Interoperability Standards Priorities Task Force
Lab Orders, Results and Lab Test Compendium IGs

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Companion Implementation Guides (IG)

- **eDOS IG**
  - Basic Message Profile
  - The guides are independent and provide different services. As a whole, they provide the full function of the interoperability between an EHR and the reference laboratory.
  - As companion guides, they lay the foundation for a more interoperable solution.
  - eDOS provides the test compendium, the components of the test, the requirements for the test, the requirements of the identifiers to be used in the message to correctly order the test from the Lab.
  - LOI is a laboratory order message that gathers the appropriate information and submits it to the laboratory based on the requirements established in eDOS.
  - LRI is a laboratory result message consistent with the LOI and eDOS from the lab to the EHR/EMR.

- **LOI IG**
  - Basic Message Profile

- **LRI IG**
  - Basic Message Profile

These guides are based on HL7 Version 2.5.1 which provides broad support of healthcare across many domains of care. The IGs are constraining Version 2.5.1 to the domain of clinical interfaces between the lab and the EHR/EMR.

- The Profile constrains the content of the fields (specifying data sets)
- Profiles can be grouped to provide increased constraints
- Profiles identify capabilities of the sender/receiver via conformance statements
- Profiles can be unique to patient’s criteria; such as Newborn Screening

**Constraints**
- Constraints drive message behaviors
- Enforce conformance between parties
- Define testable outcomes
The approach to the flexible guide

**XO Profile**
- All optional fields changed to ‘do not use’

**NB Profile**
- Newborn screen requirements

**Profile Constraint 4.d.a**
- Further Constrained

**Profile Constraint 2.a.B**

**Profile Constraint 1.c**

**LRI IG Basic Message Profile**

**Profile Constraint 3.b.B**

**Profile Constraint 2.a.F**

**Profile Constraint 1**

**LOI IG Basic Message Profile**

**Base Profile**
Example Constraints – Profile construction

- **Newborn Screen**
  - Defined code set for newborn screen
  - Date fields require Year, Month, Day and Hour
  - Uniquely identified in eDOS
  - Conformance statements to validate proper use

- **Time zone offset process**
  - Define required fields to support time zone offset and field to field relationships
  - Conformance statement to validate proper use

- **Identifiers**
  - Those that can support OIDs
    - Require the use of OIDs in field identifiers
    - Conformance statements based on the use OIDS
  - Those that do not support OIDs
    - Identify the unique fields used for identification by field id
    - Conformance Statements to support the identification when OIDs are not used
eDOS provides the framework for the requirements of the performing laboratory creating the parameters for the LOI content which drives the LRI reporting process.

Flexible IGs that conform to each other.

Provide guidance on conformance between partners.

Provides path from limited constraints to highly constrained solutions without re-engineering the interface.

Conformance parameters can be extracted and used as conformance validation rules to measure compliance to the IG and profiles.
Questions?