

# Result of Consultation on Inactivation of Role Groupers in Substance and Medicinal Product Hierarchies

## Universal Summary of All Feedback Received

23<sup>rd</sup> February, 2024

### Introduction

This document summarizes the feedback received from member countries, users, vendors implementers, and other stakeholders in response to a Briefing Note (BN) <https://confluence.ihtsdotools.org/pages/viewpage.action?pageId=212337173> that was distributed in November 2023. The aim of the BN was to consult with the community of practice (CoP) on the use case for, and necessity to maintain “role grouper” concepts in the Substance and Medicinal Product hierarchies of SNOMED CT and included too is the Resolution and Next Steps.

SNOMED International wishes to acknowledge the work of the CoP, specifically:

- US NLM
- UK NRC, Data Services Directorate (NHS England)
- The Norwegian Directorate of Health
- the Australian e-Health Research Centre, CSIRO
- Ireland NRC
- Singapore NRC
- PHAST France
- Nutrition and Dietetics Clinical Reference Group
- EMIS health
- Clinical Architecture
- Oracle Health
- Wolters Kluwer
- Cegedim Healthcare Solutions
- First Databank UK,
- Apotec
- Independent consultant

Thank you to all for providing such high-quality feedback that is both informative and comprehensive with specific examples and statistical analysis of the impact of the proposed changes, and making this an engaged and successful consultation exercise.

## Background

Role grouper concepts are useful to support the organization of the SNOMED CT hierarchy. The challenge in the Substance and Product hierarchies is that “roles” are not always and necessarily true, and are subject to change.

A proposal was approved by the drug project in 2018 to move the Therapeutic role grouper concepts from the Substance to the Product hierarchy. To date this work remains unfinished; in part due to resource restrictions but more importantly, the lack of authoritative reference sources requires a subjective decision by an author as to the therapeutic role of any particular product.

## Summary of Feedback

### *1. Concerns about Impact*

- Concerns were raised about clinical decision support for recording allergies and intolerances. Implementers with mature systems and wide implementations of SNOMED CT rely on SNOMED CT Substance role groupers in their content and clinical decision support systems. For example, using groupers to represent drug classes related to allergies or intolerances in their documentation systems, and in Electronic Medical Records (EMRs) to highlight allergies and adverse reactions, thus ensuring patient safety. SNOMED CT is also used in substance and medicinal product concepts in EMRs for sensitivity checking and clinical decision support, for example in the UK, the NHS aligns with established NHS practice of using SNOMED concepts for recording allergies and intolerances. Vendors as a group raised concerns about the potential impact of inactivating SNOMED CT Substance role groupers, particularly on delivering robust decision support for recording allergies.
- Various aspects of healthcare were impacted. “The list of concepts utilizing substance role groupers is dominated by concepts from the procedure hierarchy, indicating the impact of these concepts on various aspects of healthcare.”
- A member country replied that “this would affect around 10% of drug indications and 7% of drug contraindications documented in their drug metathesaurus. The percentage of medical specialties affected by inactivation is 60%.” Nutritionists requested access to alternatives.
- The difficulty of maintaining a system’s alignment with these proposed changes to SNOMED CT Substance role groupers was raised, which could lead to patient safety risks. Vendors in particular stressed the importance of maintaining compatibility with existing clinical workflows in order to support future initiatives effectively.
- Regulatory compliance was an issue from stakeholders who expressed concerns about potential impacts on compliance with regulatory standards and interoperability requirements, for example regarding HL7 standards and records for medication allergies and intolerances. In the US SNOMED CT is

mandated for this purpose as part of data returns, and 21 mandated Value sets contain Substance role groupers.

- Stakeholders raised concerns about interoperability challenges that may arise if role groupers are deactivated, potentially hindering information sharing between healthcare and regulatory environments, i.e. the loss of interoperability and the inability to recognize certain allergies, potentially resulting in patient harm.

## *2. Limited Current Use*

Replies from several member countries indicated that they are not currently using Substance or Medicinal Product role groupers. This included a large US supplier who hosts their own proprietary drug metathesaurus, which translates clinical characteristics of drugs into machine-readable formats using SNOMED CT and LOINC.

## *3. Support for Proposal*

Many stakeholders acknowledged the rationale behind the proposal to inactivate role groupers and their understanding of the terminological reasons for the decision. Responses from member countries' national release centres noted concerns about classification, also the confusion around whether to use substance or medicinal product. However, an observation was that "a proposed solution could lead to undesirable side effects (more primitive concepts)."

## *4. Potential Future Use Cases*

Stakeholders, including a newly established national medicinal product catalogue (not currently using role groupers), suggested potential future use cases such as clinical decision support, prescribing pathways, and analytics. Nutritionists mentioned defining groupers for specific product types like clinical nutrition products. A comment received was that these groupers could link medicines modules and clinical diagnoses/problem lists, facilitating clinical knowledge support. Implementers anticipated continued reliance on SNOMED CT Substance role groupers for future use cases such as implementing new allergy models and interoperability projects. In summary, users report that substance role groupers play a crucial role in delivering robust decision support for allergies and adverse reactions in clinical systems, ensuring patient safety and facilitating clinical decision-making.

## *5. Openness to Collaboration*

Several stakeholders, including those from national release centres and several implementers, expressed openness to collaborating with SNOMED International on future revisions or improvements in this area and suggested revisiting the issue in the future. A desire was expressed to work towards a cleaner approach to standardizing role groupers across hierarchies, ensuring consistency and usability across different healthcare contexts.

Thanks again to all for helping to inform discussions about how best to move forward with the proposal.

## Analysis

- Consensus agreement from assessment of the feedback received was that most respondents expressed concerns about the potential harmful impact if Substance role groupers are removed. This applied across a variety of healthcare scenarios.
- An evaluation of the feedback highlighted the importance of retaining Substance role groupers to ensure the utility of SNOMED CT for allergy and intolerance recording and checking, as well as for supporting clinical decision-making.
- Users reported that Substance role groupers are embedded in many systems with the real possibility of potential significant disruption in systems and workflows if these changes were implemented impacting patient safety and system interoperability. In some cases this is regulated under a country's legislation.
- No feedback evidence was provided, based on current usage, of an impact of the inactivation of Medicinal Product therapeutic role groupers.
- Medicinal Product therapeutic role groupers are incomplete, and comments received included confusion regarding which to use in terms of substance or products.

## Resolution and Next Steps

Be assured that SNOMED International has listened to your feedback and has taken on board your concerns.

- The Substance role groupers will remain in situ with no change.
  - A disclaimer will be added to the SNOMED CT Editorial Guide related to known issues with use of Substance role groupers including potential incorrect classification.
- A Briefing Note will follow regarding the inactivation of Medicinal Product therapeutic role groupers.

*Nicki Ingram and Farzaneh Ashrafi, 23rd February 2024.*

| <b>Approvals</b>                | <b>Date</b> | <b>Name</b>  |
|---------------------------------|-------------|--------------|
| Chief Terminologist             | March 2023  | Jim Case     |
| Director of Content and Mapping | March 2023  | Monica Harry |