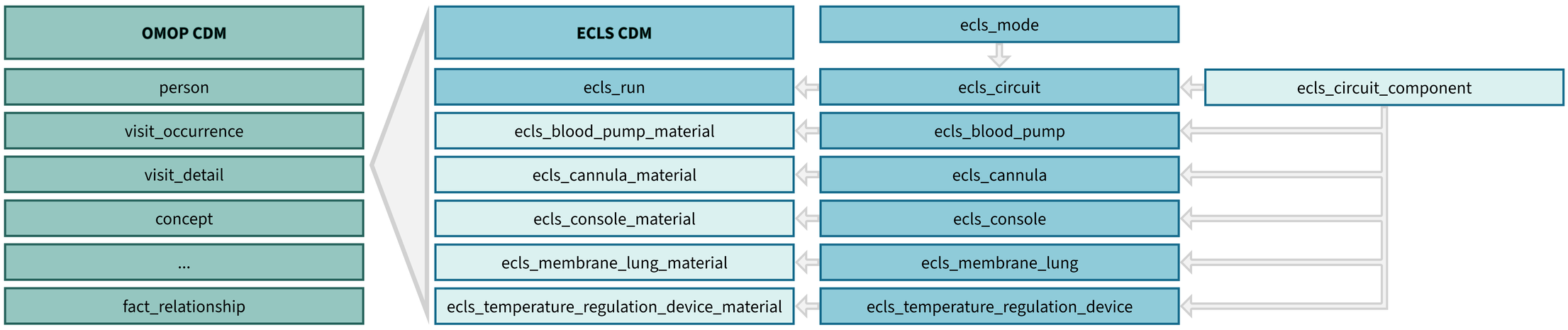
The **ECLS CDM expansion** enables the **OMOP CDM** to store **extracorporeal life support data**

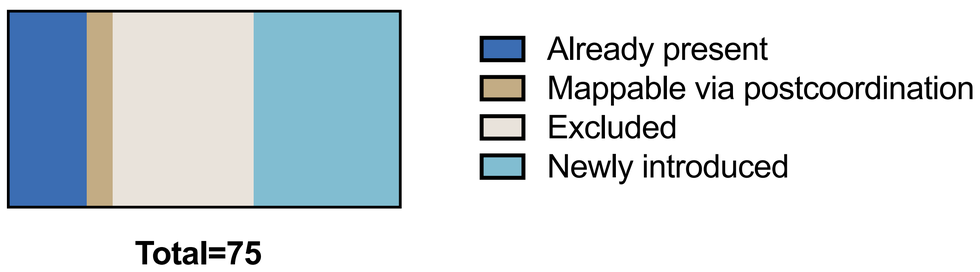
Expanding the OMOP Common Data Model to support Extracorporeal Life Support research

Background: Extracorporeal life support (ECLS) is a keystone in today's critical care. Constant evolvement of the procedure over the last 50 years has resulted in a manifold terminology, often used inconsistently. Intending to provide an unambiguous nomenclature the Extracorporeal Life Support Organization (ELSO) published terminology guidelines. Until now the OMOP CDM lacked the capability to store ECLS-related data sufficiently due to a lack of fitting concepts as well as poor user operability in complex cases of ECLS.

Result 1: New data tables introduced as part of the new expansion.



Result 2: Concept landscape analysis of the Maastricht Treaty.



Results: The ELSO Maastricht Treaty, ELSO data definition documents were analyzed. In total, 134 new concepts were designed. Custom database tables specific to extracorporeal therapy were introduced and logically divided into core tables and support tables. The expansion is available on GitHub (QR Code) and was placed in the public domain.

Methods

in silico

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