



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 | Mapeo | 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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INTRODUCTION

METHODS

RESULTS

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