Empowerment of German university hospitals to utilize OHDSI OMOP
Prologue

• Medical Informatics Funding Scheme
• MIRACUM - Medical Informatics in Research and Care in University Medicine
• Data integration centres → collection and exchange of data (within the consortia)
• Interoperable data formats + development of common tools and services
• Enhance collaborative research and clinical care
• We like open source 🤟
Introduction

Use case:

• multi-centred patient recruitment infrastructure

Goals:

• easy deployment & fast distribution
• high flexibility
• standardized data load process (German claim data)
Examination of OHDSI Broadsea:

- WebAPI
- Atlas
- OHDSI R methods lib

- missing Vocabularies
- no DBMS with OMOP CDM
- lack of data load process
Enhance - Vocabulary

approx. 100 Athena vocabularies

determine needed ones

German claim data
(9 out of 100)

SynPUF
(24 out of 100)
DBMS

PostgreSQL

OMOP CDM

flexible scripted Docker Volume generation based on selected vocabulary subset
Standardized data load process for all:

- clinical case data
- observational data
- diagnoses
- procedures

completely integrated in the docker environment
Results

- download pre-configured docker environment
- selectable docker databases volumes
- deployment in a few minutes with a single command
Outlook

• Federated showcase for patient recruitment in autumn 2020 in MIRACUM

• ICD10GM in Athena

• security aspects

• revised database generation
Many thanks!

Thanks for the attention :)