


Title: Connex CS HL7 Interface Guide and Conformance Statement		Document Number: 80018284 Version: H	
Department: Field Service			Area: Skaneateles Falls
Document Type: LIT			
Parent Document: 60053270 Connex CS Enterprise Gateway Service SDS			

Version	Sec, Pg, Para Changed	Description of Change	Reason for Change	Date Created	Created By
A	-	-	Initial Release	2012.10.25	DLL
B	Multiple Sections	See ECM red lines	Clarification of content in all sections.	2013.03.08	DLL
C		Moved Header info to new Header template Added A17 Support Added ES Support Added Email Alerts	Allowing for printout of customer facing content only Per Customer change request New to 1.5 New to 1.5	2013.11.18	DLL
D	Header - Title Header - Parent Header – Section 1 Header – Section 4 Header – Footer Main – Title Main – TOC Main - 2.1.x Main - 2.2.x Main - 2.3.x Main - 2.4.x Main - 2.5.x	Changed Title Changed Parent Doc Title General Cleanup General Cleanup General Cleanup Name Change Changed Title Added CCSS to Definitions General cleanup Change language to be consistent and made clarifications on usage Updated figure 3 Renumbered Section 2.3.3 General cleanup Clarified HL7 Capability Cleaned up PV1-3 section General cleanup	IHE Conformance Had 1.5 reference General Cleanup General Cleanup Title changed Changed Title Section numbers changed Product Name change New Definition General cleanup Name ADT section Name ORU section Used correct names Clarified 2.3.3.1 and 2.3.3.2 General cleanup General cleanup General cleanup	2014.05.07	DLL

	Main - 2.6.x	General cleanup	General cleanup		
	Main – 3.0	General cleanup	General cleanup		
	Main-Appendix A	Updated based on changes from 60045130	New CVSM Profile table Updated OBX-8-1 and OBX-8-2 table		
		General Cleanup/Formatting beginning with Section 1.2.4 and clarification of sections and labels.	General Cleanup		
		Updated Supported Segments	Updated in HL7 Spec		
		Removed Result Status Table	Updated in HL7 Spec		
		Removed Value Type Table	Updated in HL7 Spec		
	Main-Appendix B	Added missing ES Motion/Turn labels General Cleanup of Tables	Missing ES measurements		
	Main-Appendix C	General Cleanup	General Cleanup		
E	Multiple section	See ECM	See ECM	D*	DLL
F	Multiple section	See ECM	See ECM	D*	DLL
G	2.1 Definitions	Add term LTA (Life Threatening Arrythmia)	Add ECG for Connex CS 1.8.5 project	D*	DCS
	1.8.4.1.1	Add ECG source to Respiration parameter			
	1.8.7 (new)	Add <i>ECG Alarm Values</i> section			
	1.2.8 (new)	Add sample messages CVSM – ECG			
		See ECM			
H	Multiple section	Update branding Update DIR references for SOW and CRD Customer Requirements	Connex CS 1.8.8 project	2025.08.07	DCS
	1.5.3	Add “A45” to event definition table and insert A45 example after A42			
		See ECM			

See SAP for Change Number, Approver(s) Name, and Date(s) of Approval.

Required Approvers		
Title:	Name:	Signature:
Product Manager, Systems Monitoring	Lari Rutherford	D*

D* See SAP DIR for change number, approver name and date of approval.



1. Purpose

This document contains specifications intended as a guide for software and HL7 Interface developers who understand HL7 Interface requirements. It explains the Welch Allyn Connex CS Interface requirements. This document shall be used to assist software and HL7 Interface developers and allow these technical personnel to develop the HL7 interface between a facility-controlled clinical information system (CIS or HIS) and the Welch Allyn Connex CS System including the Admit, Discharge, Transfer (ADT) Interface and the Observations/Results (ORU) Interface.

For information about configuring the HL7 Interfaces and other configuration settings for your facility, please work with the Baxter Project delivery team and HIS provider to address issues not covered in this guide.

2. Scope

This document applies to all HL7 based configuration changes for installations. It does not contain installation procedures for the hardware and/or software upgrade.

3. Responsibilities

The customer must work with the implementation team to complete Section D of 80024154 Connex CS Customer Project Req Form. Section D identifies the components required to establish connections with the Customer's HIS and includes additional data regarding key patient identifiers and custom elements a site may require for the HIS. In addition to Section D, Appendix D1 addresses data points involving observation labels and units of measure. It is required section D be completed and it is strongly recommended section D1 be completed before shipping the product from Welch Allyn.

Using the completed Section D documents, Welch Allyn will create the required customer configuration to establish ADT and ORU Interfaces with the customer's HIS. In addition to Section D, if Appendix D1 is also complete, Welch Allyn will configure all observation labels and units of measure on the Connex CS Server prior to shipping the product.

Once installed, the Customer shall work with Welch Allyn to test and validate both the ADT and ORU interfaces to ensure the system is configured and working properly. If there are changes or issues with the ADT or ORU Interface, Welch Allyn can make changes to the configuration, where possible.

Once the customer has tested and confirmed the Connex CS system is working correctly, Welch Allyn shall test and release the Connex CS system for clinical use.

Service Engineering with input from Field Service, Product Engineering and Product Marketing is responsible for coordinating the maintenance of the Connex CS HL7 Interface Guide.

4. Related Documents

The following table lists other documents to refer to as necessary.

Title	Part Number
CONNEX CS CUSTOMER PROJECT REQ FORM	80024154
CCSS Scope of Work (SoW)	20014070
Connex CS HL7 Interface Specification	60045130

5. Definitions

Terms	Acronyms and Definitions
ACK	Acknowledgement, a network packet sent from a device which confirms receipt of data sent by another device.
ADT	Admit Discharge, and Transfer, an HL7 group used to describe the state of patients in the facility.
Continuous Profile	A CVSM 2.x device configured to a Continuous profile. Measurements taken in this profile could be a continuous (e.g. CO2 measurement) or episodic measurement (e.g. Temperature measurement).
EMR	Electronic Medical Record, the umbrella term used to describe all patient records and the systems that manage them.
Episodic Profile	A CVSM 2.x device configured to an Episodic, Interval or Spot Check profile. Measurements taken in this profile are episodic measurements (e.g. Temperature measurement).
HIS	Hospital Information System, the umbrella term used to describe the facilities network. The EMR is part of the facility's HIS.
HL7	Health Level 7
Installation	The on-site processes for the installation of hardware, infrastructure, connectivity and system configuration at the customer location of business.
I.T.	Information Technology
ORU	Observation Result Unsolicited, an HL7 message type used to send patient vitals data to the facility EMR or HIS application.
SW	Software
WA	Welch Allyn
Baxter Authorized Representative	A third party representative, service or other, who has completed training requirements to the satisfaction of Baxter.
WHI	Welch Allyn HL7 Interface
WLAN	Wireless Local Area Network

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6. Procedure

The sectional format of the project requirements form allows the respective team members to be able to send the Connex CS HL7 Interface Guide to their Customer contacts while completing and reviewing the data with the customer.

7. Connex CS HL7 Interface

The customer facing information is contained in the attached document. Because it is customer-facing, the document is formatted with independent page numbers and a different header from the instructions.