**Technical Service Bulletin**

**PATIENT MONITORS SYSTEMS**

**Welch Allyn, Inc.**

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Skaneateles Falls, New York 13153-0220 USA

**Bulletin Type:** AS NEEDED

**Manufacturer:** Welch Allyn

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**Date:** 2014-11-06  
**SAP DIR #:** 20013928

**Subject:** 20013928A TSB-UNIT NAME PV1-3-1 LENGTH LIMITS

**Distribution Scope:** Welch Allyn Global Technical Support, Product, Field & Customer Service.

**Product(s) Referenced:** Connex Clinical Surveillance System

**Summary:**

Connex CS 1.6 requires the Master Bed List and Covered Area to be configured. If the customer is also using ADT and ORU interfaces, the contents of the HL7 PV1-3-1 fields must map correctly to the “UNIT” Field.

There are limitations on what Connex CS 1.6 support in the Unit name.

The HL7 Specification for CS 1.6 supported HL7 versions supports 20 characters in the PV1-3-1 field but has capable of supporting up to 80 characters. Connex CS Unit name can only support up to 12 characters.

If the Covered Area “UNIT” only supports 12 characters and the inbound ADT message contains 13 or more characters in the PV1-3-1 field, then that message will be processed correctly by Corepoint and delivered to Connex CS correctly.

However, Connex CS will only accept up to 12 characters in the Unit field of the Covered Area.

If this mapping is not present, any vitals captured for the patient would not be sent out in an ORU message as the unit is not a Licensed unit in Connex CS.

Corepoint will accept values greater than 12 characters in the PV1-3-1 field and be mapped to a value less than 12 characters to support Connex CS.

This TSB will address:
- What information the Welch Allyn Project Manager (PM) must collect
if it is determined that the PV1-3-1 field contains more than 12 characters and is mapped to a Connex CS 1.6 Unit name.

- How to program CVSM on a Connex CS Episodic only workflow and/or a Connex CS workflow with a Connex CS Workstation.
- What information must be captured in the Customer Requirements Document to communicate with the Manufacturing team and the assigned Interface Engineer on how to configure Connex CS 1.6 and the Corepoint Action Lists.
- Explain how the Interface Engineer will modify the Corepoint Action lists to support the Connex CS 1.6 Unit name and return the correct Unit location in the Outbound ORU message.

This TSB will be valid until the release Connex CS 1.7. This solution will be added to Connex CS and documented in DIR 60057662 Connex CS Corepoint Configuration Guide in the Connex CS 1.7 release.

**Issue:**

If the Covered Area “UNIT” only supports 12 characters and the inbound ADT message contains 13 or more characters in the PV1-3-1 field, then that message will be processed correctly by Corepoint and delivered to Connex CS correctly. Any vitals captured for the patient would not be sent out in an ORU message as the unit the patient would be in, is not a Licensed unit.

**Action:** Distribute TSB

**Reference to Standards:**

- 21 CFR Part 820, ISO 13485, MPD SOP-0002

**Updates:**

- Technical Manual
- Service Plan
- Procedures  ☒
- Training Material
- Repair Tool
- Internet/Intranet
- Price List
- Other

**Procedure:**

**Step 1: Information Gathering (Project Manager)**

1. The WA PM shall determine the UNIT name to complete the 80017306L Appendix B2 - Covered Area Information document.
2. The WA PM shall collect sample ADT messages showing the UNIT names in PV1-3-1.
3. The WA PM shall verify the customer samples PV1-3-1 fields do not have more than 12 characters and match the 80017306L Appendix B2 - Covered Area Information document.
4. **If the values in PV1-3-1 are more than 12 characters then the WA PM shall work with the customer and the WA Interface Engineer to remap the PV1-3-1 inbound ADT message to be 12 or less characters and remap the OB ORU message back to the original values.**
5. Once defined, the customer will need to be instructed on how to program a CVSM in the Episodic Only workflow to see patients in the newly defined Covered Area.
6. The WA PM shall document both the Original PV1-3-1 Value, the truncated version to be used to build the Covered Area by Manufacturing in 80017306L Appendix B2 - Covered Area Information document.
Example:
Actual Unit name in PV1-3-1 is “Ambulatory Care Center” and “Operating Room”. Connex CS Covered Area must be truncated to a short value such as “Ambulatory” and “Operating RM”.

Complete 80017306L Appendix B2 - Covered Area Information to look like the example below:

<table>
<thead>
<tr>
<th>Covered Area name*</th>
<th>Station name*</th>
<th>ADT Workflow*</th>
<th>Qty. of Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connex CS Central Station Covered Area Information (THIS HOST SHALL BE THE DEFAULT COVERED)</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Connex CS Bed License all beds:</th>
<th>4 Day FD License all beds:</th>
<th>ORU Continuous Vitals Outbound:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continuous ORU Port #</th>
<th>Unit name* (PV1-3-1):</th>
<th>Facility name* (PV1-3-4):</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Ambulatory Care Center</td>
<td></td>
</tr>
<tr>
<td>Use 8011</td>
<td>Ambulatory</td>
<td></td>
</tr>
</tbody>
</table>

Manufacturing to build the Unit name as “Ambulatory”.

Interface Engineer to covert the PV1-3-1 value from “Ambulatory Care Center” to “Ambulatory” in the inbound ADT Action Lists and to revert “Ambulatory” to “Ambulatory Care Center” in the outbound ORU Action Lists.

**Step 2: Manufacturing**

1. Manufacturing will build the Connex CS workstation following the normal MFG processes, only deviating to build the Unit name to match the new Covered Area value identified in 80017306L Appendix B2 - Covered Area Information document.

**Step 3: Configuring Action List Code Set (Interface Engineer)**

1. Modify existing code set value in “Inbound-InterestedLocationValue” which maps the HIS Unit values with Connex CS unit names. Place the actual value being sent in PV1-3-1 in the “Code” column and the abbreviated new value in the “Description” column:
2. Enable the following sections in the WA_ADT_IB_PARENT action list:

3. Disable and Enable the corresponding sections shown below, within the WA_ADT_IB_CHILD action list:

For A17 message:
4. Commit and Activate the configuration changes. If customer wants to export unit name in ORU outbound message then perform following changes:

5. Open WA_ADT_IB_CHILD action list.
6. Enable “Unit Name Mapping” like following:

7. Enable “Unit Name Mapping” section in #8.C.4.4 and #8.C.5.4 (ZEP-5 – EPID Formation) for A17 message.
8. Open WA_ORU_OB_CHILD action list.
9. Enable the “Matching clause for Unit Name Mapping” like following:
10. Commit and Activate the configuration changes.

Step 4: Verification (Field Engineer)

1. The Field Engineer shall install the system and validate the system normally. If the Covered Area is misconfigured this will be addressed through normal processes.

Notes:

1. Contact the Welch Allyn Complaints Department to initiate or process a medical device complaint resulting from this or other issues.
2. Drawings, illustrations, and part numbers in this document are for reference purposes only and subject to change.

End of Bulletin

Revision History

<table>
<thead>
<tr>
<th>Version</th>
<th>Description</th>
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<th>Init</th>
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<td>D*</td>
<td>DLL</td>
<td>D*</td>
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D* SEE SAP DIR FOR CHANGE NUMBER, APPROVER NAME AND DATE OF APPROVAL