

Briefing Note for the MF, CMAG, EAG, Clinical Leads 26 September 2023

Revision of segmental models of the cardiac wall

Purpose

The purpose of this briefing note is to inform the Member Forum, Editorial Advisory Group, Content Managers Advisory Group, and Clinical Leads Group of the plan to revise the segment models of the cardiac wall.

Background

There are different segment models of the cardiac wall in clinical practice. The most commonly recognized are the 16, 17, and 18-segment models. They are the detailed regions of the myocardium of the left ventricle.

Issues

The key issues with the current model are:

- *There are no indications of different segment models used in clinical practices in SNOMED CT.*
- *The segments of these models are only applicable to the left ventricle, but some segments are misplaced under the ventricle and have duplications.*
- *The segments with the same names exist in different models, but they differ in size and location. Hence, these segments are not the same concepts in different models.*
- *The links are missing between the segments and the regions of the myocardium of the left ventricle.*

Next Steps

The proposal is to revise the hierarchical relationships, add new concepts that specify the models, and inactivate duplicate concepts. The new anatomy concept model in the attached diagram (Appendix 1) is available for feedback, which can also be found on Confluence page: <https://confluence.ihtsdotools.org/display/IAP/Cardiac+wall+and+segment+models>

or download the SVG file from the following link (note, the display is incorrect online). Then the local SVG file can be opened by any browser, such as Chrome or Edge (easy to zoom in for details).

[Segment models of left cardiac ventricle.svg](#)

Appendix 2 contains a list of concepts for inactivation and their replacements because of duplication.

It is recommended that the Member Forum, Editorial Advisory Group, Content Managers Advisory Group, and Clinical Leads representatives ask for feedback.

The work is planned for early 2024. Notification will be provided via the Early Visibility Confluence page.

Comments on this plan should be submitted to Yongsheng Gao (yga@snomed.org) or info@snomed.org by 30 November 2023.

Approvals	Date	Name
Chief Terminologist	Sep 27, 2023	James T. Case
Director of Content and Mapping	Oct. 3rd, 2023	Monica Harry
CSR team	Oct. 18, 2023	Jane Millar

Yongsheng Gao, 2023-09-26

Appendix 2: Concepts for inactivation and their replacements because of duplication

371944003 | *Structure of apical anterior segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264844003 | *Structure of apical anterior segment of left cardiac ventricle (body structure)* |

371942004 | *Structure of apical inferior segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264849008 | *Structure of apical inferior segment of left cardiac ventricle (body structure)* |

371941006 | *Structure of apical lateral segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264853005 | *Structure of apical lateral segment of left cardiac ventricle (body structure)* |

371943009 | *Structure of apical septal segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264845002 | *Structure of apical septal segment of left cardiac ventricle (body structure)* |

371935004 | *Structure of basal anterior segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264850008 | *Structure of basal anterior segment of left cardiac ventricle (body structure)* |

371950008 | *Structure of basal anterolateral segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

396654005 | *Structure of basal anterolateral segment of left cardiac ventricle (body structure)* |

371936003 | *Structure of basal anteroseptal segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

396482007 | *Structure of basal anteroseptal segment of left cardiac ventricle (body structure)* |

371938002 | *Structure of basal inferior segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

264846001 | *Structure of basal inferior segment of left cardiac ventricle (body structure)* |

371949008 | *Structure of basal inferolateral segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

396652009 | *Structure of basal inferolateral segment of left cardiac ventricle (body structure)* |

371937007 | *Structure of basal inferoseptal segment of cardiac ventricle (body structure)* |
inactivate and is replaced by

396646008 | *Structure of basal inferoseptal segment of left cardiac ventricle (body structure)* |

72542009 | *Structure of myocardium of diaphragmatic region (body structure)* |

inactivate and is replaced by

264846001 | *Structure of basal inferior segment of left cardiac ventricle (body structure)* |

371948000 | *Structure of mid anterior segment of cardiac ventricle (body structure)* |

inactivate and is replaced by

264848000 | *Structure of mid anterior segment of left cardiac ventricle (body structure)* |

371945002 | *Structure of mid anterolateral segment of cardiac ventricle (body structure)* |

inactivate and is replaced by

396656007 | *Structure of mid anterolateral segment of left cardiac ventricle (body structure)* |

371939005 | *Structure of mid anteroseptal segment of cardiac ventricle (body structure)* |

inactivate and is replaced by

396647004 | *Structure of mid anteroseptal segment of left cardiac ventricle (body structure)* |

371947005 | *Structure of mid inferior segment of cardiac ventricle (body structure)* |

inactivate and is replaced by

264847005 | *Structure of mid inferior segment of left cardiac ventricle (body structure)* |

371946001 | *Structure of mid inferolateral segment of cardiac ventricle (body structure)* |

inactivate and is replaced by

396655006 | *Structure of mid inferolateral segment of left cardiac ventricle (body structure)* |