

Additional File 3: Supplementary Figures

A distributed analysis approach for pharmacovigilance data from electronic medical records in German university hospitals: the POLAR_MI ETL Pipeline

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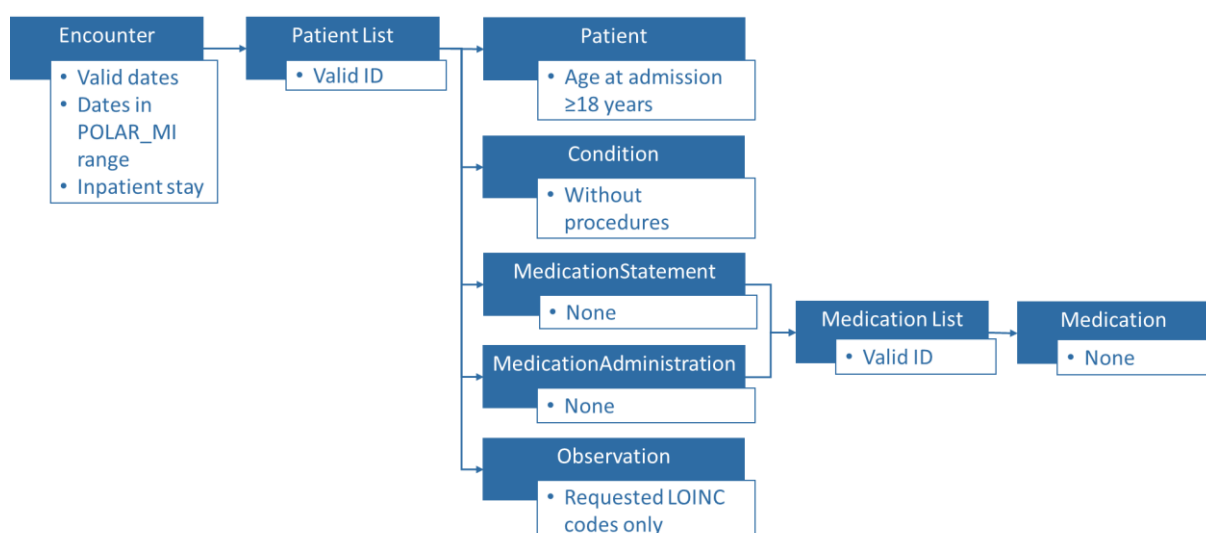
* Equal contribution

⁺ The membership list of POLAR_MI is provided in Additional File 1.

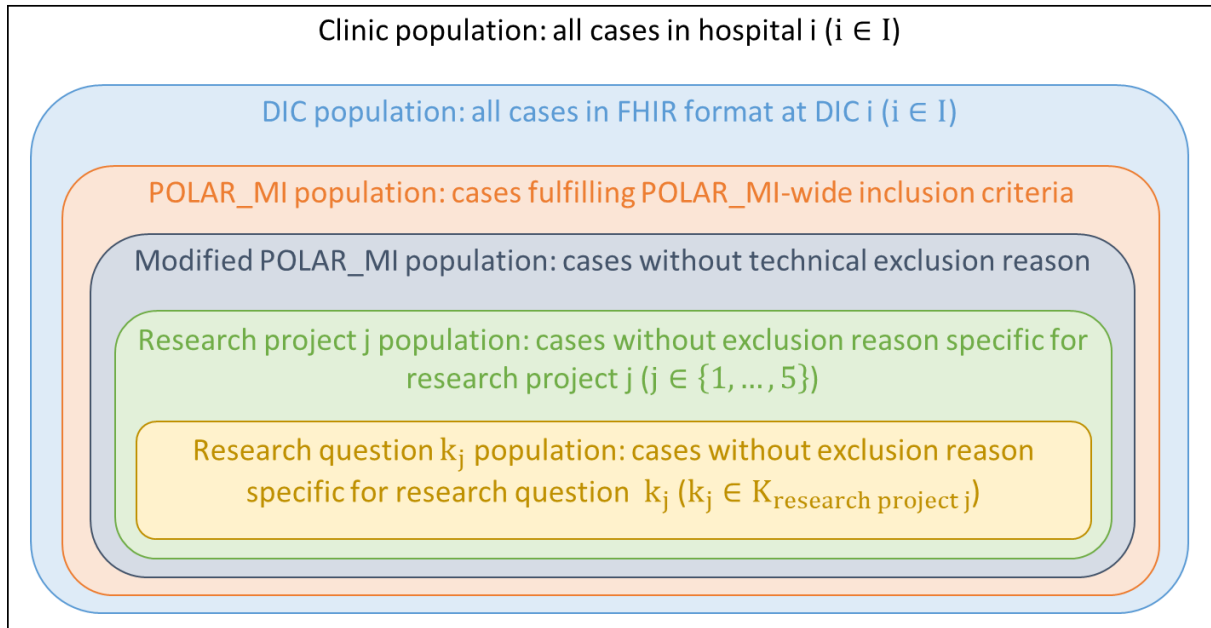
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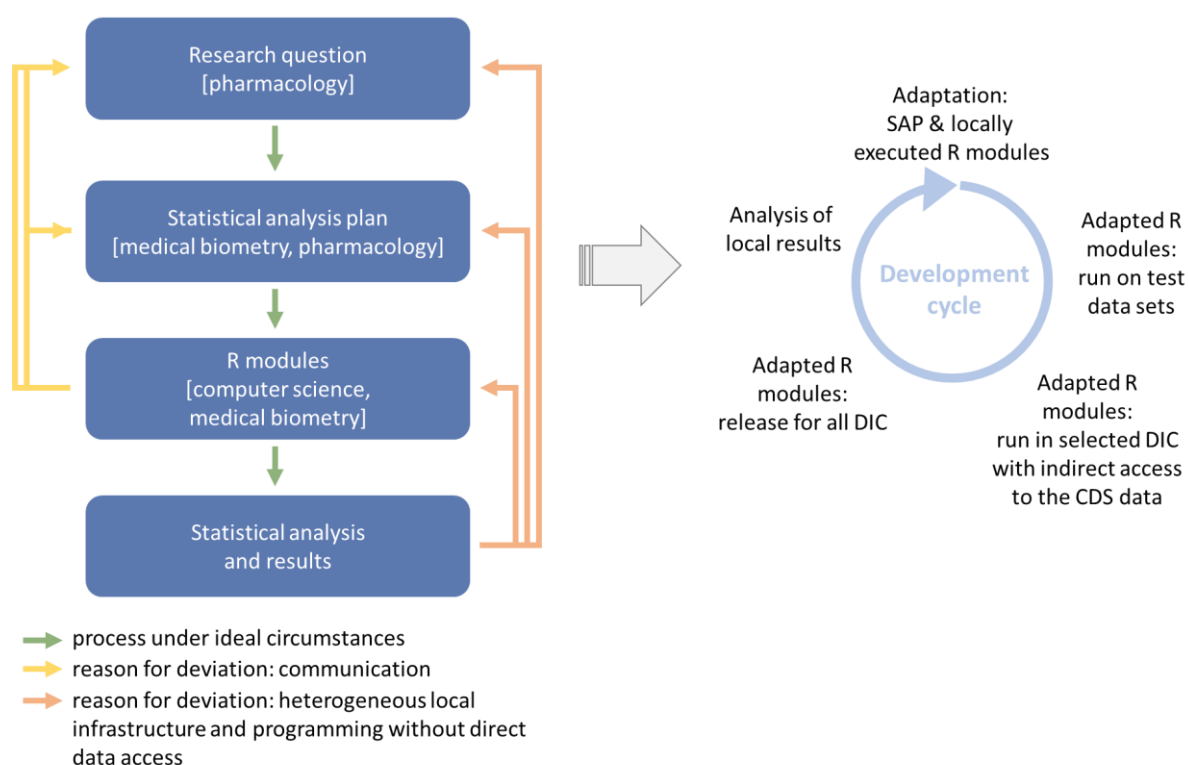
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Supplementary Figure 1. Retrieval request procedure resulting in the resource tables building the data snapshot. FHIR resources (blue boxes) together with the required conditions for the entries (white boxes) are provided. For the overall workflow, see Figure 1. Abbreviations: FHIR, Fast Health Interoperability Resources; ID, identifier(s); LOINC, Logical Observation Identifiers Names and Codes.



Supplementary Figure 2. Populations considered in POLAR_MI. Abbreviations: DIC, data integration centre; I , index set of participating centres; $K_{\text{research project } j}$, index set of defined research questions within the research project j ($j \in \{1, \dots, 5\}$).



Supplementary Figure 3. From a research question to the final analysis results. Left-handed part: The process under ideal circumstances with required adaptations within POLAR_MI. Reasons for deviations from the straightforward development are given. Participating research disciplines are provided in squared brackets together with the respective task. Right-handed part: Introduced development/adaptation cycles of the statistical analysis plan and R modules. Abbreviations: CDS, core data set; DIC, data integration centre; SAP, statistical analysis plan.