

Exploring Interactive Insights in the RCCS Cohort Data

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National Institute of
Allergy and
Infectious Diseases

Meet the Team



Kevin Footer
Solution Architect



Alex Glogowski
Solution Architect



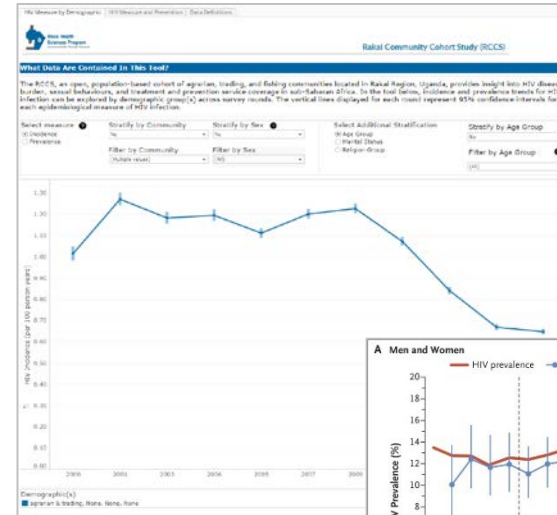
Tanvir Ahmed
Developer



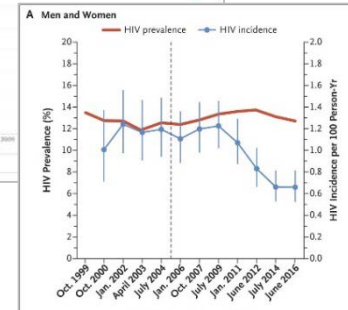
Grace Ha
Developer

An Interactive Approach to Visualizing RCCS Cohort Data

- Typically, access to data in publications is constrained to static visualizations that convey the author's interpretation of the data
- We explored a novel approach to visualizing published research data using interactive dashboards
- Interactive visualizations were developed from data contained in the **RHSP Data Mart** and enables users to explore insights of interest from previously published data



Visualization of HIV incidence in agrarian and trading communities



Grabowski, MK et al., NEJM, 2017

RHSP Data Mart Solution – Impact and Benefits

RHSP Source Data

Repeated for 17+ RCCS Survey Rounds

Partner

Lab

Flow

Mobility

Family

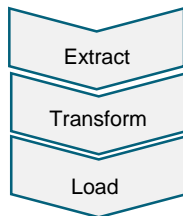
Baseline

Follow-Up



Data Integration

- Merge
- Consolidate
- Validate
- Cleanse
- Exception Handling
- Change Tracking



Sample Queries

- 34 Total sample Queries
- 91 ETL Scripts

Data Repository



RHSP Data Mart

- 20+ Tables
- 65,762+ Subject Records
- 16+ Rounds of Research Data
- Track Changes Logs

Data Dictionary

- 750 Pages of survey questionnaires mapped to response values
- 9 Columns of Information

Training

- 10 Video Tutorials (~150 minutes total)
- 2 User Manuals
- 2 User Test Plans
- 1 Training Plan

Analytics



Search Capability



Reporting



Analytics & Visualization



Integration with statistical software

Visualization Benefits



Reinforce previously published data through **interactive visuals**



Allow researchers to filter and represent data in **dynamic and interactive** ways to **explore new hypotheses**



Enable access to broader research community



Securely expose only **aggregate distributions**

Dashboard Demo

[RCCS Dashboard](#)

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