

The Surveillance Implementation Guide Power Team is pleased to submit this report, concluding its deliberations from June to August. Members of this team included: CG Chute, John Derr, Seth Foldy, Marty LaVenture, Ken Mandl, Anna Orlova, Walter Suarez, Sharon Terry, and assistance from Rita Altamore and Priya Rajamani.

Our first point of deliberation was the scope of our assignment and recommendation. At the largest scale, there remains work to define Meaningful Use Standards that support messaging about detection of events and outbreaks in populations, including Syndromic Surveillance, vital statistics, reportable disease, outbreak detail, and Population Health metrics. For these purposes, ONC will eventually need to make determinations about appropriateness and completeness of existing standards, and appropriate circumstances for modifying or adding standards.

However, the task group rapidly converged on a more narrow scope, specifically the format and implementation of three public health messages:

- Immunization reporting using HL7 2.3.1 or 2.5.1.
- Electronic Laboratory Reporting (ELR) using HL7 2.5.1
- Syndromic surveillance reporting using HL7 2.3.1. or 2.5.1.
 - The recommendation of a modified and appropriate Implementation Guide

We unanimously present recommendations on these questions, and raise a strategic issue for future consideration around a uniform public health reporting specification based on CDA (Clinical Document Architecture). We were significantly influenced by the HIT Policy Committee recommendation that a single specification should exist for public health report, rather than optionality of more than one.

1. Electronic Laboratory Reporting (ELR)

HL7 V2.5.1 is distinguished from 2.3.1 for ELR by virtue of an additional OBX field for performing laboratory, which affords substantial information value for public health purposes. Presently, Stage I Meaningful Use specifies only 2.5.1. We are aware that adoption by ambulatory providers is presently incomplete, and specifying a requirement for these providers may be done in a later phase.

Recommendation: ELR should remain using 2.5.1 only.

2. Immunization Reporting

There are increasing cases where immunization reporting has invoked bi-directional messaging, around such issues as inventory management. HL7 2.5.1 support these fields, in addition to fields related to pediatric vaccination. Furthermore, a published implementation guide is only available for 2.5.1 in this domain. We are aware that not all public health organizations are prepared to accept 2.5.1 messages, though for completeness they are not all prepared to accept 2.3.1 either, as substantial proprietary interfaces prevail in this domain. Nevertheless, we believe a single specification adds clarity to senders and recipients. Furthermore, in view of a 2.5.1 implementation for ELR, it would be burdensome for many providers to support parallel implementations of HL7 v2 interfaces.

Recommendation: Vaccination reporting should specify 2.5.1 only.

3. Syndromic Surveillance

At a technical level, there are no material differences invoked by Syndromic Surveillance between HL7 2.3.1 and 2.5.1. However, consistent with our reasoning for Immunization reporting and the recommendations of HIT Policy, we believe that all parties would benefit from a focus on a single public health reporting specification.

On the matter of a Syndromic Surveillance implementation guide, a much improved guide for hospitals is in the final stages of preparation, and is expected to become available approximately two years before Phase II implementation (assuming a one year delay in Phase II timing). However, there is not expected to be an implementation guide targeted to eligible providers.

Recommendations: Syndromic Surveillance reporting should specify 2.5.1 only.

The Hospital Implementation Guide in preparation should be conditionally approved, with final review by the HIT Standards Committee around Sept, 2010.

4. Strategic Considerations

Large segments of the public health community are experimenting with CDA message formats, to cover the full spectrum of public health reporting requirements, including case reports, cancer reporting, and reportable diseases. Additionally, virtually all Meaningful Use compliant providers will have the capacity for CDA generation, as a function of Health Information Exchange requirements. As such, the HIT Standards Committee will need to consider the timing and phasing of introducing CDA specifications into requirements. The largest inertia will lay with public health recipients, despite the current experimental activity on the part of many progressive public health organizations.