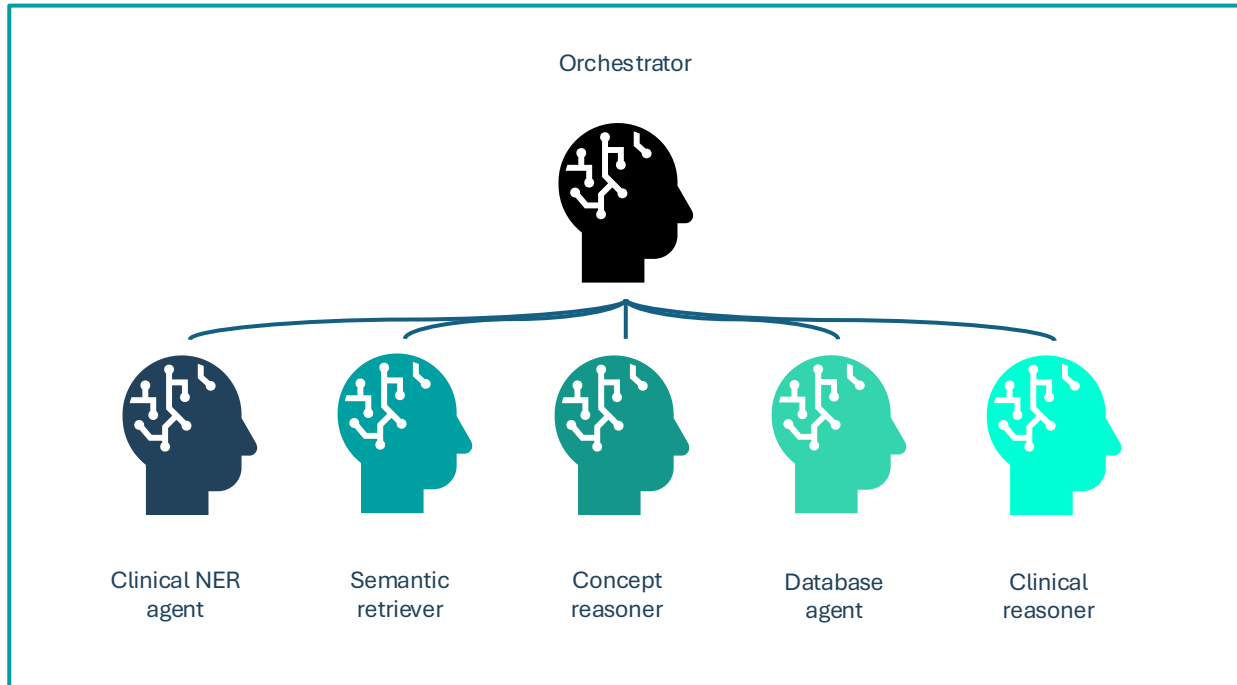


Lowering access barriers to clinical insights and RWE

Processes with FastOMOP



Clinical Query

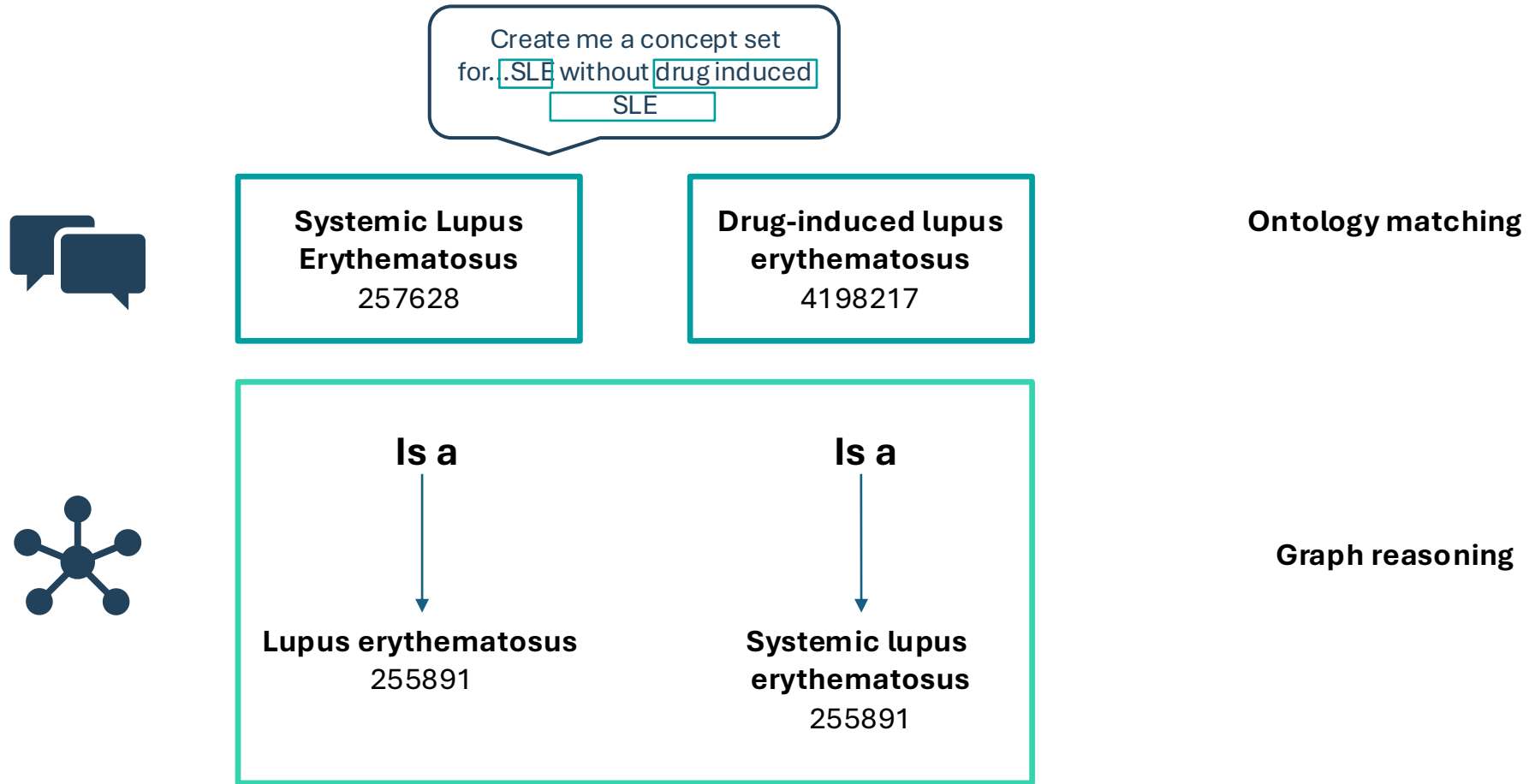
Vocabulary lookup

Data retrieval

Clinical answer

Lowering access barriers to clinical insights and RWE

Processes with FastOMOP



Analyse cohort descr.

Vocabulary lookup

Cohort generation

Statistical profiling

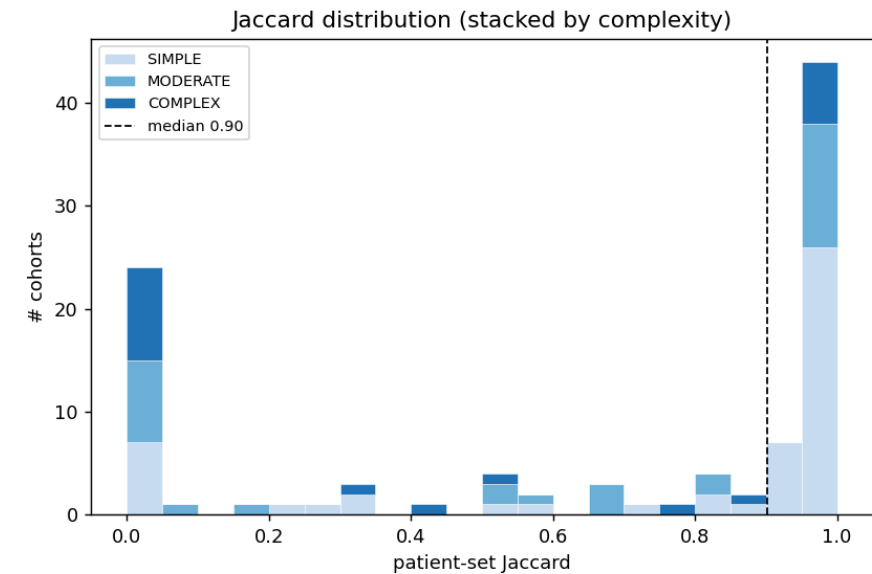
Extending FastOMOP to the application layer: towards useful co-design of OMOP CDM cohorts

Background:

- First experiments showed promise for the use of agentic frameworks in handling of OMOP CDM structured EHR data
- Natural access to OMOP CDM data can broaden access to RWE pathways as well as accelerate use in clinical settings
- Extending towards the application layer of existing OHDSI tools holds promise to broaden the use of co-pilot style agentic frameworks in these settings

Methods:

- Design of a multi-agent workflow analysing cohort descriptions, semantically enriching context, creating CIRCE JSON cohort definitions and executing cohorts per OHDSI standards
- Jacquard-Overlap comparison side-to-side with a gold-standard of 100 actual cohort definitions from published OHDSI studies



Analyse cohort descr.

Vocabulary lookup

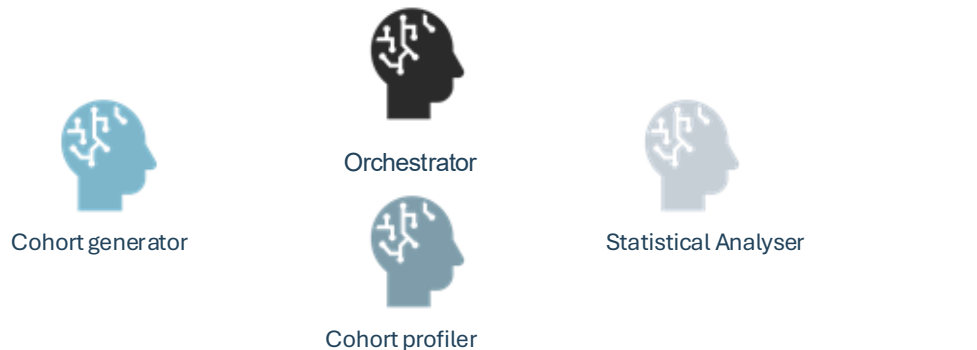
Cohort generation

Statistical profiling

Extending FastOMOP to the application layer: towards useful co-design of OMOP CDM cohorts

- Specialised agents designed to handle different subtasks of OMOP CDM analysis

- Reliable, deterministic and explainable tool calling
- Connected to LLM Agents through Model Context (MCP) Protocol



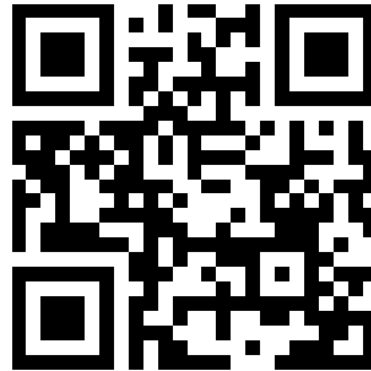
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Acknowledgements:

This work was supported by the UK Engineering and Physical Sciences Research Council (EPSRC) [EP/Y035216/1] Centre for Doctoral Training in Data-Driven Health (DRIVE-Health) at King's College London, with additional support from the National Institute for Health and Care Research (NIHR) Maudsley Biomedical Research Centre (BRC) [NIHR203318] and Lancashire Teaching Hospitals NHS Foundation Trust. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health and Social Care, or Lancashire Teaching Hospitals NHS Foundation Trust.