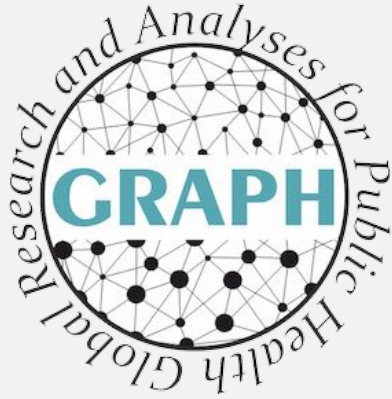




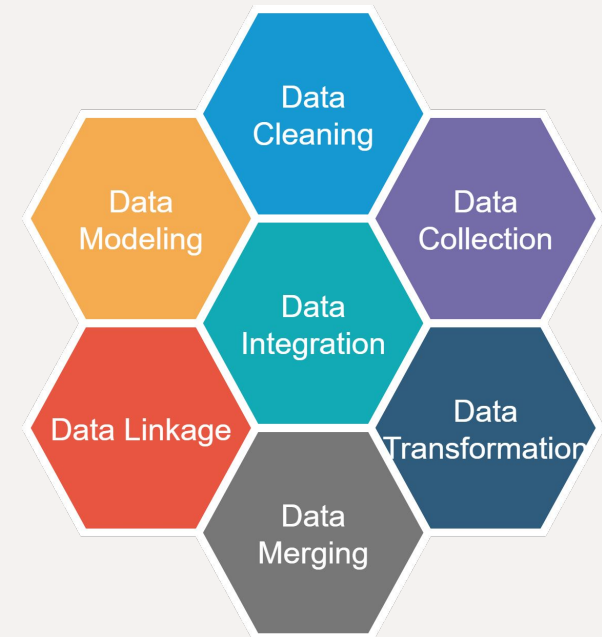
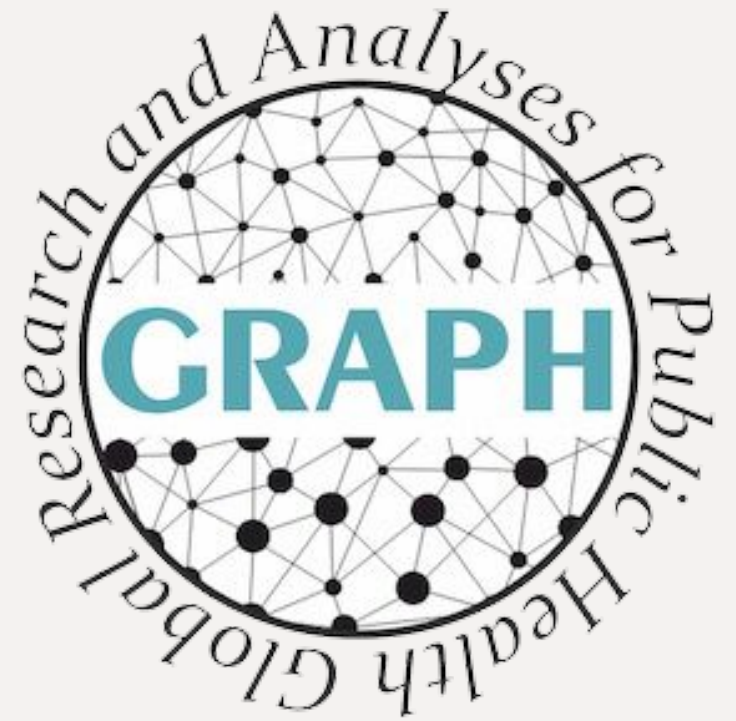
EpiGraphHub

Data integration platform
for health



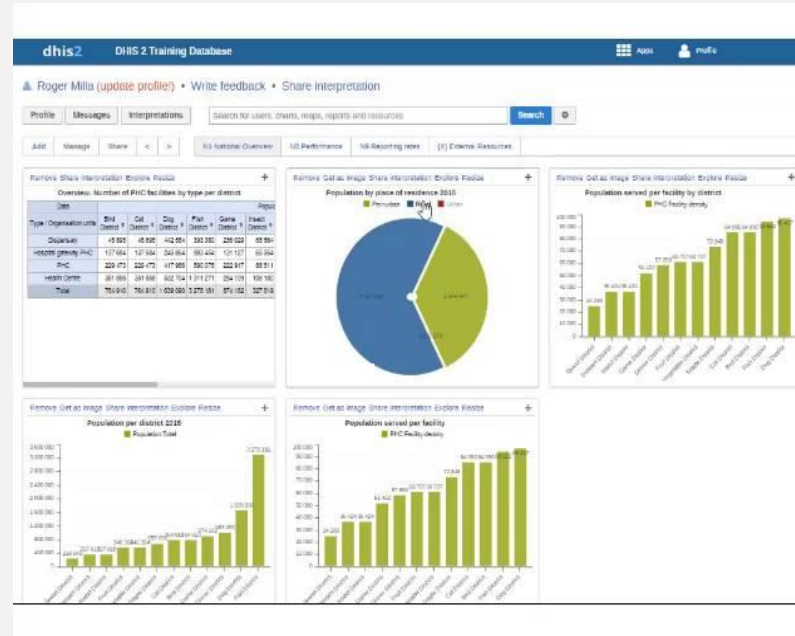
What is EpiGraphHub for?

- Integration and management of heterogeneous data sources
- Rapid exploration and dashboarding
- Data backend for analytical apps

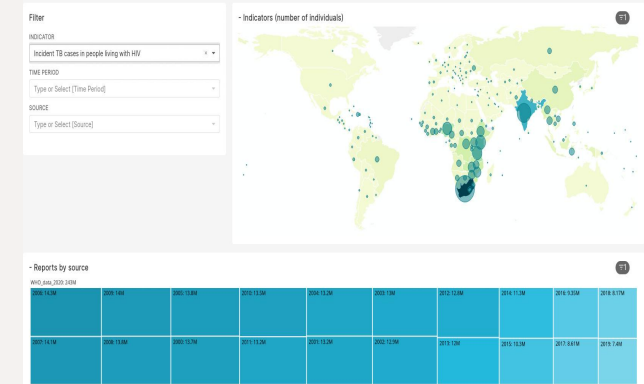


Working together with Health Information Management Systems

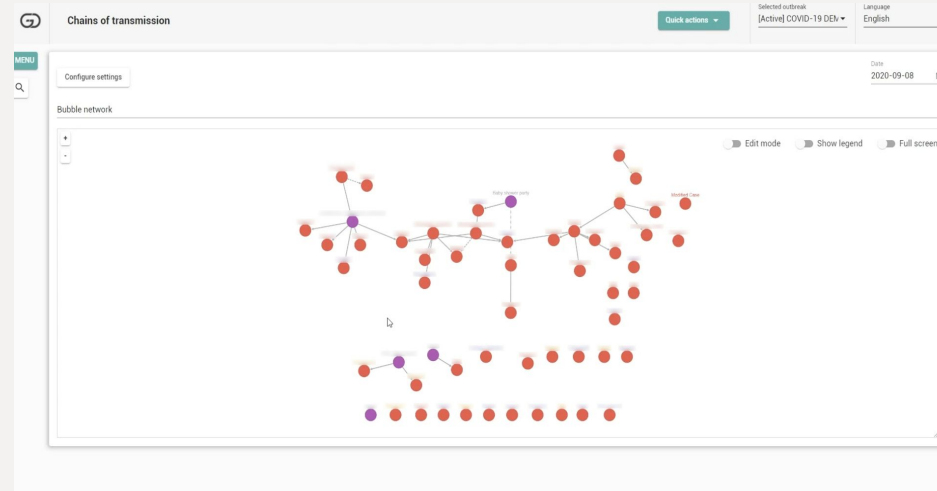
Health information management systems



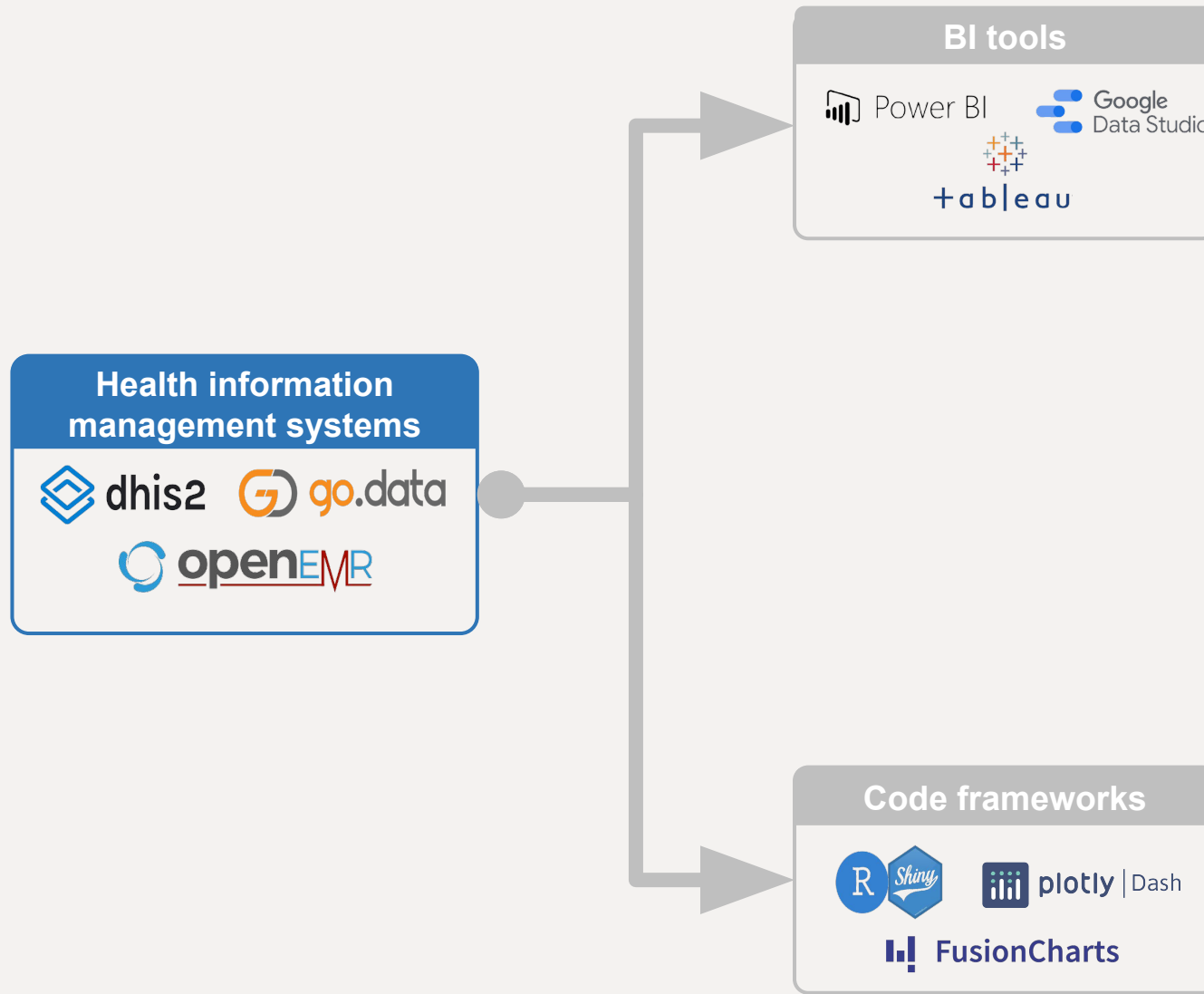
EpiGraphHub



- Open Standards
- Secure
- Data source agnostic



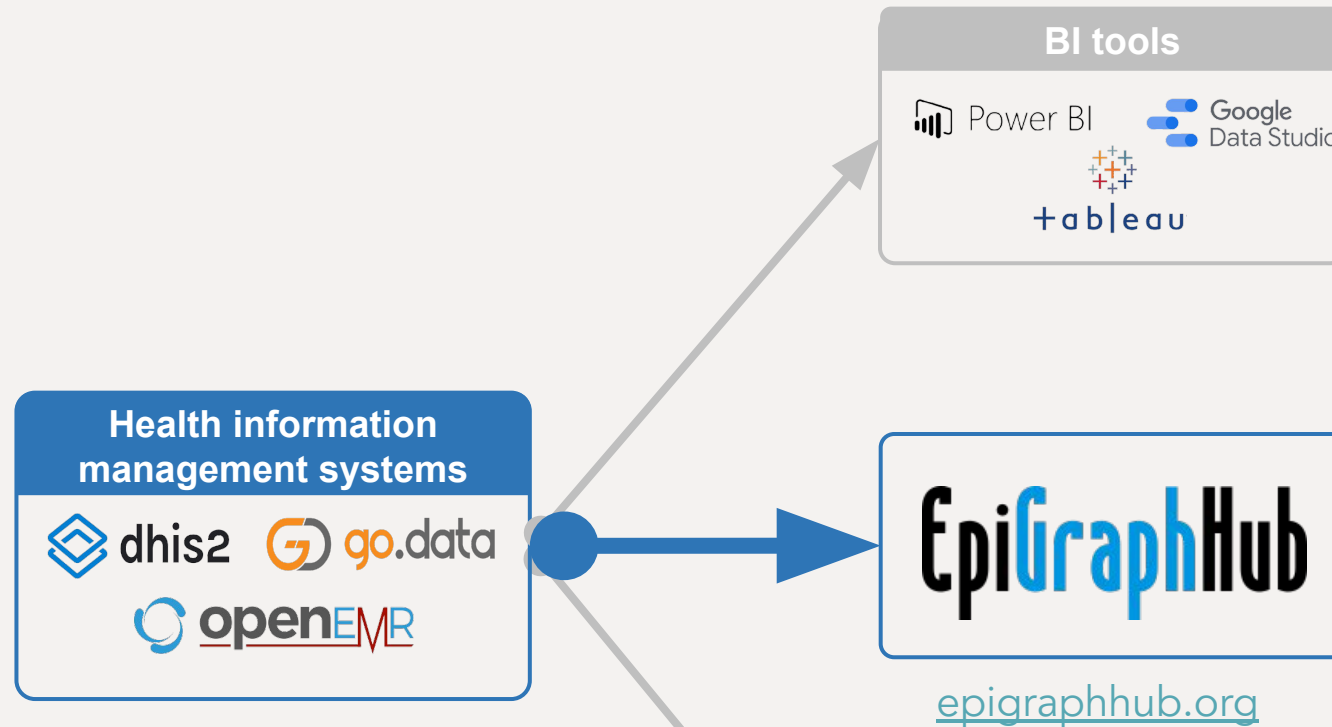
Health Analytics Tools



- Cost, Restrictive Licenses
- No built-in health analytics (incidence curves, age-sex pyramids, short-term forecast.)
- Platform lock-in

- Shortage of human capacity (we are working on this)
- Significant investment
- May be too slow for emergencies

Enter EpiGraphHub!



- Aggressive pricing
- Few out-of-the-box solutions for health data (incidence curves, age-sex pyramids, short-term forecast.)
- Lock-in

- Fully open-source
- Easy to use:
- Modern visualization features (powered by Apache Echarts)
- Built on Apache superset, an enterprise grade BI platform.
- Connectors to many databases, open datasets

- Shortage of human capacity (we are working on this)
- Significant investment
- May be too slow for emergencies

medRxiv
THE PREPRINT SERVER FOR HEALTH SCIENCES



BMJ Yale

A Platform for Data-centric, Continuous Epidemiological Analyses

Flávio Codeço Coelho, Daniel Câmara, Eduardo Araújo, Lucas Bianchi, Ivan Ogasawara, Jyoti Dalal, Ananthu James, Jessica Lee Abbate, Aziza Merzouki, Izabel Reis, Kenechukwu Nwosu, Olivia Keiser

doi: <https://doi.org/10.1101/2022.04.19.22274026>

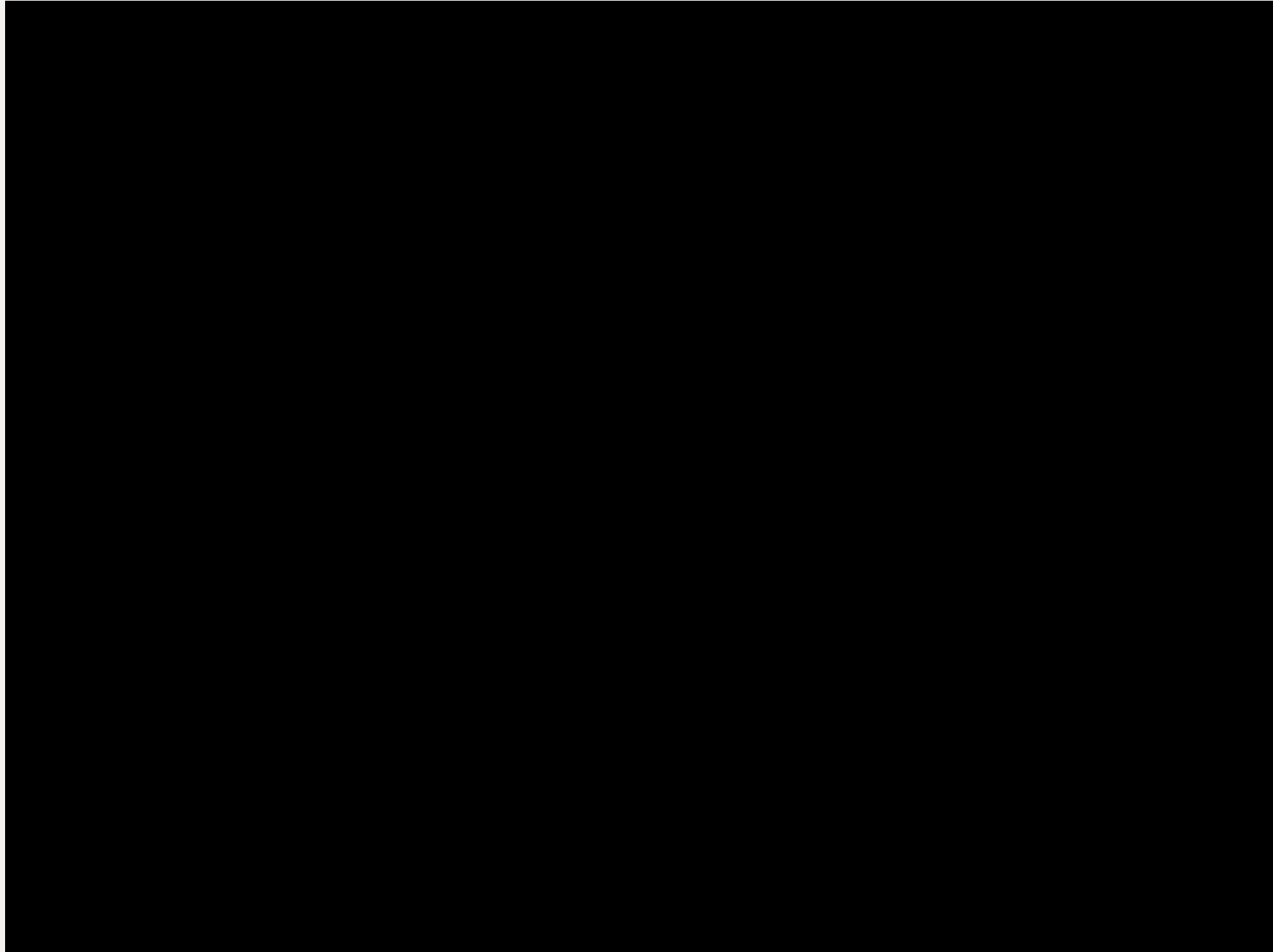


Web Interface: Intuitive Charting Interface



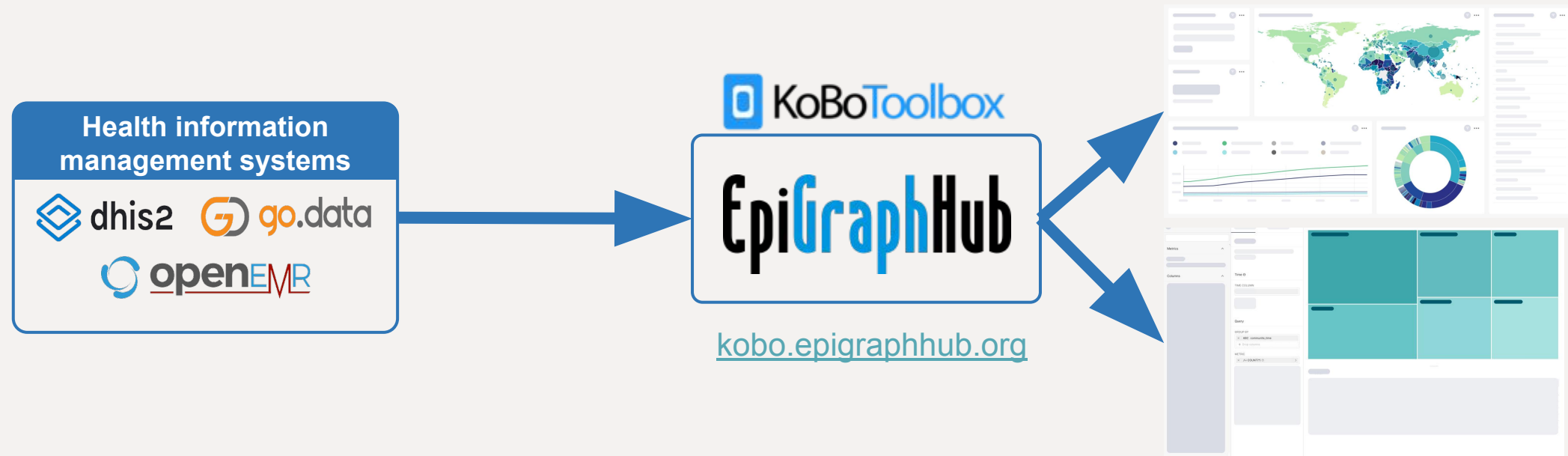
Lightning-fast
queries and
visualizations
on COVID
dataset with
167,000 rows

Feature: dashboard creation and publishing



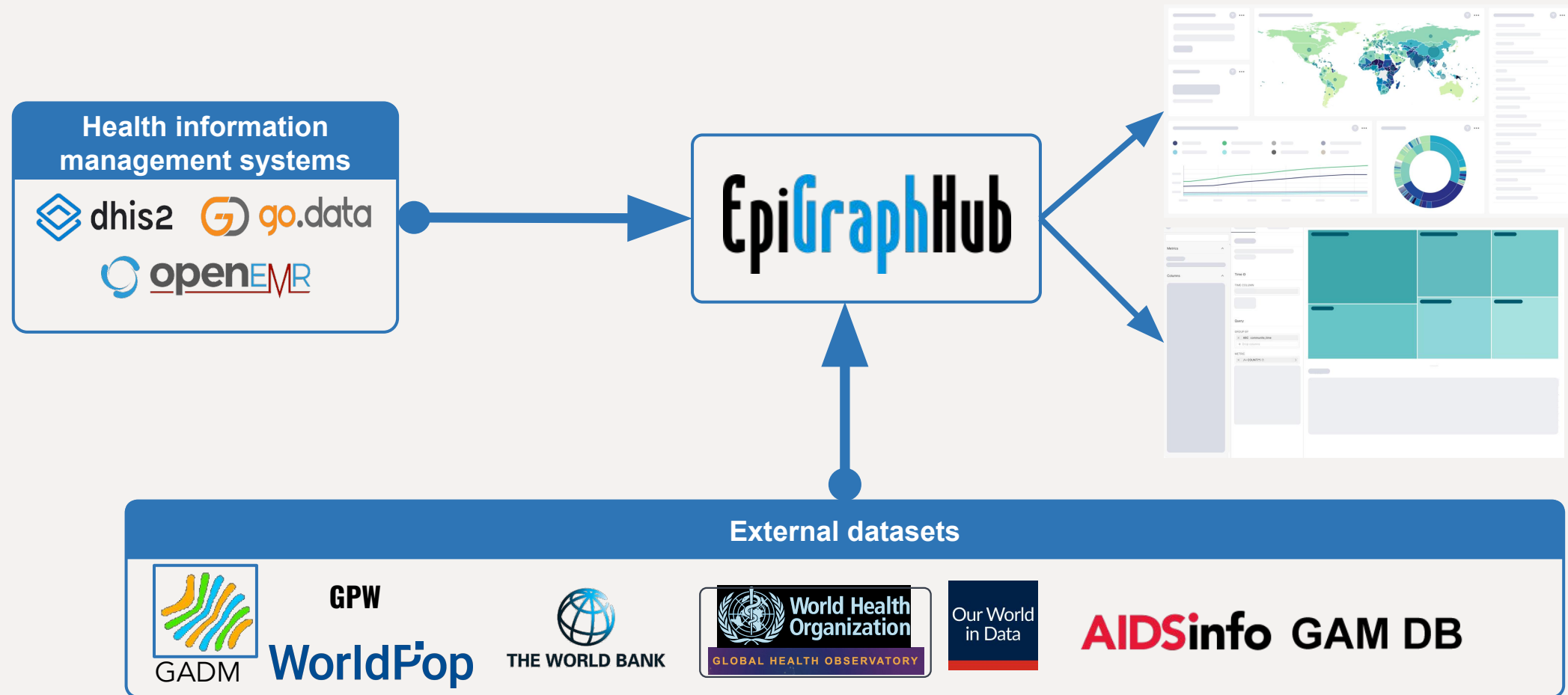
BYOD: Bring Your Own Data!

- Connect with **existing** HIMS, such as DHIS2, GoData, etc.
- **Our own** KoBoToolbox server, integrated with the EpiGraphHub Interface



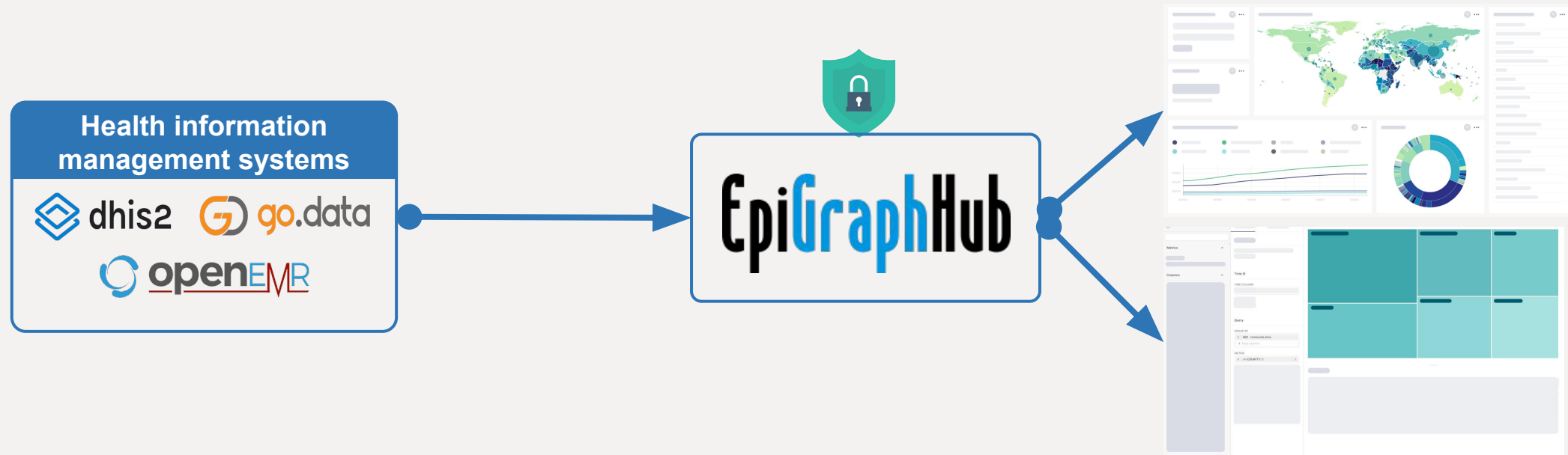
BYOD: Bring Your **Other** Data

- Can connect to local, remote or cloud databases, even Google spreadsheets
- The team is constantly collating relevant open datasets



Security: Full Access Control

- All connections are encrypted using SSL: HTTPS for the web access, and Public-Key authentication for programmatic access.
- Fine-grained user-based authorization built into the web interface



- Private and Public data can be hosted in total isolation

Fine-grained Sharing of Dashboards

EpiGraphHub Home Dashboards Charts SQL Lab ▾ Data ▾

HIV and TB GAM database Draft ★

Filter

INDICATOR

Viral hepatitis among men who have sex with ... ▾

TIME PERIOD

Type or Select [Time Period] ▾

SOURCE

Type or Select [Source] ▾

- Reports by source

UNAIDS_GAM_: 158.6

2016: 89.1

Dashboard properties

Basic information

TITLE

HIV and TB GAM database

URL SLUG

hivtb-dash

A readable URL for your dashboard

Access

OWNERS

Flávio Coelho × ▾

Owners is a list of users who can alter the dashboard.
Searchable by name or username.

Certification

CERTIFIED BY

Person or group that has certified this dashboard.

CERTIFICATION DETAILS

Any additional detail to show in the certification tooltip.

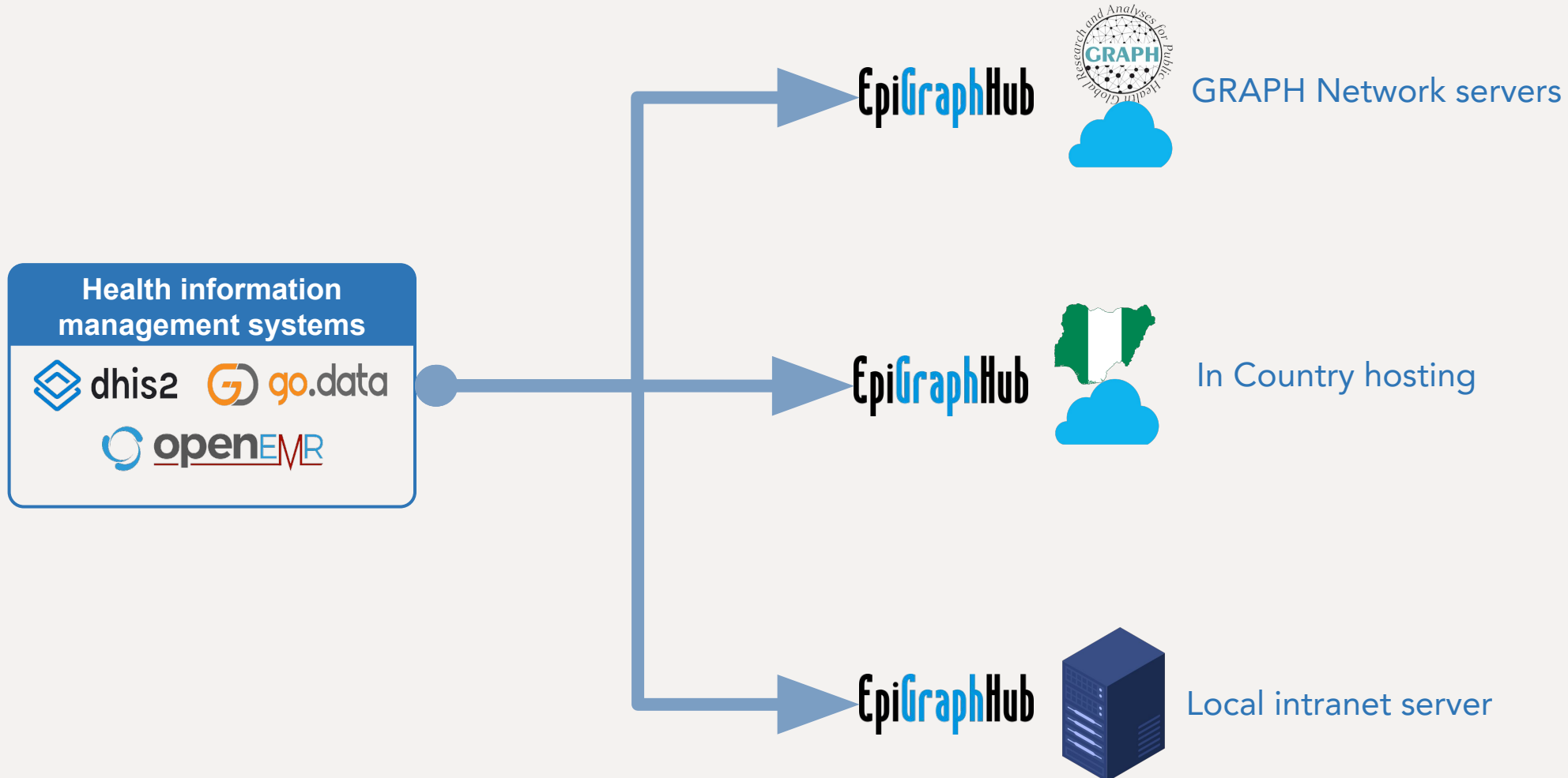
> ADVANCED

CANCEL

APPLY

Hosting: Flexible and Affordable

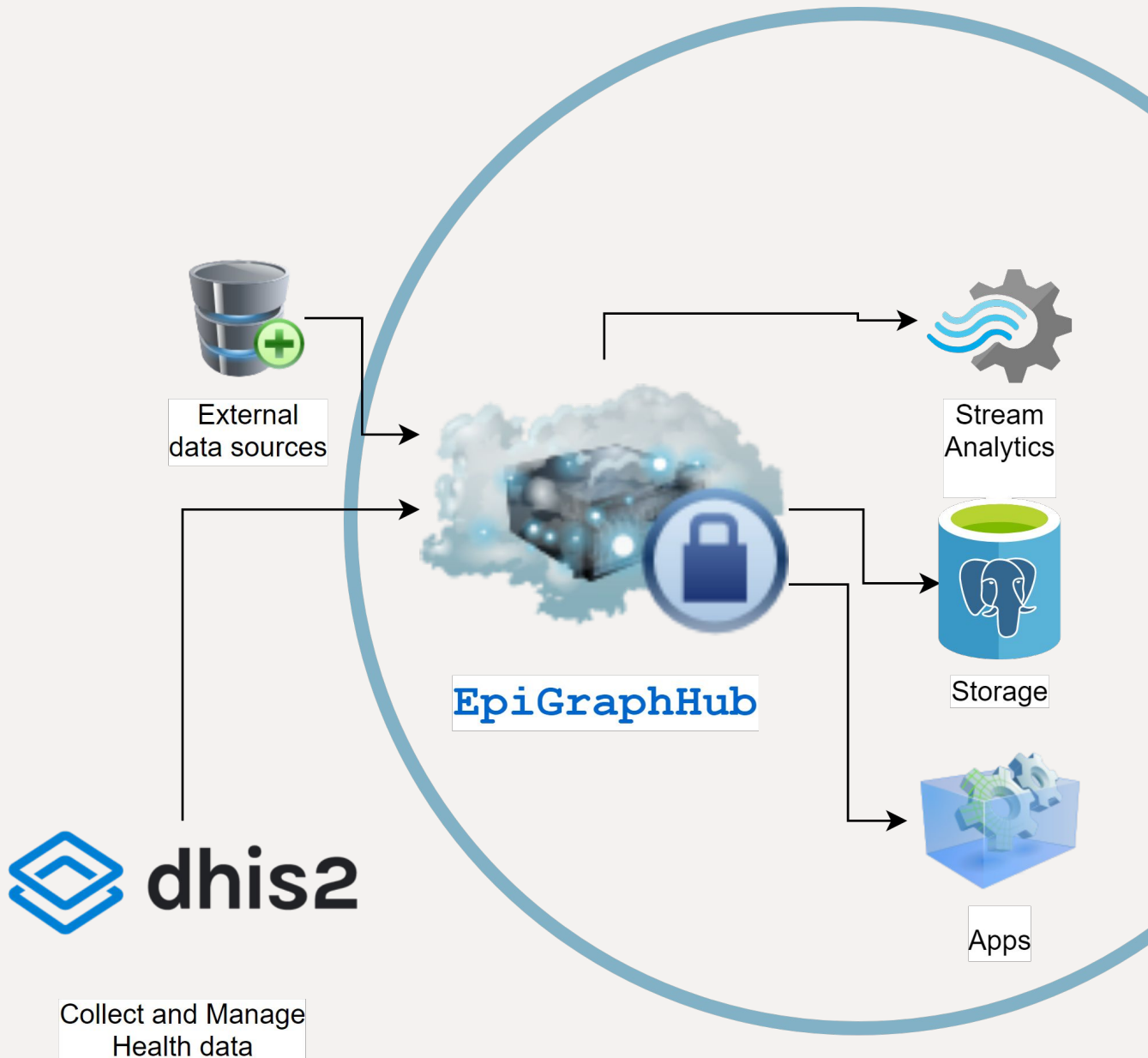
- Can host on local intranet, local servers, or EpiGraphHub servers



Beyond Visualizations

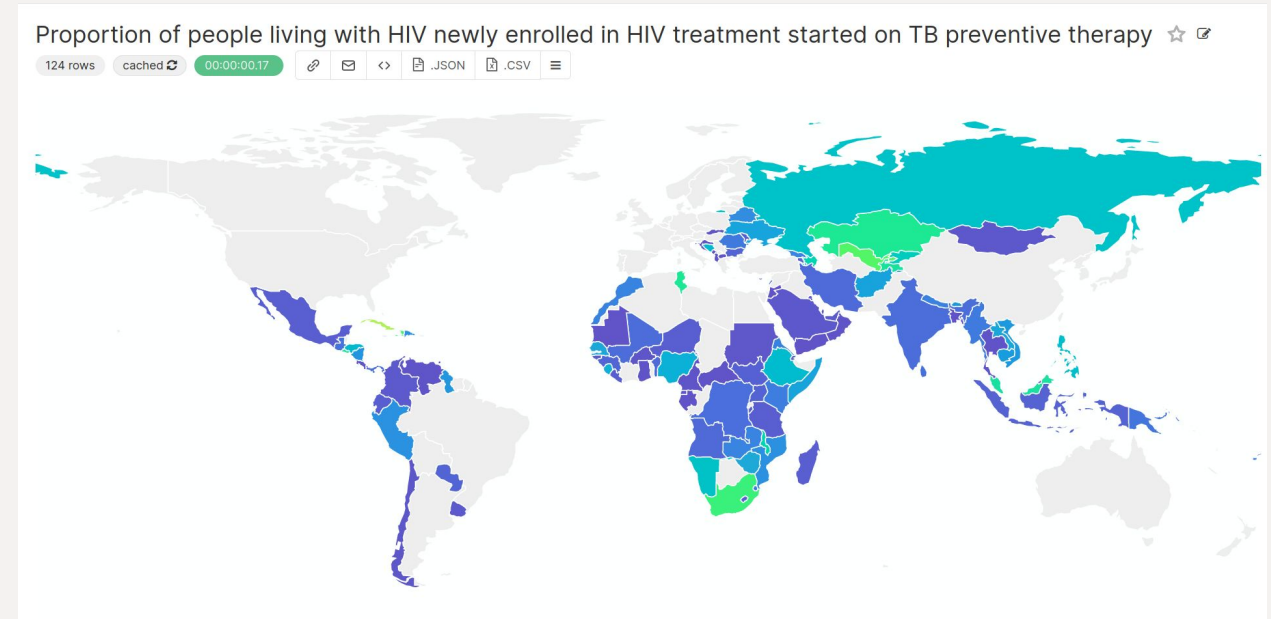
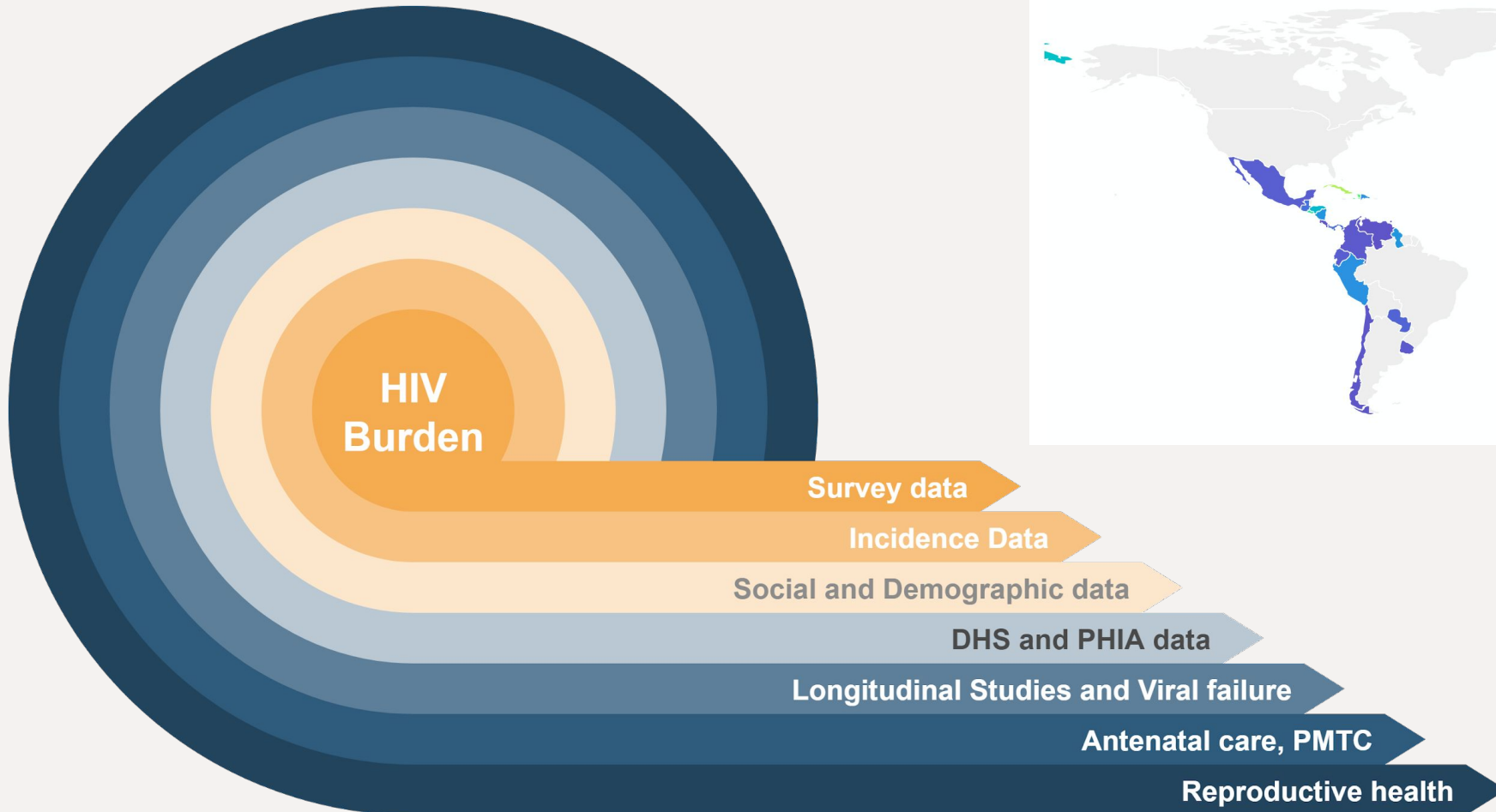
EpiGraphHub Libraries

- Bayesian Statistics
- Epidemiological analysis
- Mathematical modelling
- Cost-effectiveness
- Forecasting
- Machine Learning
- Text Mining
- Geo-Spatial



Example: HIV

- Monitoring HIV burden and effectiveness of public policies.



EpiGraphHub

Potential Application: Malaria

Commentary

For malaria elimination India needs a platform for data integration



Authors

Manju Rahi

Division of Epidemiology and Communicable Diseases, Indian Council

[PubMed articles](#) [Google scholar articles](#)

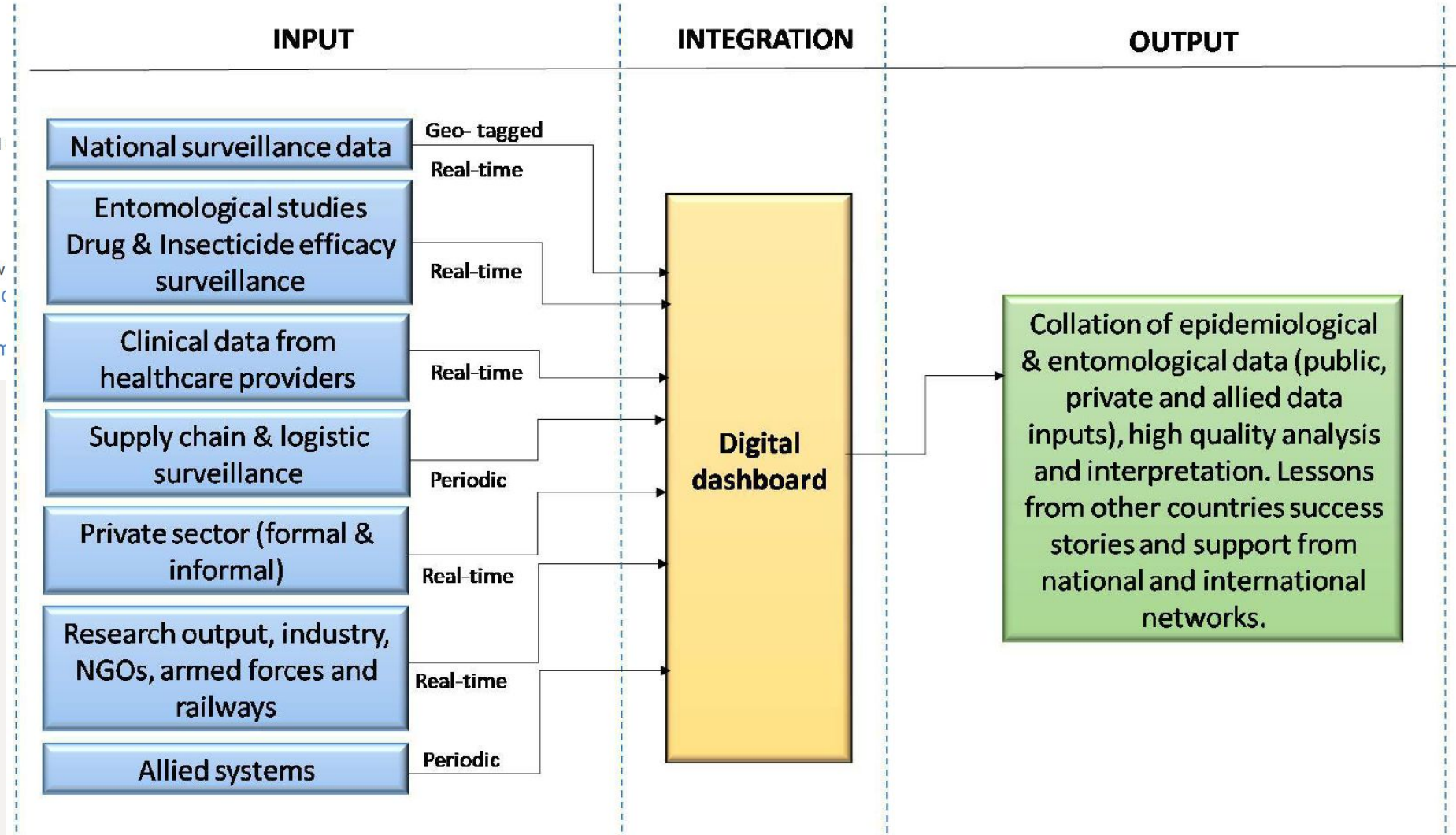
Amit Sharma

National Institute of Malaria Research, New Delhi, India

International Centre For Genetic Engineering and Biotechnology, New

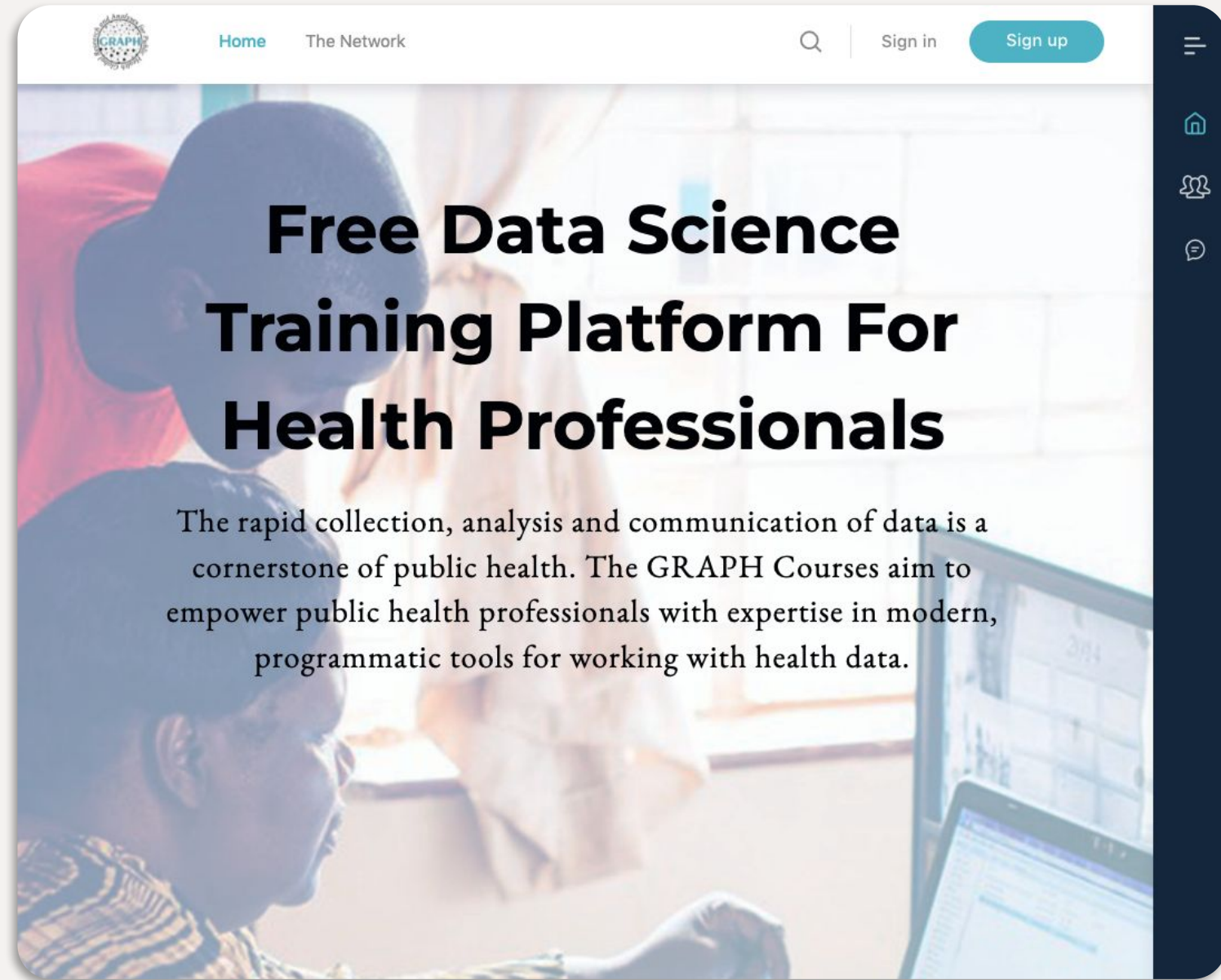
<http://orcid.org/0000-0002-3305-0034> [PubMed articles](#)

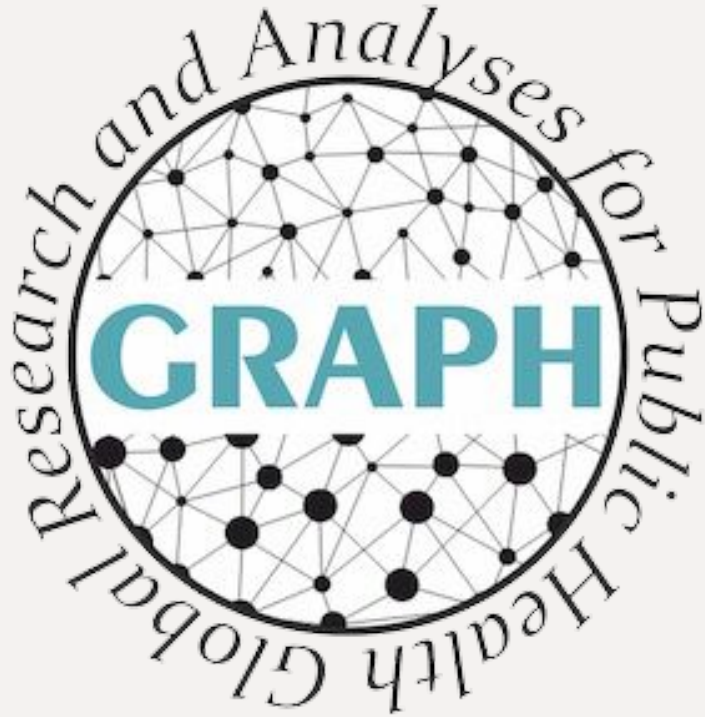
1. Correspondence to: Dr Amit Sharma; directornimr@icmr.org.in



Example: Training!

- Large, real-world datasets for the GRAPH Courses





Try Now!

[Epigraphhub.org](https://epigraphhub.org)

Thank you!

