

Briefing Note for the Clinical Leads, Member Forum and Content Managers Advisory Group 21 November 2023

Inactivation of Mechanical Complication of <x> Device

Purpose

This briefing note is intended to inform and seek feedback from the Community of Practice on the impact of the plan to inactivate the high level grouping concepts “Mechanical complication of <x> device”.

Feedback

Comments to be submitted to Cathy Richardson (cri@snomed.org) or info@snomed.org by 22nd December 2023.

Background

The topic of how to model the concepts << 111746009 |Mechanical complication of device (disorder)| was brought to the SNOMED CT Editorial Advisory Group with discussions on the topic held at both the [April](#) and [October](#) 2023 business meetings.

A decision was made at the EAG October meeting to inactivate the 50 concepts that represent the meaning, mechanical complication of <x> device. A full list of these concepts is available in Appendix A. This decision was undertaken given:

1. The lack of clarity in meaning in what is intended by “mechanical complication”.

The term could be interpreted in to mean one, some or all of the following:

- a. an issue with the structural integrity of the device e.g. breakage
- b. an issue with the function of the device e.g. a battery that needs replacing
- c. a device that is out of expected position e.g. malposition, displacement
- d. a disorder in the patient due to a malfunction of the device, so the complication is related to the patient

It would be reasonable to assume different users would interpret the meaning in different ways.

The term ‘mechanical complication of device’ was a classification construct drawn from ICD-9 and ICD-10.

Example:

213036006 |Mechanical complication of heart valve prosthesis (disorder)|

ICD10: T82.0 Mechanical complication of heart valve prosthesis

- <https://icd.who.int/browse10/2019/en#/T82>

In ICD10 there is a specified list of what constitutes a mechanical complication of a device:

- Breakdown (mechanical),
- Displacement
- Leakage
- Malposition
- Obstruction, mechanical
- Perforation
- Protrusion

2. These are grouping concepts which lack specificity for recording in a clinical record. It would be expected that the reason for the complication e.g. breakage of device, rather than ‘mechanical complication would be recorded.

NOTE: Concepts that represent a specific type of device complication e.g. 473177008 |Obstruction of nasogastric tube (disorder)| are not planned for inactivation. Instead, further work will be done in this area of content to improve the modeling and definition status of these concepts.

Next Steps:

Following the feedback period the concepts in Appendix A will be inactivated as ambiguous with an historical association to 473023007 |Complication associated with device (disorder)| or a suitable subtype.

The change will be planned for the first quarter of 2024.

Approvals	Date	Name
Chief Terminologist	31 October 2023	James T. Case

Director of Content and Mapping	Nov 7, 2023	Monica Harry
CSRM Team	14 November 2023	Jane Millar

Appendix A: Mechanical Complication of <x> Device Concept for Inactivation

Concept ID	Concept FSN
270524007	Mechanical complication of intrauterine contraceptive device (disorder)
111746009	Mechanical complication of device (disorder)
473041004	Mechanical complication of implant (disorder)
90191000119100	Mechanical complication of ventilator (disorder)
79325000	Mechanical complication of aortic graft (disorder)
213112009	Mechanical complication of breast prosthesis (disorder)
1179237005	Mechanical complication of ureteric stent (disorder)
1179238000	Mechanical complication of urethral stent (disorder)
473024001	Mechanical complication of cardiac implant (disorder)
269439003	Mechanical complication of vascular device (disorder)
108431000119104	Mechanical complication of venous catheter (disorder)
213113004	Mechanical complication of chin prosthesis (disorder)
473044007	Mechanical complication of vascular implant (disorder)
213115006	Mechanical complication of intraocular lens (disorder)
269291000	Mechanical complication of urethral catheter (disorder)
111743001	Mechanical complication of genitourinary device (disorder)
213035005	Mechanical complication of cardiac pacemaker (disorder)
17778006	Mechanical complication of dialysis catheter (disorder)
213045007	Mechanical complication of vena cava umbrella (disorder)
275414004	Mechanical complication of suprapubic catheter (disorder)
213063007	Mechanical complication of cystostomy catheter (disorder)
1179241009	Mechanical complication of urinary tract stent (disorder)
213046008	Mechanical complication of intra-aortic balloon (disorder)

213111002	Mechanical complication of bile duct prosthesis (disorder)
213114005	Mechanical complication of eye orbit prosthesis (disorder)
736987000	Mechanical complication of hemodialysis catheter (disorder)
111739000	Mechanical complication of cardiovascular device (disorder)
111742006	Mechanical complication of nervous system device (disorder)
473045008	Mechanical complication of nervous system implant (disorder)
213036006	Mechanical complication of heart valve prosthesis (disorder)
473042006	Mechanical complication of musculoskeletal implant (disorder)
1255693006	Mechanical complication of central venous catheter (disorder)
473043001	Mechanical complication of internal fixation device (disorder)
213054005	Mechanical complication of dorsal column stimulator (disorder)
213104001	Mechanical complication of internal joint prosthesis (disorder)
111744007	Mechanical complication of internal orthopedic device (disorder)
50006004	Mechanical complication of intra-aortic balloon device (disorder)
213076001	Mechanical complication of internal nail fixing device (disorder)
431028002	Mechanical complication of peritoneal dialysis catheter (disorder)
213077005	Mechanical complication of internal rod fixation device (disorder)
213078000	Mechanical complication of internal plate fixing device (disorder)
79315005	Mechanical complication of urethral indwelling catheter (disorder)
269440001	Mechanical complication of central nervous system device (disorder)
213055006	Mechanical complication of electrodes implanted in brain (disorder)
473039000	Mechanical complication associated with orthopedic device (disorder)
12727006	Mechanical complication due to cardiac pacemaker electrode (disorder)
65433005	Mechanical complication of ventricular communicating shunt (disorder)
213118008	Mechanical complication of gastrointestinal prosthetic device (disorder)
213064001	Mechanical complication of prosthetic reconstruction of vas deferens (disorder)
16411000	Mechanical complication of nervous system device, implant AND/OR graft (disorder)

Cathy Richardson, 2023-10-31