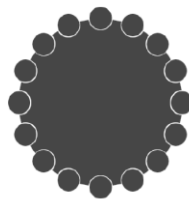Karen Comer, The Polis Center
Umberto Tachinardi, Regenstrief Institute
Katie Allen, Regenstrief Institute
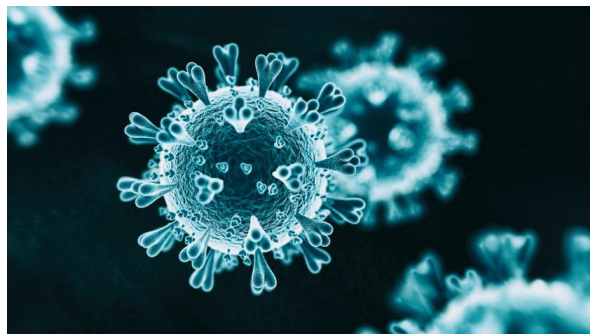
SAVI + CoRDaCo
What's trending in your community?
COVID-19 Research Data Commons

Use Case 4: Integrating Clinical and Community Data to
Address COVID-19 and the Social and Structural Determinants of Health

Regenstrief Institute

The Polis Center

Enhanced Data to Support COVID-19 Research and Response

1. Community mitigation and recovery from the health, social, economic impacts

2. Research on social and structural determinants of COVID-19 outcomes

3. Community preparedness for future pandemics

To meet the needs of organizations and researchers to readily find, explore, and validate relevant data and information.
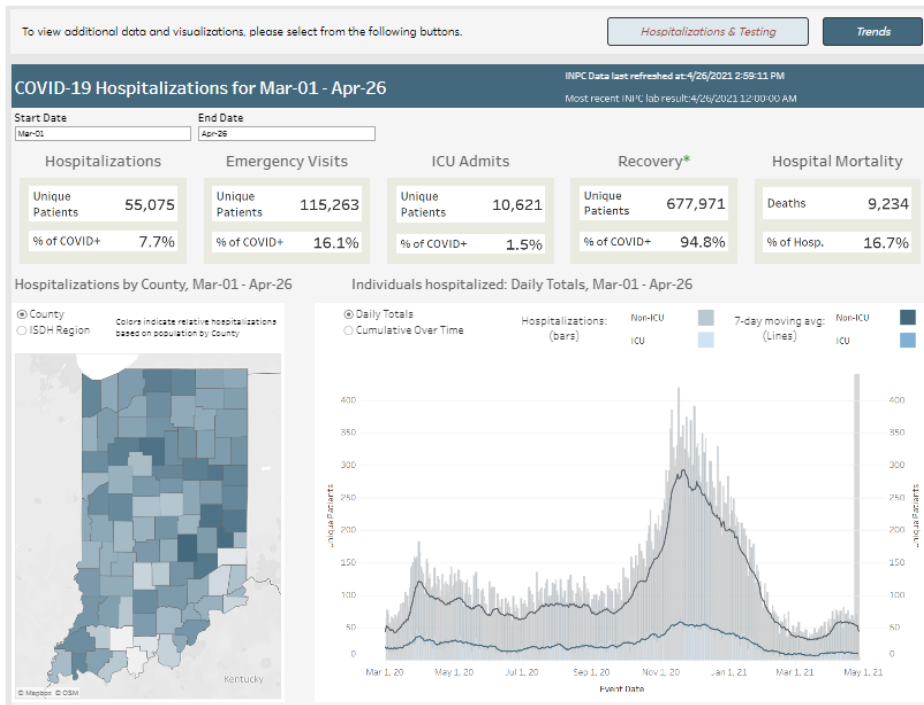
Partners

Our Information Systems

COVID-19 Surveillance

County-Level Cases and Risks

Real-time updates of county-level COVID-19 case data alongside indicators of high-risk populations.

Tracking Indiana COVID-19 Cases

Live dashboard of Indiana's confirmed COVID-19 cases, testing levels, and deaths, along with a county map showing the location of cases.

Neighborhood-Level Risk Estimates in Marion County

Models of which Central Indiana neighborhoods are at higher risk of severe and deadly cases, based on demographic data and health estimates.

Marion County Food and Meal Resources

Map the location of open food pantries and soup kitchens as well as locations where meals and lunch boxes are being provided during the COVID-19 pandemic. View these data along with food deserts and COVID-19 risk maps.

Risk of Social Isolation in Older Adults

This statewide StoryMap uses four indicators for adults over 65—poverty, marriage status, living alone, and disability—to indicate areas where more

The Inequalities Behind COVID-19 Disparities for African Americans in Indianapolis

The COVID-19 positivity rate is 1.8 times higher for blacks than for whites. We explore how systemic inequities put many black individuals at higher risk for getting the virus, having a serious case, and suffering from the economic impacts compared to white residents.

🌼 SAVI

Socioeconomic factors explain why some New York ZIP codes were hit hardest by COVID-19

By comparing New York's COVID-19 test results with demographic and socioeconomic factors by ZIP code, we found that low education levels, crowded housing, and a lack of health insurance are some of the strongest

🌼 SAVI

Health and Economic Impact of COVID-19 in Neighborhoods

SAVI's COVID-19 Impact Index simultaneously describes the health and economic impact in each Indianapolis ZIP code, as well as the health and socioeconomic vulnerabilities present before this crisis struck.

Read More

🌼 SAVI

SAVI Coronavirus Hub

www.savi.org/coronavirus-data-hub
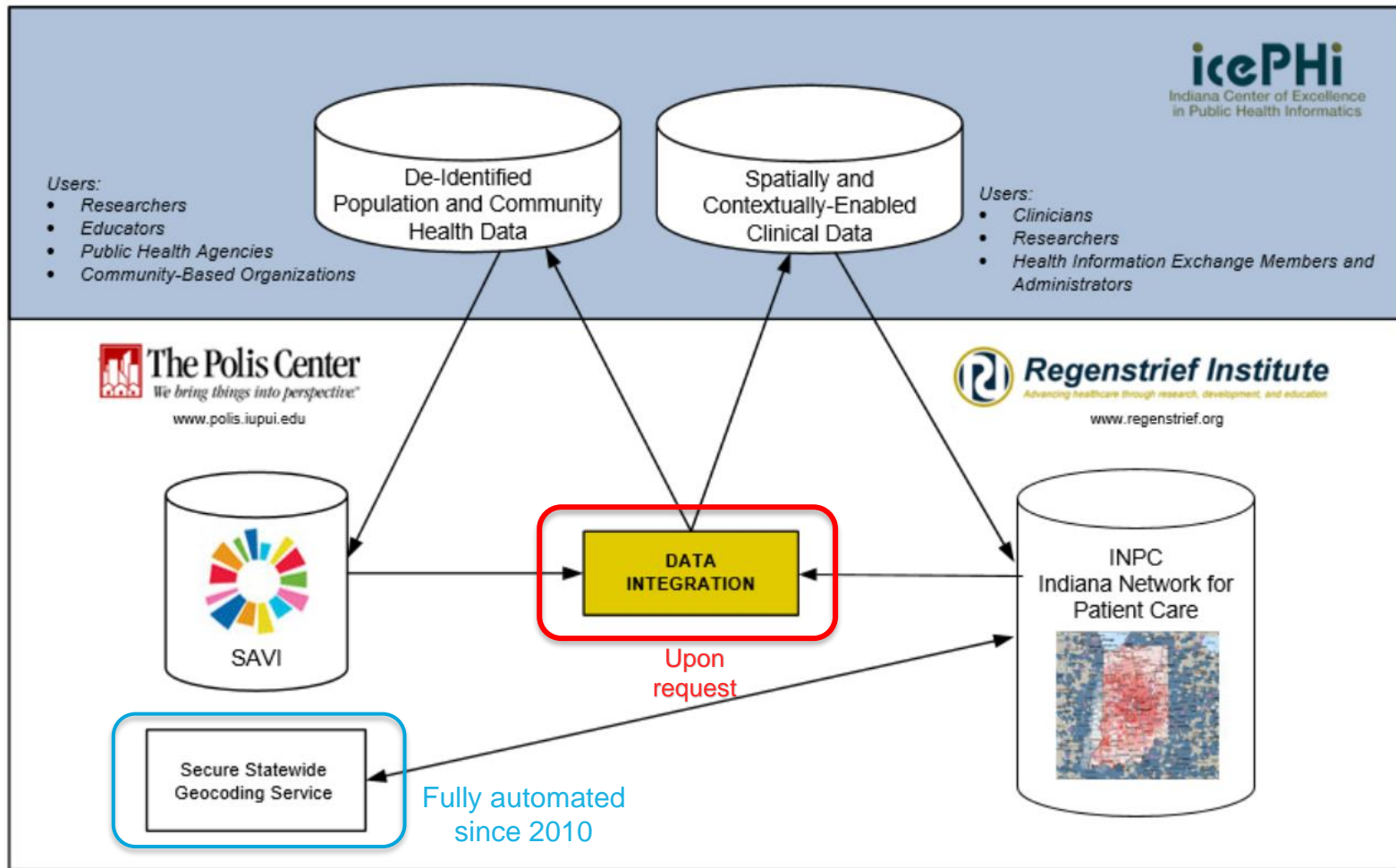
Disseminating COVID-19 Information to the Community:

1. Community-level Risk Estimation

2. Community Needs Assessment

3. Community Impact Assessment

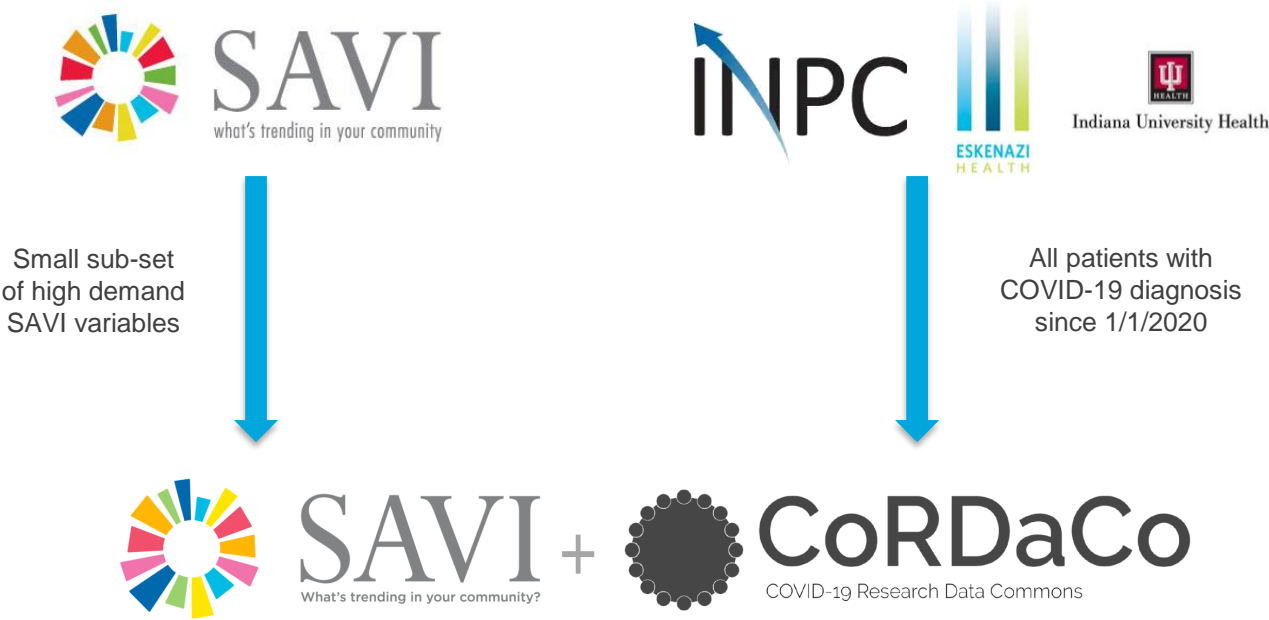4. Exploration of Social and Structural Determinants of Disparities

The Polis Center
INDIANA UNIVERSITY PURDUE UNIVERSITY INDIANAPOLIS

Po...

Comer, K.F., S. Grannis, N. Devadasan, B. Dixon, and J. Colbert. "Incorporating Geospatial Capacity to the Indiana Network for Patient Care to Improve Public Health Practice and Research." *Proceedings of the 2010 ESRI Health GIS Conference, Denver, Colorado, October 2010.*

NIH P...

A Near-Term Solution

The Pilot

Small sub-set
of high demand
SAVI variables

All patients with
COVID-19 diagnosis
since 1/1/2020

IUPUI

Clinical Data

1. COVID-19 phenotype (for selecting INPC patient records) collaboratively defined with input from an advisory committee

2. INPC extract, transform, load (ETL) processes in place

3. Developing data derivatives for the National COVID Cohort Collaborative (N3C)

Community Measures

1. Poverty

2. Food access

3. 211 calls for social services

4. Residential segregation

5. Transit service

6. Tobacco access

7. Air quality

8. Life expectancy

Data Governance

— RI is already the honest data broker for Indiana CTSI research usage of INPC data

— RI is leveraging current research data use agreements (DUAs) with INPC, IU Health, and Eskenazi

— Polis is leveraging current DUAs with its SAVI data providers

— Polis develops SAVI indicators for public use. DUAs are not required by end users of public SAVI data.

— An MOU between RI and Polis has established our respective expectations for our partnership

Data Requests

— SAVI + CoRDaCo data requests can be submitted via a form on the Regenstrief Institute web portal. https://www.regenstrief.org/data-request/

— If someone initially just wants to explore partnership, they can send an email directly to RI and/or Polis via the portal. We will contact the individual to discuss their research/community interests and to help identify data needs.

The Polis Center

Challenges

Community Applications

Challenges	Solutions
Umbrella data use agreement (DUA) focused on research and healthcare uses	• Community organizations develop partnerships with I-CTSI researchers, RI, and/or Polis • Polis develops and publishes community health measures to SAVI Community Information System
Limited scope of pilot	• Expand scope over time with funding • Partner with others building complimentary infrastructure
Sustainability	• Market the resource • Confirm interest and need • Raise appropriate levels of funding • Automate

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Our Shared Vision

Improved Data Discovery

Improved Data Exploration → **More Timely Information Creation** → **Improved Knowledge and Decision Making**

Improved Data Validation

Next Steps

Next Steps

— Partner and stakeholder engagement

— Conduct preliminary analyses of COVID-19 outcomes using the pilot SAVI + CoRDaCo data

— Demonstrate use of SAVI + CoRDaCo for the analysis of social and structural determinants of health

— Collect stakeholder feedback on pilot data commons and define/refine requirements for the longer-term solution

— Jointly pursue funding for the long-term vision

SAVI+CoRDaCo Team

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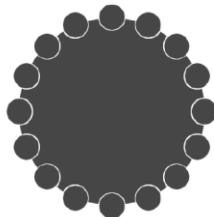— Ashley Griffith

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