

Terminology Authoring Activities

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Authoring teams

Clinical

8 authors

Pharmacy (Emma)

5 authors

Cross-mapping (Hazel)

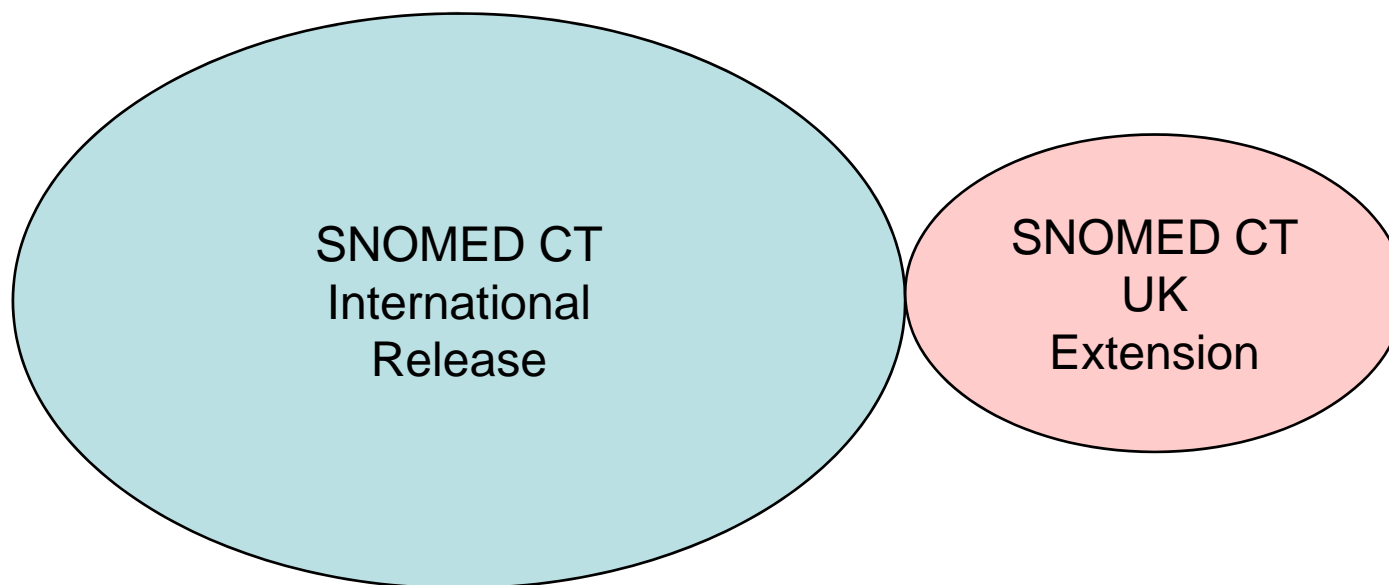
2 authors

Advice

“God grant me the serenity to accept the things I cannot change; courage to change the things I can; and wisdom to know the difference”

Reinhold Niebuhr

Perspectives



Requests for change

- Requests via a central portal
- Requests
 - New content
 - Term changes to existing content
 - Relationship changes to existing content
 - Other changes

Steps to author

1. Request for a new term
2. Research term, including clarification
3. Locate where to add in the hierarchy
4. Consider term strings
 - FSN / Preferred term
 - Possible synonyms
5. What is the status of the term, UK/International ?

Steps to author

6. What attributes does the term inherit ?
7. Does the term require additional attributes ?
8. Does the term require a fixed initial capital status ?
9. What language set are we authoring in ?
10. What dataset are we authoring into ?

UKTC HEALTH WARNING





Bespoke authoring tool - CLIVE

The screenshot displays the CLIVE software interface with two main windows:

- SCT Concept Window:**
 - Concept ID: 0
 - <New concept> (procedure)
 - Concept Details:
 - CTV3 ID: ?????
 - SNOMED ID: [empty]
 - Status: Current
 - Dataset: UK Clinical
 - Primitive:
 - Term List:

Desc	St	Term
F	C	<New concept> (procedure)
P	C	<New preferred term>
 - Term Details:
 - Desc ID: 0
 - Status: Current
 - Dataset: UK Clinical
 - Language: en
- SCT Hierarchy Window:**
 - Endoscopic freeing of adhesions of fallopian tube (procedure)
 - Endoscopic freeing of adhesions of ovary (procedure)
 - Endoscopic injection into fallopian tube (procedure)
 - Endoscopic insertion of cannula into gallbladder using laparoscope (procedure)
 - Endoscopic intrafallopian transfer of gamete (procedure)
 - Endoscopic removal of calculus from liver using laparoscope (procedure)
 - Endoscopic suspension of uterus (procedure)
 - Endoscopic transurethral ultrasound directed oocyte recovery (procedure)
 - Endoscopic transvesical oocyte recovery (procedure)
 - Laparoscopic ablation of lesion of kidney (procedure)
 - Laparoscopic adrenalectomy (procedure)
 - Laparoscopic anastomosis of gallbladder to intestine (procedure)
 - Laparoscopic appendectomy (procedure)
 - Laparoscopic emergency appendectomy (procedure)
 - Laparoscopic interval appendectomy (procedure)
 - Laparoscopic biopsy of liver (procedure)
 - Laparoscopic biopsy of uterine ligaments (procedure)
 - Laparoscopic biopsy of uterus (procedure)
 - Laparoscopic cholecystectomy (procedure)
 - Laparoscopic cryoablation of neoplasm of liver (procedure)
 - Laparoscopic diaphragm pacing (procedure)
 - Laparoscopic drainage of lymphocele to peritoneal cavity (procedure)
 - Laparoscopic drainage of ovarian cyst (procedure)
 - Laparoscopic dye test of Fallopian tube (procedure)
 - Laparoscopic excision of kidney and partial excision of ureter (procedure)
 - Laparoscopic excision of kidney and total excision of ureter (procedure)
 - Laparoscopic fundoplication (procedure)
 - Laparoscopic gastric bypass (procedure)
 - Laparoscopic gastroenterostomy (procedure)

SCT Concept Window

Concept ID:    




<New concept> (procedure)

Concept Details:

CTV3 ID: SNOMED ID: Unreleased

Status: Dataset: Primitive:

Term List

   Desc. Type:

Desc	St	Term
F	C	<New concept> (procedure)
P	C	<New preferred term>

Term Details:

Desc ID: Unreleased Fixed Case Initial:

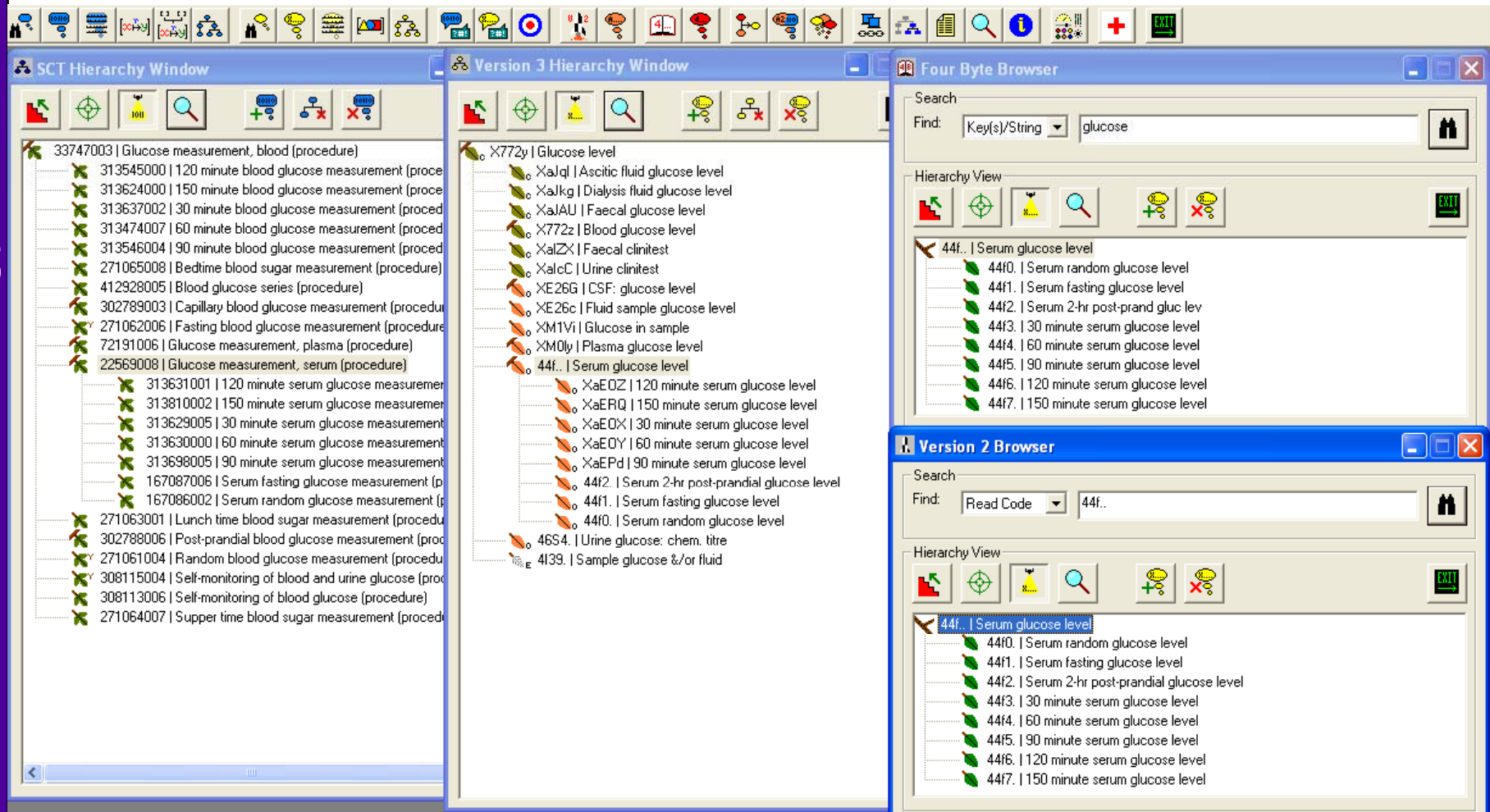
Status: Dataset: Language:

<New concept> (procedure)

SCT Hierarchy Window

The screenshot shows a software window titled 'SCT Hierarchy Window'. It features a toolbar with icons for navigation and editing. The main content area displays a hierarchical list of SNOMED CT concepts. The concept '410607006 | Organism (organism)' is selected and highlighted in blue. Other concepts include '138875005 | SNOMED CT Concept (SNOMED RT+CTV3)', '123037004 | Body structure (body structure)', '404684003 | Clinical finding (finding)', '308916002 | Environment or geographical location (environment / location)', '272379006 | Event (event)', '106237007 | Linkage concept (linkage concept)', '363787002 | Observable entity (observable entity)', '39866004 | Animal (organism)', '36272005 | Infectious agent (organism)', '387961004 | Kingdom Animalia (organism)', '426785004 | Kingdom Chromista (organism)', '31006001 | Kingdom Plantae (organism)', '278306005 | Life-cycle form (organism)', '264395009 | Microorganism (organism)', '264418008 | Pathogenic organism (organism)', '115630000 | Renotrophic organism (organism)', '284666000 | Trophic life form (organism)', '89088004 | Unknown living organism (organism)', '373873005 | Pharmaceutical / biologic product (product)', '78621006 | Physical force (physical force)', '260787004 | Physical object (physical object)', '71388002 | Procedure (procedure)', '362981000 | Qualifier value (qualifier value)', '419891008 | Record artifact (record artifact)', '24221000000103 | SNOMED CT UK administrative concepts (administrative concept)', '243796009 | Situation with explicit context (situation)', '48176007 | Social context (social concept)', '370115009 | Special concept (special concept)', '123038009 | Specimen (specimen)', '254291000 | Staging and scales (staging scale)', and '105590001 | Substance (substance)'.

- 138875005 | SNOMED CT Concept (SNOMED RT+CTV3)
- 123037004 | Body structure (body structure)
- 404684003 | Clinical finding (finding)
- 308916002 | Environment or geographical location (environment / location)
- 272379006 | Event (event)
- 106237007 | Linkage concept (linkage concept)
- 363787002 | Observable entity (observable entity)
- 410607006 | Organism (organism)
- 39866004 | Animal (organism)
- 36272005 | Infectious agent (organism)
- 387961004 | Kingdom Animalia (organism)
- 426785004 | Kingdom Chromista (organism)
- 31006001 | Kingdom Plantae (organism)
- 278306005 | Life-cycle form (organism)
- 264395009 | Microorganism (organism)
- 264418008 | Pathogenic organism (organism)
- 115630000 | Renotrophic organism (organism)
- 284666000 | Trophic life form (organism)
- 89088004 | Unknown living organism (organism)
- 373873005 | Pharmaceutical / biologic product (product)
- 78621006 | Physical force (physical force)
- 260787004 | Physical object (physical object)
- 71388002 | Procedure (procedure)
- 362981000 | Qualifier value (qualifier value)
- 419891008 | Record artifact (record artifact)
- 24221000000103 | SNOMED CT UK administrative concepts (administrative concept)
- 243796009 | Situation with explicit context (situation)
- 48176007 | Social context (social concept)
- 370115009 | Special concept (special concept)
- 123038009 | Specimen (specimen)
- 254291000 | Staging and scales (staging scale)
- 105590001 | Substance (substance)






The screenshot displays a software interface with three main windows:

- SCT Hierarchy Window:** Shows a hierarchical list of terms starting with '33747003 | Glucose measurement, blood (procedure)'. It includes various sub-terms such as '313545000 | 120 minute blood glucose measurement (procedure)', '271065008 | Bedtime blood sugar measurement (procedure)', and '22569008 | Glucose measurement, serum (procedure)'. The list continues with numerous other specific measurement terms.
- Version 3 Hierarchy Window:** Shows a hierarchical list starting with 'X772y | Glucose level'. It includes sub-terms like 'XaJq | Ascitic fluid glucose level', 'XaJk | Dialysis fluid glucose level', 'XaJAU | Faecal glucose level', 'X772z | Blood glucose level', 'XaJX | Faecal clintest', 'XalcC | Urine clintest', 'XE26G | CSF: glucose level', 'XE26c | Fluid sample glucose level', 'XM1Vi | Glucose in sample', 'XM0ly | Plasma glucose level', '44f.. | Serum glucose level', 'XaE0Z | 120 minute serum glucose level', 'XaERQ | 150 minute serum glucose level', 'XaEOX | 30 minute serum glucose level', 'XaEOY | 60 minute serum glucose level', 'XaEPd | 90 minute serum glucose level', '44f2. | Serum 2-hr post-prandial glucose level', '44f1. | Serum fasting glucose level', '44f0. | Serum random glucose level', '46S4. | Urine glucose: chem. titre', and '4139. | Sample glucose &/or fluid'.
- Four Byte Browser:** Features a search bar with 'Find: Key(s)/String' and 'glucose'. Below it, a 'Hierarchy View' section shows a tree structure starting with '44f.. | Serum glucose level', which branches into '44f0. | Serum random glucose level', '44f1. | Serum fasting glucose level', '44f2. | Serum 2-hr post-prandial glucose level', '44f3. | 30 minute serum glucose level', '44f4. | 60 minute serum glucose level', '44f5. | 90 minute serum glucose level', '44f6. | 120 minute serum glucose level', and '44f7. | 150 minute serum glucose level'.
- Version 2 Browser:** Features a search bar with 'Find: Read Code' and '44f..'. Below it, a 'Hierarchy View' section shows a tree structure starting with '44f.. | Serum glucose level', which branches into '44f0. | Serum random glucose level', '44f1. | Serum fasting glucose level', '44f2. | Serum 2-hr post-prandial glucose level', '44f3. | 30 minute serum glucose level', '44f4. | 60 minute serum glucose level', '44f5. | 90 minute serum glucose level', '44f6. | 120 minute serum glucose level', and '44f7. | 150 minute serum glucose level'.

New Intervention Concept



Parents - SCT: 4-Byte:

Version 2: Version 3:

Read Code: Unreleased   

Terms

TC	Rel	Term
??	N	

Selected Term

Term Code: Unreleased

Term 30:

Term 60:

Term 198:



Cross Mapping

Class: Def:

Code:

Key List

Rel	Key
N	

Review concepts Review maps V3 parent is really V3 map

Authoring tool - current

- Originally created to author Read codes
- Expanded to include SNOMED CT
- Inbuilt ability to maintain mappings between terminologies
- Built to meet specific requirements of the UK authoring team
- Lacks an internal classifier
- . . . soon to be redundant . . .

UK authoring

1. IHTSDO guidance
2. UK specific guidance – constrained subset of IHTSDO guidance
 - Developed specifically to meet UK specific use cases
 - Guidance reflects the lack of a classifier
3. Some constraints are inbuilt into the authoring tool

In-built tool constraint examples

1. FSN tags must be present
2. Must be an FSN and Preferred term at least
3. Appropriate parentage status
4. Changes cannot be made to International edition concepts (additional terms/relationships are acceptable)
5. Language settings

Validation of authored content

1. All UK authors have a clinical background
2. Additional expert views are sought from a variety of expert sources
3. All additions to the terminology are checked by two other authors
4. Mature QA system
 - 1000+ SQL rules run against the data
 - Supporting software

Standard inspections

- New concepts
- V3 to SCT mapping
- Fully specified names
- Preferred terms
- Synonyms
- Relationships
- Description changes
- Relationship changes

QA rules - examples

- All words (except acronyms) in active UK Clinical descriptions must be in the lexicon
- There should be no gaps in a concept's relationship group sequence
- Active terms should be capitalised, or have an initial capital status of 1
- Subset IDs in the subsets table should belong to an active subset
- Concept model validity

Technical QA

1. Validity checks on data
 - E.g. lexical checks, double spaces, language settings, FSN structure
2. Data integrity
 - E.g. All concepts have parents, all concepts have FSN/Preferred term, all maps are valid from legacy products

Governance

1. UK Edition Committee
 - provides recommendations to the UKTC Governance Board on products and service developments
 - clinically and technically assure products
2. UKTC Management Team
 - Day-to-day management of products
3. UK Governance Board

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