



Abstract

Aim: The objectives of this work were to observe and create terminology resources so that there were systematized terms in common concepts, broad coverage, dynamic response, intuitive use and resolution in terms of semantic interoperability.

Methods: Several sources were used, organizing excerpts from published reviews and originals in impact journals. An observation system, documentation, alerts and priorities were organized on the Confluence platform ®. The sources were grouped into: scientific-technical information, needs expressed by hospital care teams, marking, annotation and fact-checking. After analysing the needs, activities were carried out to:

- Analysis and prioritization, Product validation in clinical applications, Product usability optimization for end users
- Deploying resources on the SNS Reference Terminology Server
- Development of technology for support.
- Coordination of works
- Creating an interactive viewer for the SARS-CoV-2 concept reference set

Results: The work has been divided into five well-structured phases:

1. Initial observation actions,
2. Selecting terms with their specific annotations
3. Joint analysis to assign priority, hierarchy, importance and urgency
4. Registration in the inventory of SNOMED CT concepts
5. Re-evaluation of terms by space-time relevance

The list of concepts created is published every 14 days. In the latest edition available (18/05/2020) there are 205 new terms.

Conclusions : SNOMED CT is an ideal instrument in areas such as precision medicine, data analysis in the clinical environment, clinical research and as a decision support. Its agility and ability to emerging problems. In the context of a national health information system, the use of SNOMED CT, should be considered a key requirement for semantic interoperability of clinical data. The ultimate goal for all users is to collect and share information in an international environment, which will help us better understand the epidemiology of SARS-CoV-2 disease and inform and communicate risk management, for example under WHO's multisectoral approach called One Health.



Content

Several sources were used, organizing excerpts from published reviews and originals in impact journals. An observation system, documentation, alerts and priorities were organized on the Confluence platform ®. The sources were grouped into: scientific-technical information, needs expressed by hospital care teams, marking, annotation and fact-checking. After analysing the needs, activities were carried out to:

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Terminological observatory in times of COVID-19 pandemic

Rosalía Fernández Vásquez | HCDSNS System of the General Sub-Directorate of Health Information of the Spanish Ministry of Health



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The last versión: SNOMED CT National Release Center for Spain **Version: 9.0, Date-time: 07/09/2020** (Table 1 and 2)

Table 1. Main columns of SNOMED CT Spain

Domain	Terms	Hierarchy	Concept
22	309	17	309

Table 2. Other columns of SNOMED CT Spain

Column "Map" displays equivalence of concept to ICD-10 WHO

Column "Notes" displays annotations related to special uses of concept

Column "Change" displays date of release for new concept and those having relevant updates

Column "Selector" can be used to check concepts which are relevant for each user (apt for your own use)

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DISCUSSION



Dominio	Término	Jerarquía	Concepto	Ma p eo	Notas	Cambio	Selector
Anatomía patológica	Fibrosis pulmonar por COVID-19	anomalía morfológica	62771000122102				<input type="checkbox"/>
	Necrosis tubular aguda renal por infección por SARS-CoV-2	anomalía morfológica	65651000122105				<input type="checkbox"/>
Aspectos éticos	Consentimiento para uso compasivo de medicamento no autorizado	evento	64091000122105				<input type="checkbox"/>
	Consentimiento para uso de medicamento en investigación	evento	64081000122107				<input type="checkbox"/>
	Consentimiento para uso de medicamento fuera de indicación aprobada	evento	64101000122101				<input type="checkbox"/>
Ausencia de enfermedad	Ausencia de enfermedad por SARS-CoV-2	situación	688232241000119100				<input type="checkbox"/>
Contención	Aislamiento de caso de infección COVID-19	procedimiento	62781000122104				<input type="checkbox"/>
	Aislamiento de persona que ha tenido contacto con caso de infección COVID-19	procedimiento	62791000122101				<input type="checkbox"/>
	Aislamiento tras exposición a SARS-CoV-2	procedimiento	62601000122101				<input type="checkbox"/>
	Procedimiento de actuación frente a casos de enfermedad por SARS-CoV-2	procedimiento	64121000122109				<input type="checkbox"/>
	Protocolo de manejo de contactos con casos de enfermedad por SARS-CoV-2	procedimiento	64111000122103				<input type="checkbox"/>
	Prueba diagnóstica para búsqueda de contactos asintomáticos de casos con COVID-19	procedimiento	64551000122105				<input type="checkbox"/>
	Contexto de Salud Pública	Efecto colateral de la pandemia COVID-19 en asistencia sanitaria y salud pública	contexto social	65431000122103			
	Enfermedad por SARS-CoV-2 en paciente con edad mayor de 75 años	situación	63991000122107		N1		<input type="checkbox"/>
	Infección por coronavirus en profesional sanitario	evento	63911000122104				<input type="checkbox"/>
	Pandemia global COVID-19	evento	63931000122108				<input type="checkbox"/>
	Retraso en diagnóstico de accidente cerebrovascular asociado a situación de pandemia	hallazgo	65461000122105				<input type="checkbox"/>
	Retraso en diagnóstico de enfermedad crónica asociado a situación de pandemia	hallazgo	65451000122108				<input type="checkbox"/>
	Retraso en tratamiento de accidente cerebrovascular asociado a situación de pandemia	hallazgo	65471000122100				<input type="checkbox"/>
	Retraso en tratamiento de enfermedad crónica asociado a situación de pandemia	hallazgo	65481000122102				<input type="checkbox"/>

Conclusions

SNOMED CT is an ideal instrument in areas such as precision medicine, data analysis in the clinical environment, clinical research and as a decision support. Its agility and ability to emerging problems. In the context of a national health information system, the use of SNOMED CT, should be considered a key requirement for semantic interoperability of clinical data. The ultimate goal for all users is to collect and share information in an international environment, which will help us better understand the epidemiology of SARS-CoV-2 disease and inform and communicate risk management, for example under WHO's multisectoral approach called One Health

References

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- III. 3: Agrawal A, Qazi K. Detecting modeling inconsistencies in SNOMED CT using a machine learning technique. Methods. 2020 Jul 1;179:111-118. doi: 10.1016/j.ymeth.2020.05.019.
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INTRODUCTION

METHODS

RESULTS

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