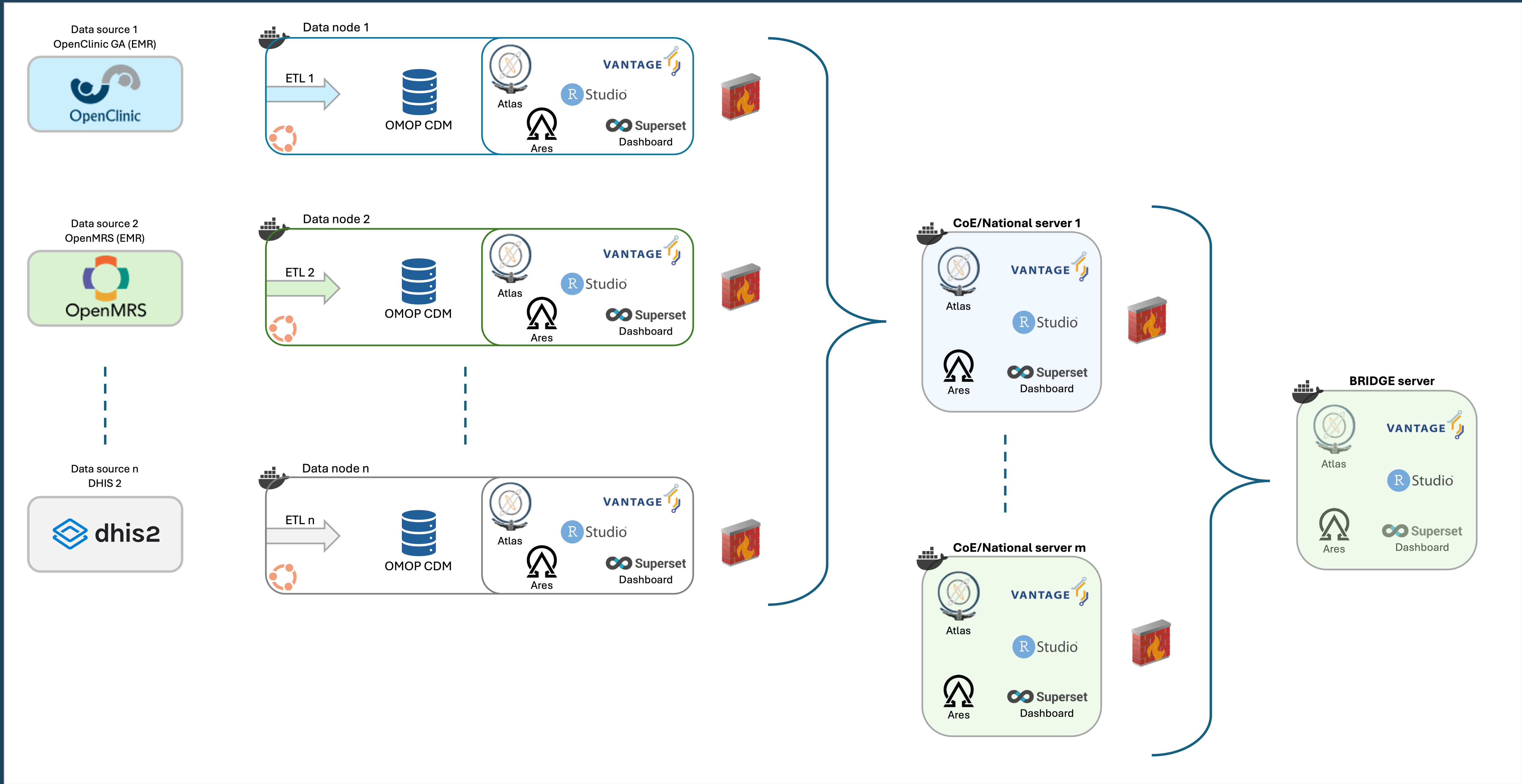


Title: Advancing Epidemiological Research in Africa: Federated Infrastructure, Data Harmonization, and Knowledge Transfer for Scalable Public Health Insights – Technical contribution of the BRIDGE NETWORK

PRESENTER: Freija Descamps

BACKGROUND:
Epidemiological research relies heavily on high-quality, standardized data to analyse disease patterns and inform public health policies and interventions. However, variability in health information systems and data formats hinders interoperability and large-scale (inter)national studies. To address these challenges, the BRIDGE Network aims to empower infectious disease experts to drive research from and for sub-Saharan Africa through creation of an innovative scalable training program that leverages data harmonisation and federated research infrastructure. Knowledge transfer of the technical processes across institutions and countries will ensure the network is sustainable for future research studies.

Technical contribution to a more robust and accessible evidence-based data network for public health and epidemiology in Africa



METHODS:
This is an overview of the infrastructure set-up for the BRIDGE network, with several different data sources that still need to be defined. Each country will have their own national node. There will also be an overarching BRIDGE central node.

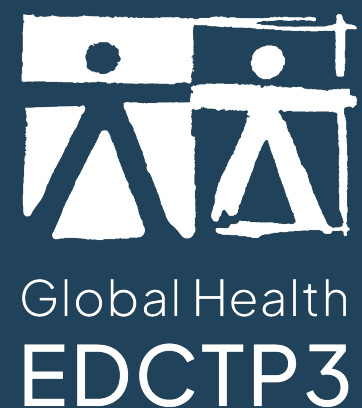
CONCLUSION:
This work aims to enhance the efficiency and reproducibility of public health research in Africa by establishing a robust research framework. The integration of OMOP CDM with federated analysis enables scalable, privacy-preserving studies, fostering international collaboration and accelerating evidence generation. These findings will provide valuable insights to the broader OHDSI community and demonstrate effective knowledge transfer within a large-scale international consortium.

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