Specimen Fhir Resource Proposal
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Specimen

Owning committee name
Orders & Observations WG

Interested Work Groups
• Anatomic Pathology
• Clinical Genomics
• Imaging Integration
• Public Health and Emergency Response

FHIR Resource Development Project Insight ID
952

Scope of coverage
DEFINITION (SPECIMEN): Any material sample:
1. taken from a biological entity, living or dead
2. taken from a physical object or the environment

Biospecimen can contain one or more components including but not limited to cellular molecules, cells, tissues, organs, body fluids, embryos, and body excretory products (source: NCIt, modified).

The specimen resource covers substances used for diagnostic and environmental testing.

The focus of the specimen resource is the process for gathering, maintaining and processing the specimen as well as where the specimen originated. This is distinct from the use of Substance which is only used when these other aspects are not relevant.

RIM scope
• Role: Specimen (RoleClass=SPM)
  • Entity (player): Material (EntityClass="MAT")
  • Entity (scoper): Choice - Person, Non-Human Living Subject, Material
• Entity: Place (EntityClass="PLC")

Resource appropriateness
Specimens are primarily of importance in healthcare for diagnostic testing and in public health for environmental testing. Because of the frequent biologic nature of specimens, they are uniquely identified. Additionally, specimens are tracked, transported, and stored, sometimes for years.

Expected implementations
The Specimen resource is used by other resources such as the Diagnostic Report to record the entity that is being reported against. The Procedure resource may also reference a specimen removed during a procedure. Essential to support Lab

Content sources
• HL7 v3 Laboratory Standard - Normative
• HL7 v2.x
• HL7 OO Specimen DAM Project
• OpenEHR?

Example Scenarios
• A tumour excised from a patient during a procedure is sent for histological examination. It is referenced in the Procedure, DiagnosticOrder and the Diagnostic report.
• A blood sample
• A laboratory counter swab
Resource Relationships

- Order
- DiagnosticOrder
- DiagnosticReport
- ImagingStudy
- Procedure

Timelines

- Proposal Approved by WG at May 2013 WGM
- Planned Ballot: September 2013

gForge Users

- Lorraine Constable
- Patrick Loyd

Issues

- Added to scope to differentiate between Specimen and Material.
- Is Specimen used for things like donated blood, other materials that might be re-implanted in someone else?
- Is Specimen used when there's a need to refer to a specific "part" of a patient even though that hasn't necessarily been removed?
- Don't understand the RIM mapping of Entity: Place (EntityClass="PLC")
- Need explanation of relationships to other resources