#### **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee**



Stan Wiley, Draeger Medical Systems, Inc., <a href="mailto:stan.wiley@draeger.com">stan.wiley@draeger.com</a>
Jan Wittenber, Center for Medical Interoperability, <a href="mailto:janw@center4mi.org">janw@center4mi.org</a>
John Rhoads, Philips Healthcare, <a href="mailto:john.rhoads@philips.com">john.rhoads@philips.com</a>

### **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee**

- 1. Overview of AAMI-UL 2800 Standard
- 2. Current Status of Standards Development
- 3. Forward Outlook
- 4. IEEE 11073 Committe-Specific Implications

#### **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee: Overview of AAMI-UL 2800 Standard**

AAMI/UL 2800 is intended to provide a set of safety and security requirements that support component safety claims in the context of system safety claims, related to multi-vendor, <u>plug-and-play</u> interoperability of components assembled within an architectural framework and ecosphere designed to satisfy the declared system safety objectives:

- 1. Horizontal Standards (application-agnostic safety and security requirements)
  - General Requirements (system safety and security requirements and performance objectives): <u>AAMI/UL</u>
     2800-0
  - Minimum Requirements for Specifying and Submitting a Medical System Interoperability Architecture: <u>AAMI/UL 2800-1</u> New!
  - ICE Safety and Security Architecture Standard (ICE architecture-specific safety and security requirements): <u>AAMI/UL 2800-1-1</u>
- 2. Vertical Standards (Intended use-specific safety and security system and test requirements, test protocol requirements)
  - ICS PCA Safety and Security Requirements: <u>AAMI/UL 2800-3-1-1</u>

## **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee: Current Status of Standards Development**

- Draft standards deliverables targeted for the June 2015 Joint Committee Meeting are outlined on the previous slide.
- Multiple work products in support of the standard have been created and distributed to develop the language of the standard. For example (not exhaustive):
  - List of ICS PCA-specific hazardous situations and hazards; Generalized list of fault types
  - List of "existing interoperable clinical scenarios"
  - Glossary of terms and automated tool to manage this glossary
  - List of safety and essential performance objectives; list of minimum system security requirements
  - Shared requirements from CMIT as captured in the Serena requirements management database
- Memoranda of Understanding is intended between AAMI, UL, ASTM, and IEEE.
- Standards requirements and terminology within the standards parts are being harmonized.
- Modeling is proposed for the particular instantiation of the PCA Interlock System.

### **AAMI-UL** Joint Committee 2800 Update To IEEE 11073 Standards Committee: Forward Outlook (not confirmed)

- Next JC2800 Committee Meeting (week of June 8, Denver, CO) focus:
  - Review of draft standards content (including specific comments submitted through CSDS)
  - External communications of JC2800 status
  - Going forward plans of JC2800 Work Groups
- Joint Plenary Meeting: JC2800 and AAMI SWIT (week of June 8, Denver, CO) focus:
  - High level inter-group informational reports
- JC2800 Committee Work Group Leadership Webinar (est. Mar. 2015) anticipated focus:
  - Work Group updates

# **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee: IEEE 11073 committee-specific implications**

- There is significant overlap in scope between AAMI/UL 2800 and IEEE 11073 as well as IHE PCD[/HL7] (and Open SDC[/WS]); relative mutual value potentials:
  - General: Access to/referential use of requirements definitions, particularly in computational (i.e. DB) form.
  - Upper Layers (UL):
    - MDDL: Domain Information Model (DIM) and Nomenclature—significant positive potential w.r.t.
       reuse (of 11073 by AAMI/UL 2800);
    - MDAP: Application Profiles—apparently, not very promising and probably conflicting interoperability methodologies; see "Homologation" topic below;
  - Lower Layers (LL):
    - Internet/IEEE 802-series-based: most promising potential for CoTS-based CNS reuse;
    - Non-Internet-based data links: "CNS"-based non-Internet/802-based data links have significant potential for leverage by AAMI/UL 2800-based implementations.
- Activities have mostly addressed applications and MDDL-level harmonization; more structured interaction, such as recent F2F with Open SDC on this subject, should be pursued but may require dedicated tCon series
- There is no formalized standards organizational relationship, i.e. @ MoU, which should be addressed in future, since
  - Homologation of IEEE 11073 and AAMI/UL 2800 would require significant resourcing, well beyond the
    capability of 11073 as presently constituted, probably including new 11073 Application Profiles addressing
    Internet-based "peer to peer" middle- and lower-layers standards, which is also true for homologation of
    11073 and Open SDC, but perhaps less so w.r.t. SDC and ICE/DDS.

#### **AAMI-UL Joint Committee 2800 Update To IEEE 11073 Standards Committee**

#### THANK YOU FOR YOUR ATTENTION