attempt to parse the incoming HL7 message into document stubs for processing. It is important to activate all three indexes for a particular import in order to get the data imported. CAREWare will look at the message type and trigger event to determine that the message is an immunization record by looking at the MSH 9 for the message type and MSH 9.1 for the trigger event. If the message type and trigger event match a message type and trigger event pair from a pre-defined list of possible importable messages, CAREWare will parse the incoming file. The MSH specifications can be found on table 1.1. During parsing, CAREWare will

set the primary provider and client values based on the settings the user as set. CAREWare will also split the messages into multiple document stubs if more than one PID segment exists in the message. The PID specifications can be found on table 1.2. Once the document stubs are created, they will have a starting status of “Map Provider”

Map Provider Index

This index is used to match the provider ID (MSH 6) to a domain in CAREWare. CAREWare will create a mapping record if none exists. If a mapping is complete and an activation code is entered for the domain, CAREWare will proceed to update the status to Map Client. The Lab Test Mapping Tool’s Map Provider form will list out all provider mappings. The Map Provider records will indicate whether they are active or inactive. The activation code will be generated by jProg and will be sent out upon request.

Map Client Index

This index will process client matching. It will use the matching criteria set in the provider mappings. If the patient matches the HL7 value and meets threshold then it will be updated to Process Records. The interface provides the option to manually match the clients; but if that is not set the incoming message will be deleted without moving any further in processing.

Process Records Index

Once CAREWare extracts the data necessary for an import, it will then attempt to import this data as the patient record. For demographic updates, CAREWare will update the existing record with any field(s) that is link through the field mappings. Tables 1.3 and 1.4 outline the AIG and SCH segments used for mapping key data elements for appointment/service and referral records.

Table 1.1 MSH Specifications

SEQ	LEN	OPT	ELEMENT NAME	CAREWare Field	Required For Import	Comments
1	1	R	Field Separator		Yes	Use to know what delimiter to use to separate components when parsing.
2	4	R	Encoding Characters		Yes	
3	180	O	Sending Application		Yes	Used in conjunction with MSH 6 to ensure that unique provider mapping record. CAREWare uses this value to determine where the data originated from.
4	180	O	Sending Facility		No	User can set to this value

						instead of MSH 3.
5	180	O	Receiving Application	Alternate Provider ID	Yes	User can set to this value instead of MSH 6. If user sets this as the default patient identifier, this value will override the value MSH 6. If this is set as the alternate value, it will override MSH 6 if MSH 6 is empty.
6	180	O	Receiving Facility	Primary Provider ID	No	Used in conjunction with MSH 3 to create a unique provider mapping record. CAREWare uses this value to link to a CAREWare provider. jProg will need this value to create an activation code.
7	26	O	Date/Time Of Message		No	
8	40	O	Security		No	
9	7	R	Message Type		Yes	CAREWare will use this field to determine the message type and trigger event. Message type will be in MSH 9.0 and trigger event will be in MSH 9.1
10	20	R	Message Control ID		No	
11	3	R	Processing ID		No	
12	8	R	Version ID		No	
13	15	O	Sequence Number		No	
14	180	O	Continuation Pointer		No	
15	2	O	Accept Acknowledgment Type		No	
16	2	O	Application Acknowledgment Type		No	
17	2	O	Country Code		No	
18	6	O	Character Set		No	
19	60	O	Principal Language Of Message		No	

Table 1.2 PID Specifications

SEQ	LEN	OPT	ELEMENT NAME	CAREWare Field	Required For Import	Comments
1	4	O	Set ID - Patient ID		No	
2	20	O	Patient ID	Primary Client ID	Yes	Default field where CAREWare

			(External ID)			looks for matching patient value.
3	20	R	Patient ID (Internal ID)	Primary/Alternate Client ID	No	Can be used as matching patient identifier. If user sets this as the default patient identifier, this value will override the value PID 2. If this is set as the alternate value, it will override PID 2 if PID 2 is empty.
4	20	O	Alternate Patient ID - PID	Primary/Alternate Client ID	No	Can be used as matching patient identifier. If user sets this as the default patient identifier, this value will override the value in PID 2. If this is set as the alternate value, it will override PID 2 if PID 2 is empty.
5	48	R	Patient Name	Last Name, First Name, Middle Name	No	If patient name is not set, CAREWare will match patient's by matching patient value only. Users must set CAREWare's threshold (secondary check) to 0,
6	48	O	Mother's Maiden Name		No	Can be imported as a custom client field
7	26	O	Date/Time of Birth		No	If date of birth is not set, make sure CAREWare's threshold (secondary check) is low enough to account for this. YYYY
8	1	O	Sex	Gender	No	Only mandatory if new patient is added.
9	48	O	Patient Alias		No	Can be imported as a custom client field
10	1	O	Race	Patient Race, Race Subgroup	No	Single patient race
11	106	O	Patient Address	Address, Address Continued, City, State, Zip	No	Address^Address Continued^City^State^Zip
12	4	B	County Code	County	No	
13	40	O	Phone Number - Home	Phone	No	
14	40	O	Phone Number - Business		No	Can be imported as a custom client field
15	60	O	Primary Language		No	Can be imported as a custom client field
16	1	O	Marital Status		No	Can be imported as a custom

						client field
17	3	O	Religion		No	Can be imported as a custom client field
18	20	O	Patient Account Number	acct	No	
19	16	O	SSN Number - Patient		No	Can be imported as a custom client field
20	25	O	Driver's License Number - Patient		No	Can be imported as a custom client field
21	20	O	Mother's Identifier		No	Can be imported as a custom client field
22	3	O	Ethnic Group	Hispanic	No	
23	60	O	Birth Place		No	Can be imported as a custom client field
24	2	O	Multiple Birth Indicator		No	Can be imported as a custom client field
25	2	O	Birth Order		No	Can be imported as a custom client field
26	4	O	Citizenship		No	Can be imported as a custom client field
27	60	O	Veterans Military Status		No	Can be imported as a custom client field
28	80	O	Nationality		No	Can be imported as a custom client field
29	26	O	Patient Death Date and Time	deathDate	No	Sets the date of death
30	1	O	Patient Death Indicator	Vtl Status	No	Sets the enrollment status to decease

Any fields not defined here can be imported if set to other segments. If they are set to other segments, those segments must exist in the HL7 message in order to be imported. If the fields are set and the segments do not exist, CAREWare will error out stating that it is trying to grab from data from a segment that does not exist in the message.

Table 1.3 AIG Specifications

SEQ	LEN	OPT	ELEMENT NAME	CAREWare Field	Required For Import ?	Comments
1	4	R	Set ID - AIG			
2	3	C	Segment Action Code			
3	250	C	Resource ID	Appointment/Service Name	Yes	Can be set to another field
4	250	R	Resource Type			

5	250	O	Resource Group			
6	5	O	Resource Quantity			
7	250	O	Resource Quantity Units			
8	26	C	Start Date/Time	Appointment/ Service Date	Yes	Can be used for another date field
9	20	C	Start Date/Time Offset			
10	250	C	Start Date/Time Offset Units			
11	20	O	Duration			
12	250	O	Duration Units			
13	10	C	Allow Substitution Code			
14	250	C	Filler Status Code			

Table 1.4 SCH Specifications

SEQ	LEN	OPT	ELEMENT NAME	CAREWare Field	Required for Import?	Comments
1	75	C	Placer Appointment ID		Yes	Used to identify the scheduler transaction to determine add, edit or even delete
2	75	C	Filler Appointment ID			
3	5	C	Occurrence Number			
4	22	O	Placer Group Number			
5	250	O	Schedule ID			
6	250	R	Event Reason			
7	250	O	Appointment Reason			
8	250	O	Appointment Type			
9	20	B	Appointment Duration	Service Qty	No	Used to import as service quantity for completed appointments
10	250	B	Appointment Duration Units			
11	200	B	Appointment Timing Quantity			
12	250	O	Placer Contact Person			
13	250	O	Placer Contact Phone Number			
14	250	O	Placer Contact Address			
15	80	O	Placer Contact Location			
16	250	R	Filler Contact Person			

17	250	O	Filler Contact Phone Number			
18	250	O	Filler Contact Address			
19	80	O	Filler Contact Location			
20	250	R	Entered by Person			
21	250	O	Entered by Phone Number			
22	80	O	Entered by Location			
23	75	O	Parent Placer Appointment ID			
24	75	C	Parent Filler Appointment ID			
25	250	O	Filler Status Code		Yes	Filler Status code
26	22	C	Placer Order Number			
27	22	C	Filler Order Number			

CAREWare also creates a service record when an appointment message is modified; which corresponds to a patient successfully completing a scheduled appointment. The appointment feed could also be configured to import referrals as well. The below table outlines the fields for CAREWare referral system.

Table 1.5 CAREWare's Referral Index Fields

Field	Description	Note
Appointment Subservice	subservice code	Used to complete the referral by adding a service
Filler Status Code	filler code	
Rfr Date	Referral date	
Srv Category	Contains service category required for adding a referral	
Referral ID	Identifier for each referral	
Referral Class	Contains information for referral class	
External provider	Used to map external provider for referral	
Dgn Def	diagnosis definition code	If available, CAREWare adds a diagnosis record
Diagnosis Type	diagnosis type code	
Dgn Date	diagnosis date	