

# New concept proposal

## Performer

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### 1 Rationale

For interpretation and analysis of measurement results/data, the information on the origin of these data might be important. For this purpose, it is important, among other things, to know the type of person (patient, physician, etc.) performing the activity, such as measurements leading to results/data. We therefore propose the new concept *Performer*.

In paediatrics, assessments (e.g. measurement of blood sugar, blood pressure, body weight or pain and several disease activity scores) can be performed by the patient themselves, health professionals or legal guardians/proxies. For interpretation of the data, it is important to know who is the “performer”. For example, in case a height measurement was performed by the nurse, “clinical standards” can be assumed for the measurement (meaning correct length in neonates (=feet to head in extended position)). In case of disease activity assessment, it is important if data was determined by the parents/patients (subjective component) or if disease activity is assessed by the physician (maybe more objective).

### 2 Comparison to other standards/data models

#### 2.1 SNOMED CT

In SNOMED CT, *Performer* is represented by the concepts 125676002 | Person (person) | and 14679004 | Occupation (occupation) |. Examples are:

- 106292003 | Professional nurse (occupation) |,
- 309343006 | Physician (occupation) |,
- 58626002 | Legal guardian (person) |.

## 2.2 FHIR

«The Person resource serves as a linkage resource that may provide a reference set of common demographics for an individual (human or animal) across multiple roles.

This linkage can be direct to role-specific FHIR resources (Patient, Practitioner and RelatedPerson)»: Person - FHIR v5.0.0 (hl7.org)

In FHIR, the performer is defined as follows: “A person, non-person living subject, organization or device that who actually and principally carries out the action. Device should only be assigned as a performer in circumstances where the device is performing independent of human intervention. Need not be the principal responsible actor.” Source: ParticipationPhysicalPerformer - FHIR v4.0.1 (hl7.org)

## 2.3 NCI Thesaurus

The NCI Thesaurus provides a definition for performer as follows: “Indicates the person, group, or institution who carried out the action.” Code: C48206. Source: NCI Thesaurus (nih.gov).

### 3 Concept information

Concept or concept compositions or inherited	General concept name	General description	Contextualized concept name	Contextualized description	Type	Standard	Value set or subset	Meaning binding	Cardinality for composedOf
concept	Performer	person, who carried out the action	Performer	person, who carried out the action					
composedOf	code	coded information specifying the concept	person type	coded information describing the type of person who carried out the action	Code	SNOMED CT	descendant of: 125676002   Person (person)  ; descendant of: 14679004   Occupation (occupation)		1:1

General Concept name	Cardinality for concept to Administrative Case	Cardinality for concept to Data Provider Institute	Cardinality for concept to Subject Pseudo Identifier	Cardinality for concept to Source System
Performer	-	-	-	-

## 4 Impact on the SPHN Dataset

The proposed new data concept enables, for example, the specification of new metadata for measurements (reuse in Measurement concept) and assessments (reuse in Assessment Event concept).

## 5 Discussion

The concept was worked out very generically, to allow re-usability in other concepts where measurements results/obtained data might be performer dependent. It was discussed and decided not to collect person-level identifying data in the concept for the performer, but only to collect information on a cohort/group-level (e.g., nurse, parents, physicians). This process ensures anonymisation. If identifiable information from the performer should be relevant for research projects in the future, further composedOf elements can be specifically added to the *Performer* concept after the corresponding regulatory and ethical requirements have been met in the project, and Informed Consent processes have been established, so that the corresponding pseudo anonymised data of the performer may be examined in the research project.

## 6 Example

### Performer

code:

identifier: 106292003

name: Professional nurse (occupation)

coding system and version: SNOMED-CT-2023-03-10