201938 The Unified Test List: a SNOMED CT refset for Reporting Laboratory Test Results in the UK

Andrew (Andy) Sunley, NHS (United Kingdom)

Co-authors
1. Sarah Harry

Summary
Work is being undertaken in the UK to standardize results codes used for reporting laboratory test results. The key output, called the Unified Test List (UTL), uses SNOMED CT to precoordinate in a single ‘Observable Entity’ concept the text of the ‘substance/entity + property + specimen’ triad.

Audience
Clinical, Technical, Implementers, Ontologists, Terminology Developers

Learning Objectives
Gain an understanding of:

1. Experience of how terminology design was used to support business cases.
2. How the Observables model can be used to model laboratory medicine data in SNOMED CT.
3. Approaches for engaging with clinical users in the development of refsets/subsets in SNOMED CT.

Abstract
In the UK, against the background of laboratory reorganization and the mandated transition from READ codes to SNOMED CT, a significant upgrade of the existing standardized results code lists used for reporting laboratory test results is under way. This new product uses SNOMED CT to precoordinate in a single ‘Observable Entity’ concept the text of the ‘substance/entity + property + specimen’ triad, with other information where needed. We believe this Unified Test List (UTL) can become the basis for a core refset for representing lab requests and results not just for the UK but for other member countries.

The NHS in the UK has a strong history of existing electronic flows of laboratory results, particularly to primary care physicians. This can be both an advantage and a constraint. We describe the scoping, investigation methods and model conceptualization work etc. that are getting us ‘from idea to product’ and discuss some lessons learnt from the experience to date.
We describe our review of historical models of results and requests coding and the key interaction with units of measurement (UoMs) in the context of a developing FHIR profile. We will discuss where resources, long established systems and data flows affect progress.

We identify how we engaged with key stakeholders and addressed

• vendor needs and levels of systems maturity

• requesting clinician needs

• requirements of key national stakeholders on data for epidemiology, reimbursement and quality assurance.

We outline the proposed general concept model governing a ‘unified test list’ for results and we also describe where we considered:

• international standards for nomenclature and representations

• application of the SNOMED CT concept model in practice

• international collaborations.

We describe how this work translated into a robust, safe and interoperable model that addresses heterogenous business requirements. We go on to suggest that this work, based on SNOMED CT editorial principles, could form the basis of a core international refset for representing lab requests and results using SNOMED CT.

Reference Documentation
Pathology Bounded Code List: https://hscic.kahootz.com/connect.ti/t_c_home/view?objectId=305203

UK SNOMED CT implementation: https://hscic.kahootz.com/connect.ti/t_c_home/view?objectId=297907#implmentation