SNOMED CT Community Updates

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Click for updates

Global Report

Shelley Lipon

Americas: Regional update

- SNOMED CT (SCT) listed and adopted for use as a standard in the newly published version 2, US Core for Data for Interoperability (USCDI).

- Provided exhibitor booth presence and customer engagement at HIMSS 2021.

- Submitted comments and presented to US National Committee on Vital and Health Statistics (NCVHS) on the *Standardization of Information for Burden Reduction and Post-Pandemic America project.*

- Continued support of Gravity Project on social determinants of health content inclusion in International and US Editions of SNOMED CT.

- Presented to Global Digital Health Partnership (GDHP) to support our shared Members.

- Continued engagement and support for SCT users in Brazil, Colombia, Ecuador, Mexico, and at PAHO.

- Provided ongoing engagement with El Salvador and Jamaica regarding future membership.

Asia and Pacific: Regional update

- SNOMED CT (SCT) webinars and Developer Day workshop held for stakeholders in India and New Zealand.

- SCT virtual engagement session held with the Asian eHealth Information Network (AeHIN) member representatives.

- SNOMED International was represented at BRICS Digital Health Virtual Summit; the Australian e-Health Research Colloquium in-person event in Brisbane; New Zealand's Open Forum and Australian Clinical Terminology User Group meeting amongst other engagements.

- SCT presentation delivered to representatives from the Big Data Centre of Beijing Tiantan Hospital, China.

- Continued support provided to SNOMED CT pilot implementation project in Vietnam.

- Discussions about SNOMED CT adoption held with organisations in Thailand, Mongolia, Indonesia, Georgia and Japan.

SNOMED International

Europe: Regional update

- Completion of scheduled onboarding activity of Germany

- Arrangement of research license for EU-wide Orchestra project, looking to support COVID pandemic research

- French translation group are developing ways to share the French translations available currently and in development

- German translation group is established and working towards the development of a global German translation

- Increasing focus across multiple countries on SNOMED CT support for specific clinical projects

- Agreement with the EU to provide EU member states with 60% funding to support SNOMED International membership

- Funding is in place for the current EU budgeting cycle up to 2027 supports non and existing SNOMED Member countries

- TEHDAS project - SNOMED International has joined as a member of the project, to develop the European Health data space to support data sharing and research

- Continued ongoing engagement with France, Poland and Croatia regarding future membership

Middle East and Africa: Regional update

Middle East

- UAE officially announced as the 41st Member
  - Completed initial meetings, implementation strategy and onboarding scheduled
  - Priorities include mandating use of SNOMED CT in hospital systems for symptoms, allergies and chronic conditions
  - Connected Implementation team with key UAE stakeholders
- Connected Implementation team to work with Saudi Arabia (drug dictionary)
- Continued engagement and support for SCT users in Jordan (procedures)

Africa

- Sovereignty project (Rwanda)
  - Successfully completed project to implement app for Community Health Workers in Rwanda
  - Promoting project and further deployment across Rwanda and other countries with the African Union and World Bank
- Aurelius - HIS vendor with large footprint in Zimbabwe, Kenya and Rwanda building cloud-based solutions with SCT at its core
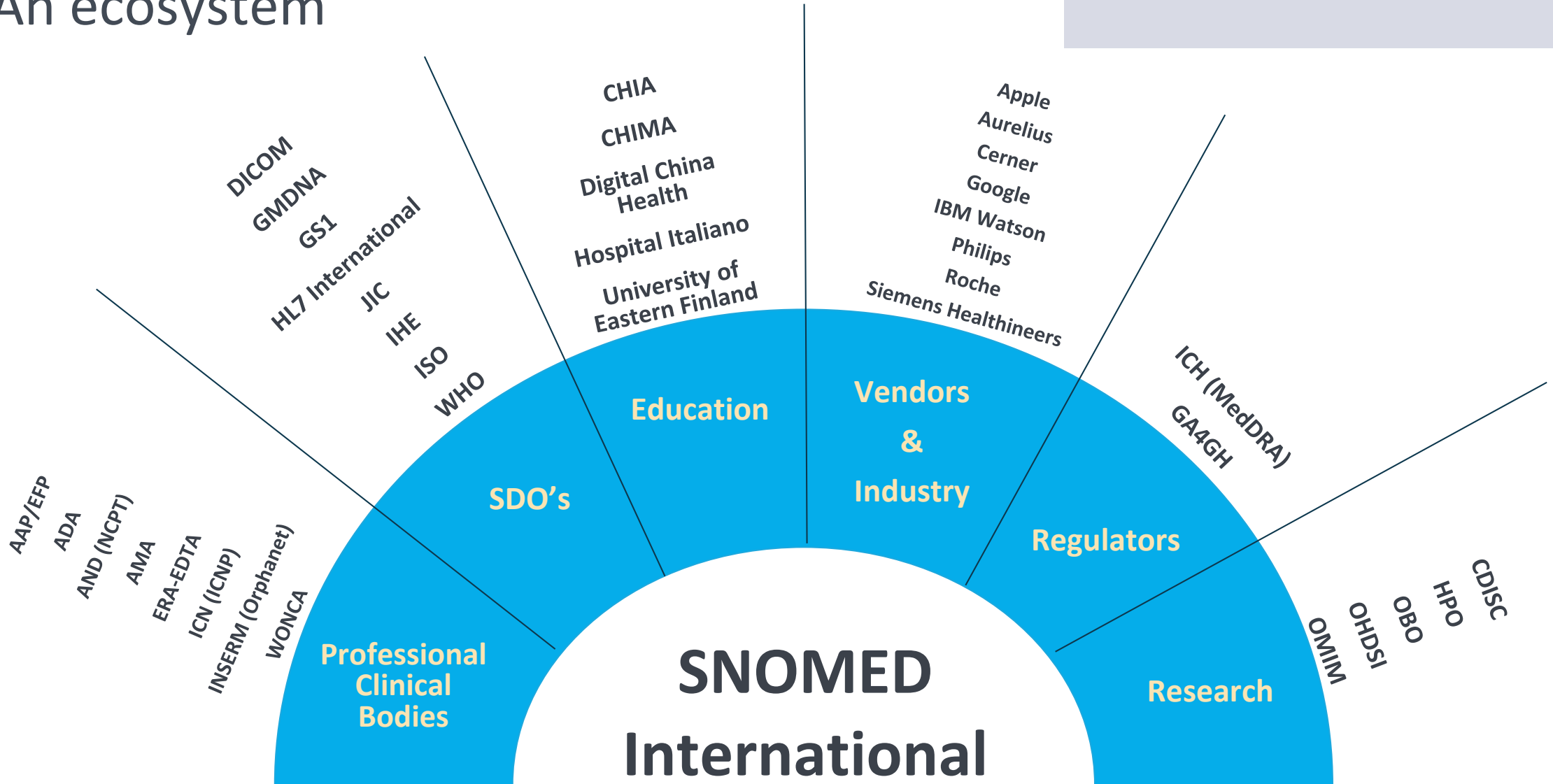
International collaboration
An ecosystem

SNOMED International partnerships are driven by our 2020 - 2025 strategy by supporting, facilitating, and integrating terminology standards to help enhance and streamline the health and care ecosystem

CHIA
CHIMA
Digital China Health
Hospital Italiano
University of Eastern Finland

DICOM
GMDNA
GS1
HL7 International
JIC
IHE
ISO
WHO

Apple
Aurelius
Cerner
Google
IBM Watson
Philips
Roche
Siemens Healthineers

ICH (MedDRA)
GA4GH

Education

Vendors
&
Industry

SDO's

Regulators

AAP/EFP
ADA
AND (NCPT)
AMA
ERA-EDTA
ICN (ICNP)
INSERM (Orphanet)
WONCA

Professional
Clinical
Bodies

SNOMED
International

Research

OMIM
OHDSI
OBO
HPO
CDISC

International collaboration

Products from partnerships

Content
Improvement & Additions
- AND NCPT content
- ICNP nursing content
- Periodontal content
- SDoH content

Refsets & Freesets
- DICOM
- Dentistry Diagnoses
- Dentistry Odontogram
- ERA-EDTA
- GP/FP
- HL7 International IPS
- ICNP 2019 (Oct 2021)
- IHE Profiles
- Nursing

Maps
- GMDN equivalency file
- ICD-10 and ICD-11 MMS
- LOINC - SNOMED expression map
- MedDRA
- Orphanet (INSERM)
- SNOMED - ICD-11 foundation map (pilot)

Other Products & Initiatives
- HL7 - SNOMED on FHIR
- Global Patient Set (GPS)
- Global vaccine certificate initiatives
- Translated Education Products
- UNICOM project deliverables

Pipeline Products
- CPT map
- HPO map
- EDQM map
- NANDA-I content

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The global language of healthcare

SNOMED International

Collaborations 2021 Pipeline

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The global language of healthcare

Agreements in Progress & Executed	Continuing Partnerships		Agreement Renewals	Current & Upcoming Areas of Focus
AAP/EFP - Periodontology*	ADA	openEHR	DICOM*	Allergies
AND (NCPT)*	AMA	WONCA	GMDNA	Devices
EDQM	CDISC		GS1	IDDSI
HPO	ERA-EDTA		HL7 International*	NANDA-I
ICH (MedDRA)*	GA4GH			NPU
LOINC	JIC			OBO
OHDSI	ICN (ICNP)			OMIM
WHO	IHE			SDoH
	Orphanet (INSERM)			UCUM

SNOMED International

* COMPLETED new & renewed agreements in 2021

Collaboration & Partnerships Glossary

- **AAP/EFP -** American Association of Periodontology & European Federation of Periodontology
- **ADA -** American Dental Association
- **AMA** - American Medical Association
- **AND (NCPT) -** Academy of Nutrition and Dietetics
- **CDISC -** Clinical Data Interchange Standards Consortium
- **CHIA -** Certified Health Informatician Australia
- **CHIMA -** Canadian Health Information Management Association
- **DICOM -** Digital Imaging and Communications in Medicine Standards Committee
- **EDQM -** European Directorate for the Quality of Medicines & HealthCare
- **ERA-EDTA -** European Renal Association – European Dialysis and Transplant Association
- **GA4GH -** Global Alliance for Genomics and Health
- **GMDNA -** Global Medical Device Nomenclature Agency
- **GS1 -** GS1

- **HL7 International -** Health Level 7 International
- **HPO -** Human Phenotype Ontology
- **ICH (MedDRA) -** International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use
- **IDDSI -** International Dysphagia Diet Standardisation Initiative
- **IHE -** Integrating the Healthcare Enterprise
- **ISO -** International Organization for Standardization
- **JIC -** Joint Initiatives Council
- **NANDA -** NANDA-I
- **OBO -** Open Biological and Biomedical Ontologies Foundry
- **OHDSI -** Observational Health Data Sciences and Informatics
- **UCUM -** Unified Code for Units of Measure
- **UNICOM (project)**
- **WHO -** World Health Organization
- **WONCA** - World Organization of Family Doctors

SNOMED CT Implementation Support

Linda Bird

Home

SNOMED Implementation Support Service

- Well designed implementations are important in achieving the full potential of SNOMED CT

- To help the eHealth community in meaningfully adopting SNOMED CT, SNOMED International is launching a new implementation support service

- This service will assist implementations of SNOMED CT for a range of stakeholders including NRCs, healthcare providers, researchers & vendors

- New **SNOMED Implementation Support Portal** available at http://snomed.org/support

SNOMED International's New Implementation Support Team

Linda Bird
Implementation Support
Lead

Alejandro Lopez Osornio
Senior Implementation
Support Specialist

Joined September 2021

Kai Kewley
Technical Support
Specialist

Joins December 2021

Anne Højen
Implementation
Support Specialist

Joins April 2022

Implementation
User Group Activities

- **Snap2SNOMED Mapping Tool**

  - Developing a hosted tool for Members and their stakeholders to collaboratively create and maintain simple maps to SNOMED CT

  - Tool will be available in early 2022

  - User group: http://snomed.org/mtug

- **SNOMED Drug Extension User Group**

  - Forum to discuss drug terminology content

  - Subgroup is developing a map from EDQM dose forms to SNOMED CT dose form

  - User group: http://snomed.org/deusg

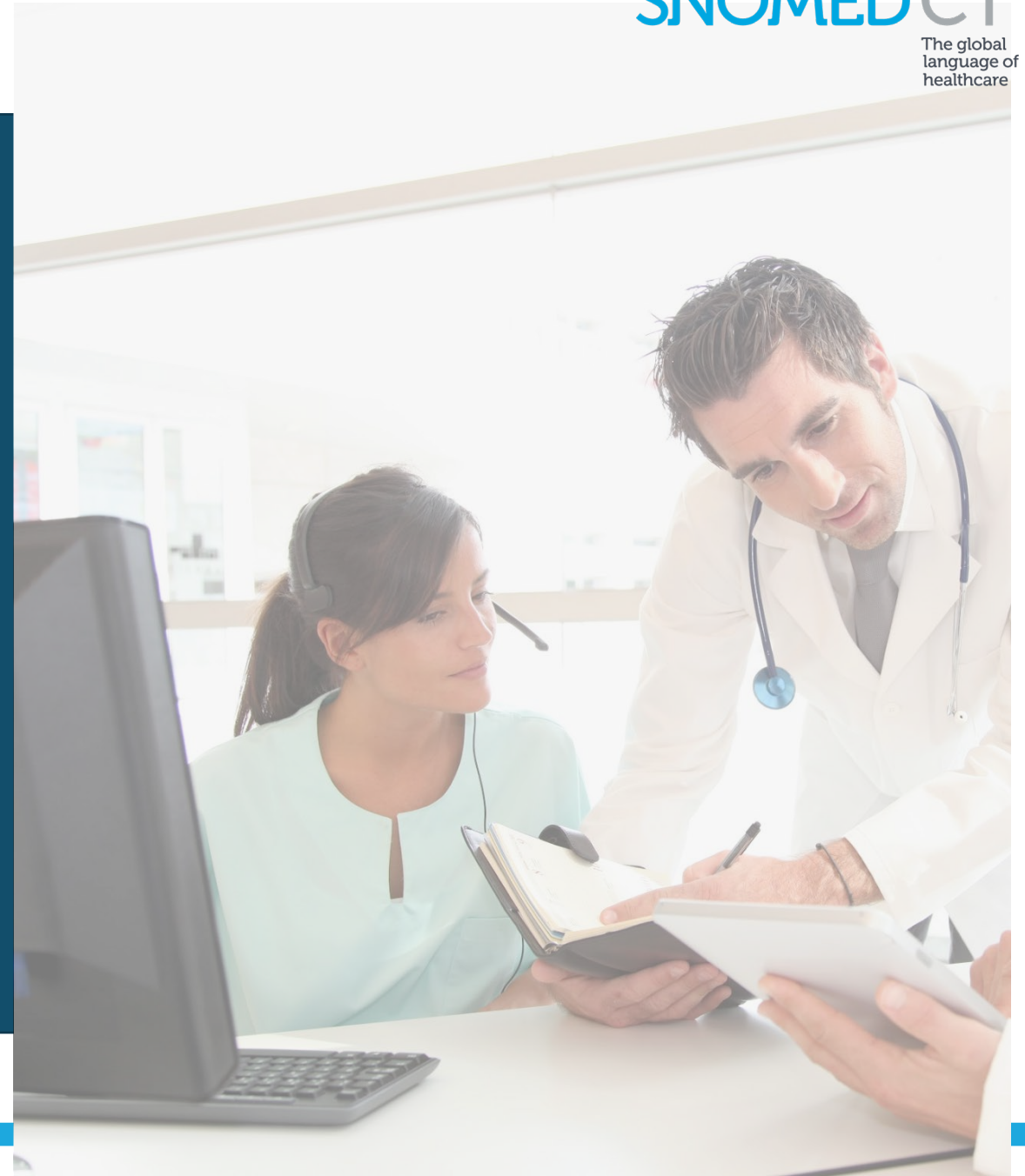# Education & Product Support

Liara Tutina

Home

Education projects

- Authoring Level 2 course development successfully completed and pilot project commenced

- SNOMED International E-Learning (Moodle) platform migration/ upgrade completed

- SNOMED CT Foundation Course course upgrade project underway with Module A completed

- SNOMED Implementation course delivery model review initiated with a view to upscaling the course intake capacity in 2022

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The global language of healthcare

SNOMED International

SNOMED CT courses

- SNOMED CT course delivery ongoing with growing number of successful course completions:

➢ Foundation course – 3090 graduates

➢ Implementation course – 656 graduates

➢ Authoring Level 1 course – 191 graduates

➢ Terminology Services course – 33 graduates

Learning resources

- **Courses**

  To enroll, please visit our website:
  http://snomed.org/courses

- **Document Library**

  Available at: http://snomed.org/doc

- **Other resources**

  Available at: http://snomed.org/eduction

SNOMED CT CT Courses
Available at:
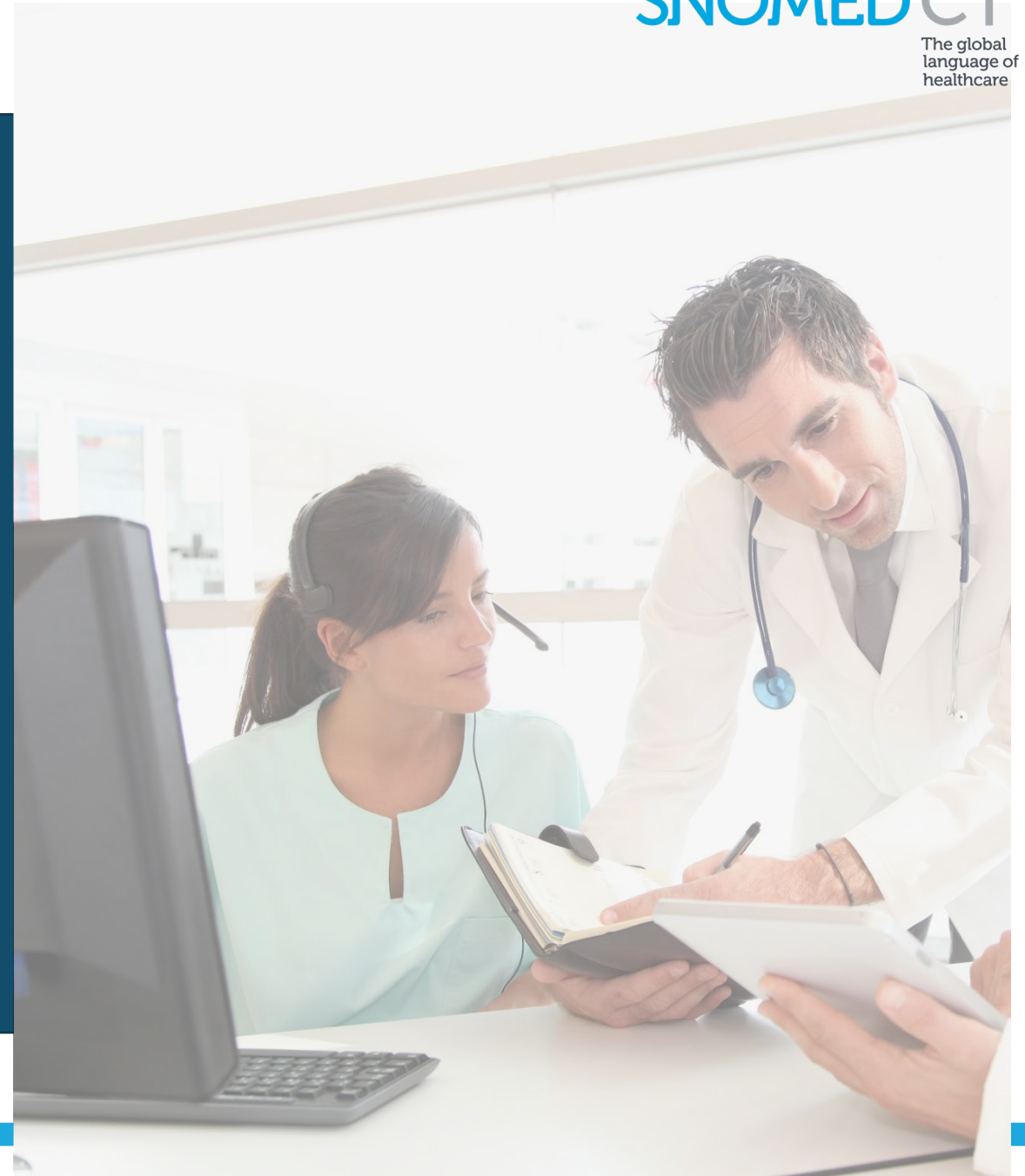http://snomed.org/courses

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Clinical Engagement

Ian Green

Home

Clinical Engagement

- **Clinical reference groups (CRGs)**
  - Launch of Ophthalmology group
  - Relaunch of a pathology group, initially focusing on laboratory medicine
- **Clinical contacts database** - development of a list of clinical expert contacts to support the SNOMED International authoring team
- **SNOMED CT support for Cancer** - webinar session as part of the October meetings looking at SNOMED CT support from cancer treatment through to research
- **Karolinska Institute** - provision of a clinical data analytics session for MSc students (this will be an annual event)
- **Presentations**
  - "SNOMED CT support for regulation" presented at the Oxford regulatory conference
  - Medical informatics Europe (MIE) - "SNOMED CT and data analytics" presented as part of the 2021 conference

Vendor Engagement

Nick Egarhos

Home

Vendor Engagement

- Patient Friendly Terms (PFT) working group: participants include vendors and 2 Members (Netherlands and New Zealand). Content to be published in Community Content area

- Apple: draft agreement to participate in Patient Friendly Terms (PFT) working group and provide seed content (over 2000 concepts). This is the first non-profit data contribution in Apple's history

- Google: continue to scope joint study. Assessing possible Google Health customers with a suitable use case to participate in study utilizing Google's AI tooling that incorporates SCT, including Google Natural Language API, and Google Entity Extraction Models for Healthcare

- HIMSS 2021 attendance: limited number of attendees, allowed for meetings and continuing discussions with multiple new vendors including:

    T-Mobile

    Lightbeam Health

    Vivify Health

    CureMD

    Cavo Health

Vendor Engagement

- Successful completion of TCC Casemix project: HOSP - Hospital Operations for Sustainable Productivity

  The project delivered on its primary objective to systematically acquire surgical procedure data at a granular level, in surgery, and to directly correlate this with patient and surgeon risk factors

  To accomplish this, TCC used SNOMED CT to create structured surgical procedure data, enabling system-wide data flows through the TCC service (perioperatively), preoperatively and postoperatively. Without SNOMED CT's rigour, clinical definitions could not be seamlessly shared across the system.

- Successful completion of the Sovereignty project in Rwanda: "Ejo Health" app now deployed and in use by Community Health Workers. The app includes:

  SNOMED CT-driven modules for patients and clinicians in Africa, starting with Rwanda. The initial focus included developing modules for Maternity and Child health

  A SNOMED CT and FHIR based rules engine and survey builder enabling the flexibility required to implement modules consistently across geographies

  Multi-language support based on SNOMED CT's translation capabilities. Currently, Ejo Health supports 3 languages within the app using SNOMED CT: Kinyarwanda, English and French

Vendor Engagement

- InterRAI: have requested our participation in their Aged Care Data Compare (ACDC) project, performed out of the University of Queensland

    Opportunity to perform the gap analysis between InterRAI and SNOMED CT, which has historically been a challenge to undertake

    This project is a potential precursor to discussion on possible InterRAI partnership and content distribution arrangements

- CRO Business Development: Working on value proposition for CRO's based on requirements
    1) CRO's want to expand their real world data (RWD) capability, they need to understand the data in the healthcare system
    2) Patient recruitment processes is a very large issue for CRO's- inclusion/exclusion criteria could be transformed into SNOMED queries
    3) Collecting data form the EHR, to do RWD and clinical trials - additional mapping opportunities (CDISC/Medra)

- Based on the above, we are working with Isabelle de Zegher to draft a short deck outlining the strategy, and using vocabulary that resonates with CRO/pharma companies

Products & Services

Rory Davidson

Home

2021 Major Projects Overview

- **Frequent Releases**

  Cross team, content & technology, effort for a major strategic change programme impacting people, processes, technology and stakeholders

  Making SNOMED CT a adapting and current clinical terminology that is more relevant than ever before

  In doing so, improves internal efficiencies and the ability to respond to stakeholder requirements quicker

- **Quality Improvement**

  The content team has been working on this key work item, looking to improve the consistency and quality of SNOMED CT, using automations where possible with help from the technical team, and often just getting into the content to make the changes.

- **Reference Set Management Tool**

  The development of a new tool to allow stakeholders to manage reference sets that make use of the Community Content area, as well as national extensions

- **Translation Tooling**

  Deployment and ongoing testing of a translation tool that focuses on quick, easy and efficient translation to allow translations to progress, leveraging automated translation where feasible

- **ICD-11 Mapping**

  After the successful pilot in 2020, the production through automated means of a full SNOMED CT to ICD-11 MMS map to aid Members in 2022, whilst a map to the ICD-11 foundation layer is assessed.

- **Subontology Creation**

  The completion of the joint project with the University of Manchester to enable the creation of subontologies of SNOMED CT based on a given set of concepts.

- **Frequent release continues**

  Focus on provision to Managed Service customers

- **Collaborative features**

  Including more involvement in authoring, feedback, etc

- **Template editing for International authoring**

- **Refactoring**

  An ageing estate with components needing review and refresh

- **Design to mitigate technology decisions driven externally**

  Software products changing direction (Atlassian specifically)

- **Open roadmap**

  Using an online tool to share product roadmaps in a more dynamic way with the community coming early 2022

Content Strategy

Dr. Jim Case

Home

Quality Improvement

- **Background:** Ongoing effort begun in 2018 with a focus on structural consistency (modeling patterns and templates)
    - Increase amount of sufficiently defined content
    - Decreased number of intermediate primitive content

- **Priorities**: Set by member surveys
    - Initial efforts focused on Clinical findings
    - Recent emphasis shifted towards Procedures

- **Status**:
    - Clinical findings - over 60% complete (55% of concepts are sufficiently defined)
    - Procedures - ~ 15% complete or in progress
    - Approx 40% of eligible content conforms to a standardized template

Rapid response to terminology needs

- **COVID-19:** Continuous monitoring of the evolving COVID-19 pandemic to address terminology needs:
  - Emergency use authorizations for vaccines, medications
  - Support for vaccination certificates (e.g. EU Digital COVID Certificate, WHO DDCC, etc.)
  - Single source access to COVID-19 related terminology
    - https://confluence.ihtsdotools.org/display/snomed/SNOMED+CT+COVID-19+Related+Content
  - Collaborations with IVD vendors and Public health community

Stakeholder involvement

- **External editor certification -** draft requirements for qualifications necessary for external (non SNOMED staff) to edit content in the International release are under internal and external review
  - Covers educational requirements, experience
  - Defines allowed functions and areas of the content that may be accessed

- **OHDSI - Observational Health Data Sciences and Informatics**
  - International, interdisciplinary collaborative focused on large-scale analytics, with SNOMED CT as a source terminology
  - Provides real-world data on use of SNOMED concepts and "gaps" in SNOMED CT coverage

- **Social care and Social determinants of health (SDoH)**
  - Participation in outside groups dealing with social care and SDoH
  - Interviews with National release centers on current and planned needs for social care terminology
  - Inventory of existing social care content to facilitate gap analysis
  - Discussion on scope of terminology to be managed by SNOMED International

Content & Mapping

Monica Harry

Home

Enhancement and Maintenance

- **Content requests:** SLA target met; **1500** change requests actioned per release;

- **ICD suite:** ICD-10 **map**; new ICD-11 & ICD-0 derived content changes and additions including map(s)- (ICD-11 map in development)

- **Substances; Anatomy:** changes to structure and modelling; **Drugs** (concrete domains implemented)

- **Traditional Medicine -** based on requests from Malaysia, India and China, a framework of high level concepts is under development

- **Epilepsy -** working with an international clinical expert group to restructure existing and add new content

- **Nutrition -** working with an international clinical expert group adding approx. 200 new concepts per 6 month release cycle

Collaboration derived activities

- **International Classification of Nursing Practise (ICNP) - derived terms added;** development of new Refset underway

- **LOINC -** Updating expression Refset to align with current content

- **Orphanet -** authoring of additional rare disease concepts identified as a gap

- **GMDNA -** Ongoing alignment of SNOMED CT devices content with GMDN release; provide a linkage table as a release artefact

- **MedDRA -** An additional 240 maps were created; most were to existing Snomed CT content

Stakeholder support

- **Mental and behavioural health -** review of content with changes in progress

- **Updating of derivatives:** aligning sets with current Snomed content in the International release e.g. Dentistry refset; Dicom freeset, ERA freeset, GP/FP refset, IPS refset, IHE freeset to support clinical profiles

- **CRG support -** Anesthesia, Ophthalmology, Observables

- **Kaiser Permanente** - addition of Convergent Medical Terminology derived new content

Release Management

Andrew Atkinson

Home

New Product Releases

Orphanet

1. The SNOMED CT to Orphanet (Rare Diseases) Map package was distributed as an Alpha release for review in 2020.
2. The completed Production release package will be published on or before 31st October 2021.

ICNP Refset

1. ICNP 2019 has now been incorporated into SNOMED CT.
2. An ICNP refset will be published annually, ensuring that nursing remains connected to the global health information landscape.
3. The first release will be published on or before 31st October 2021.

International Edition Monthly Releases

1. Monthly International release tests are currently in progress.
2. If trials go well, they will then be published each month from January 2022 onwards.
3. If you'd like to help with verifying the releases, please contact support@snomed.org.

International Edition Release updates

- The January 2021 International Edition introduced critical new COVID-19 vaccines content. The July 2021 release incorporated more vaccines content, so the relevant concepts were also added to the September 2021 GPS release.

- Updates about content relating to COVID-19 can be found here:

  https://confluence.ihtsdotools.org/display/snomed/SNOMED+CT+COVID-19+Related+Content

- The July 2021 release also included Concrete Domains for the first time in a Production release - full details were included in the Release Notes.

- Following SNOMED International's Frequent Delivery schedule, we are planning a move to monthly releases of the International Edition within the next year - communications to follow this year once trials are complete...

Terminology Release Advisory Group

Monday 18th October 2021 +

Tuesday 19th October 2021 +

09:00 to 12:00 UTC

(*remote conference call*)

1. A wide variety of agenda items will be covered, including those listed opposite:

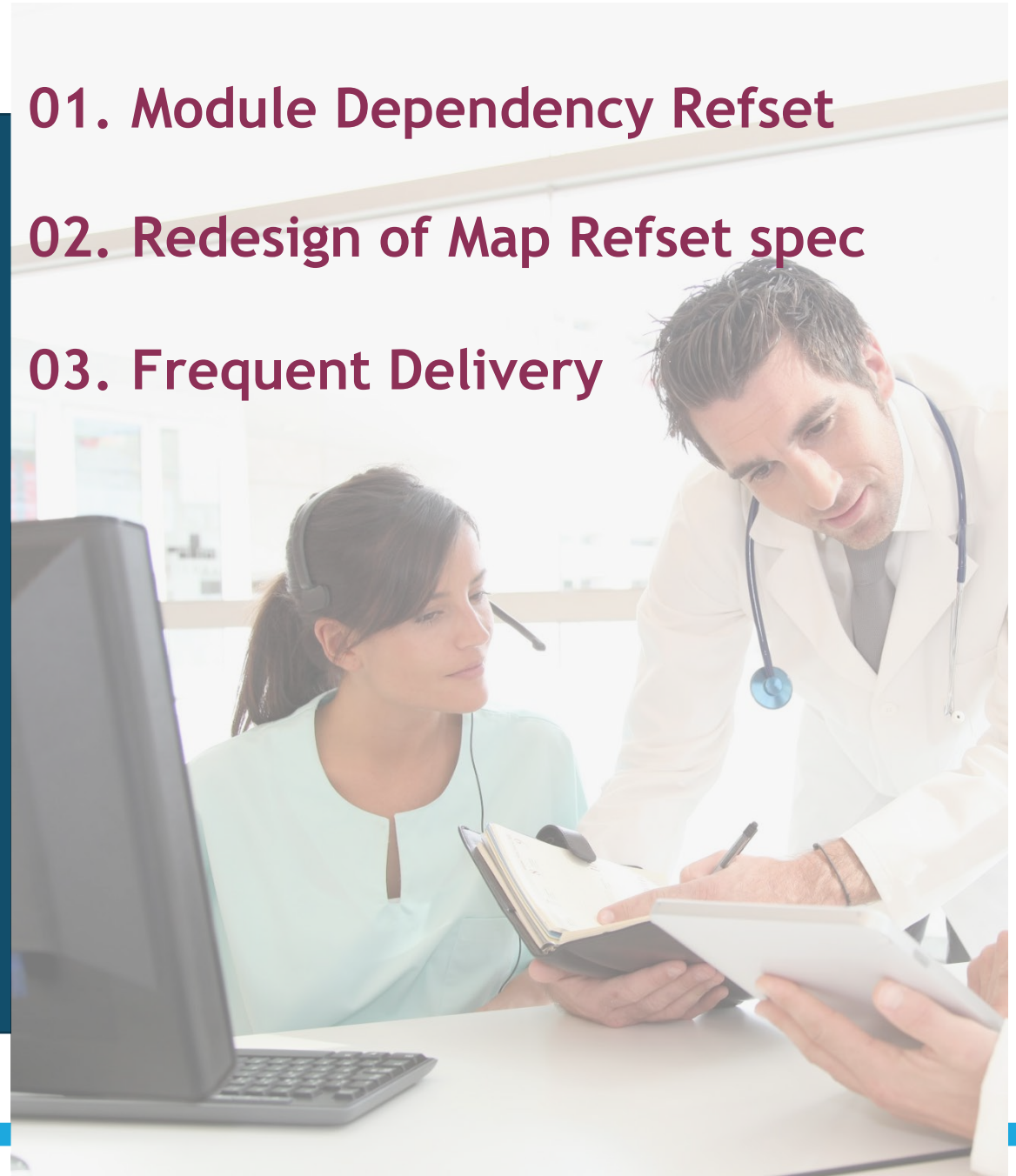2. Please feel free to read the minutes and post any questions:

https://confluence.ihtsdotools.org/pages/viewpage.action?pageId=129121034

Observers are welcome as always, and we'd like to thank everyone for their dedication in attending at some "interesting" times of day + night!

01. Module Dependency Refset

02. Redesign of Map Refset spec

03. Frequent Delivery

SNOMED International

Advanced Notice of changes to the Release schedule for the SNOMED CT International Edition

- With the impending plans to move to a more Frequent Delivery schedule of the SNOMED CT International Edition (starting with a monthly cycle within the next year), we are now trialling the new processes, including for the review and feedback periods inherent in the current Release schedule.

- Given the relative stability of recent releases, and the increased pressure that a Monthly release schedule would put upon the reviewers in the community, we are now planning to removed the Beta and Member release periods which currently allow feedback to be provided before the final Production release is published. This change will be implemented from the transition to Frequent Delivery onwards.

- If you can foresee any issues with this please contact SNOMED International ASAP at support@snomed.org with "International Edition Member release schedule question" in the subject line.

- Or you can also join the Terminology Release Advisory Group sessions during the October Conference, and provide details of the requirement to retain either or both of these review periods.

- You can also volunteer to be part of the validation efforts currently trialling the new monthly releases - please contact support@snomed.org with "Frequent Delivery Validation" in the subject line.

Tooling Updates

- **SNOMED Browser**

  New ECL Builder launched to assist creating valid ECL search queries

- **SNOMED Authoring Platform (Snowstorm)**

  Focus has been on addition of new features to support Frequent Releases, including new promotion controls and enabling Drools Rules to be run against tasks and projects.

  Updates to Role Based Access Controls to allow more control over user actions in the tool

  New Project screen functionality that allows easier task navigation and task re-assigning

- **Template Management**

  New tool to help build templates for Authoring

- **Refset Tooling**

  Work is progressing on a new Refset Management Tool which is due to be made live in the new year.

Technical Operations

- **Configuration Management Project**

  We have now implemented a new system to automatically manage our configuration and "secrets" storage. This will improve the DevOps automation, management and security of our systems.

- **JDK 11 Updates**

  We are updating all our tooling to use a newer, more secure and supported version of Java.

- **Blue Green Deployment Pilot**

  A pilot to look at how we can deploy updates to our tooling without the need for downtime was successfully completed. This has provided valuable information for a future implementation.

- **Reporting and Release Autoscaling**

  After the completion of our migration of the classification and validation services to a service which allows more servers to be run during peak times and then reduced during quiet periods, we have now extended this to our reporting and release services.

Members Managed Service

- **Member Update**

  We welcome our newest Managed Service member, Austria. Bring the total number to eleven.

- **Request Management Portal**

  The service is now live and is being used by five of Managed Service members, with more in the pipeline.

- **Tooling Updates**

  We will be running a session on the latest tooling developments for the Managed Service since the last business meeting, including a demo of the new refset tool in development..

- **Frequent Releases**

  Further discussion on Frequent Releases means for the Managed Service.

- **Roadmap Update**