Indiana Department of Health

IMMUNIZATION DASHBOARDS: CATALYSTS FOR INFORMED DECISION-MAKING

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OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.

Overview

- **Background – Adult immunizations**
- **State of Indiana**
  - Quick facts
  - Coverage across age groups
  - Where the gap lies
- **Dashboard Development**
  - Content
  - Function
  - Output
- **Impact**
- **Challenges**
- **Next steps**

Background – Adult immunizations

Immunization is significant in preventing diseases throughout adult life.

Age group

- 19 – 26
- 27 – 49
- 50 – 64
- ≥ 65

Life events

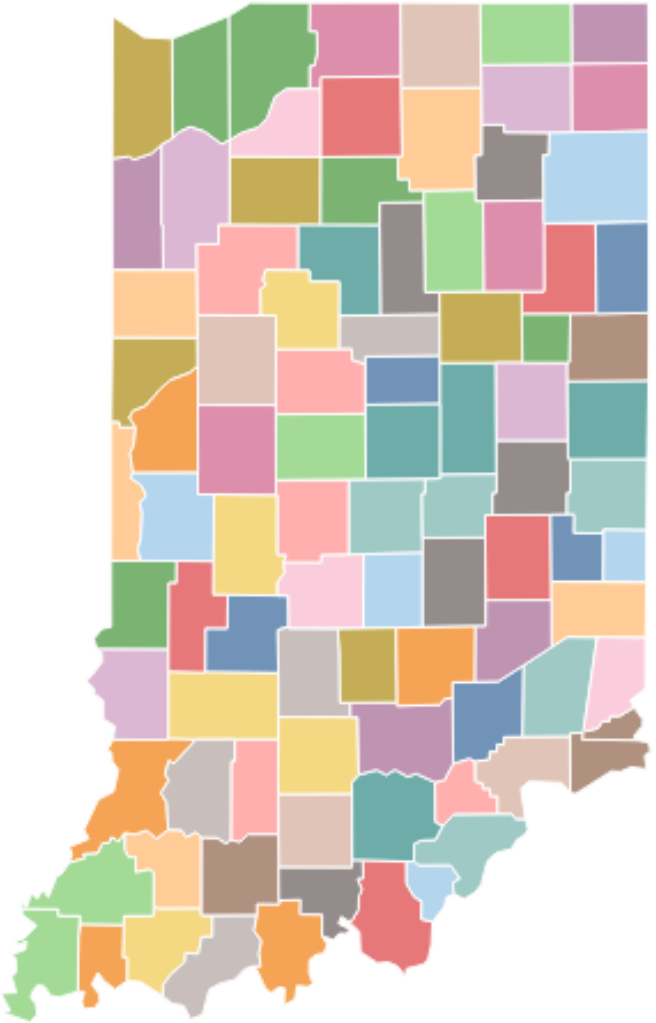
- Pregnancy
- International travel – Immigrants / Refugee
- Starting education

Risk factors

- Health conditions
- Job – Healthcare workers, military personnel
- Place of habitation – rehabilitation / care centers
- Lifestyle factors

State of Indiana – Quick facts

- **92** counties divided into five major regions – south, north, central, east and west.
- **76.5%** of the population in Indiana are 18 and over, Census
- Immunization records are reported through the states Immunization Information System also known as Children and Hoosier Immunization Registry Program (CHIRP).



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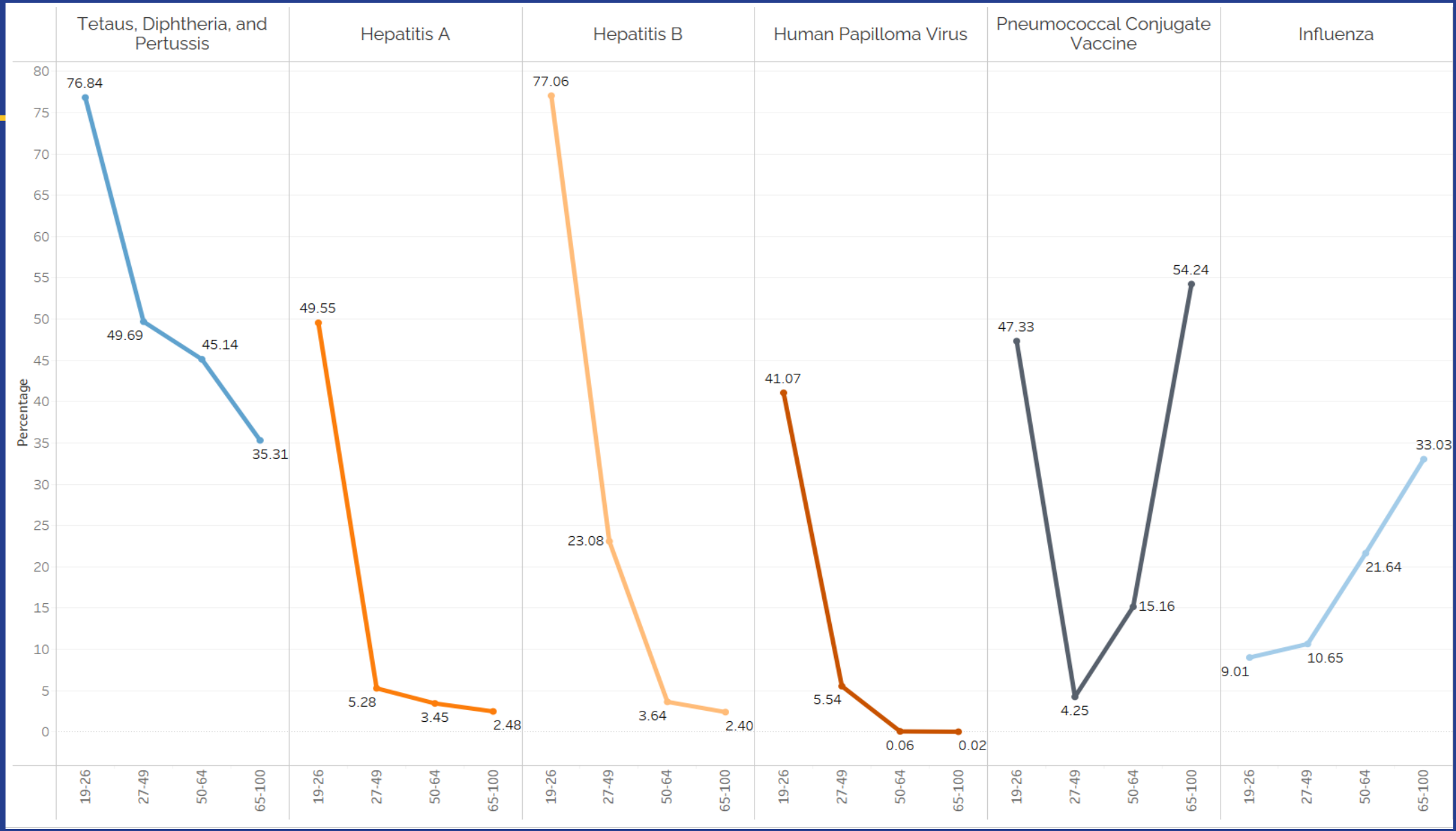
State of Indiana - Coverage across age group



State of Indiana - Where the gap lies

- Adult immunization coverage rates for adults aged 27 and above declines significantly when compared to coverage rates for young adults aged 19-26.
- Range of Tdap coverage across age groups, 19 through 65, highly fluctuates (35% - 77%)
- The gap in coverage rates was as high as 54% for Hep B followed by 45% for Hep A
- Coverage rates for PCV & FLU were as low as *15.2% & 21.6%* among adults aged 50 – 64.

Dashboard Development - Content

Data source

- Vaccine data reported through Indiana's IIS, CHIRP
- Structured Language Query was used to pull patient data, by county, from CHIRP

Data Used

Immunization rates for recommended vaccines for adults aged 19 years and above as of December 31, 2023

Data Processing

- Data was cleaned, standardized, and checked for outliers using MS Excel.
- Rates were calculated based on this cleaned dataset

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Dashboard development - Function

Navigation functions

- Navigation buttons allow easy access to data for all four age groups
- Interactive filter updates coverage for selected vaccine projected on the map
- Navigational filter displays county rates as a bar chart when selected on the map

Informational functions

- Data disaggregated for four age groups
- Cumulative rates for individual vaccines at county and state level
- Layout and interactive filters allow for comparison of rates across age group and geography

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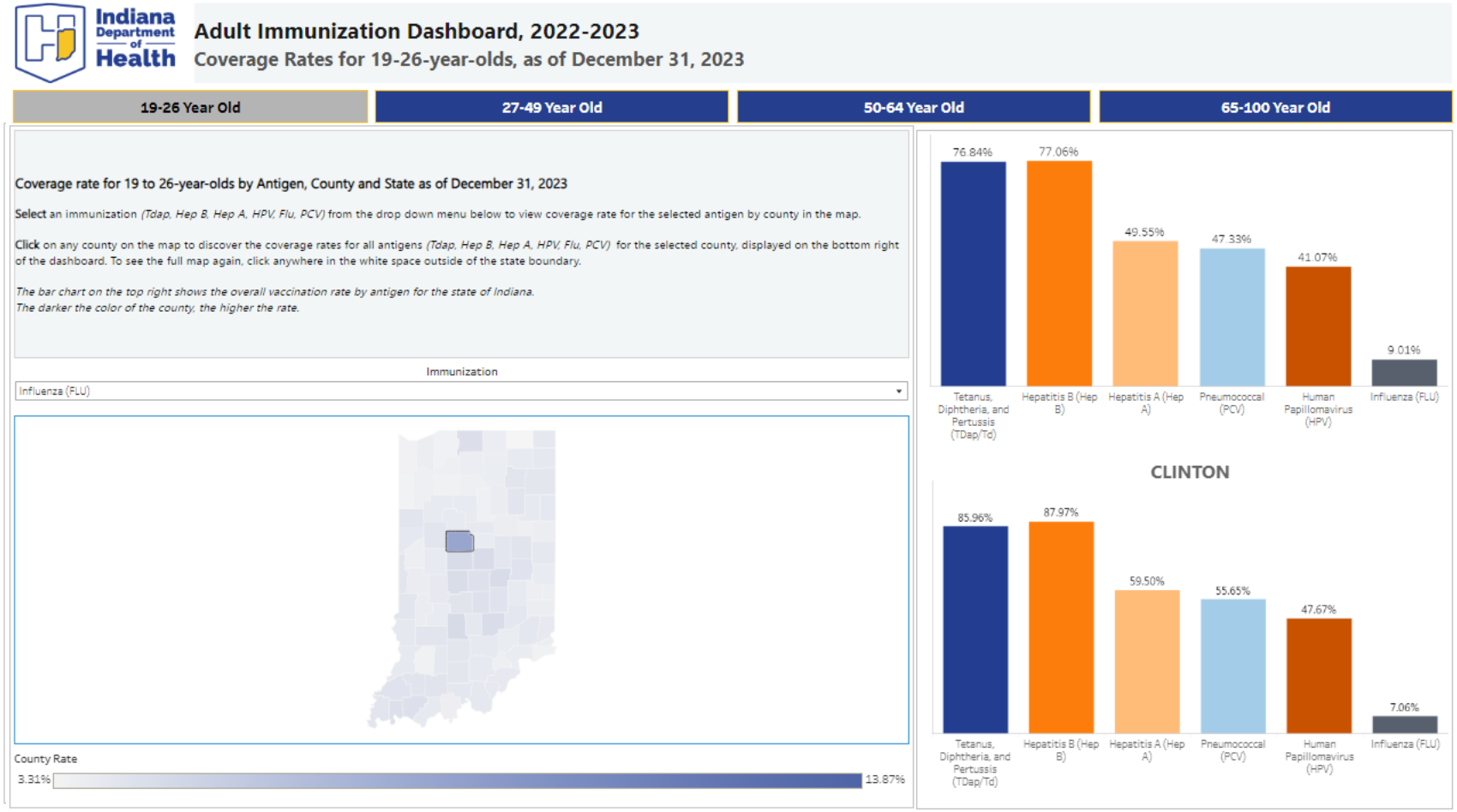
Dashboard development : Output



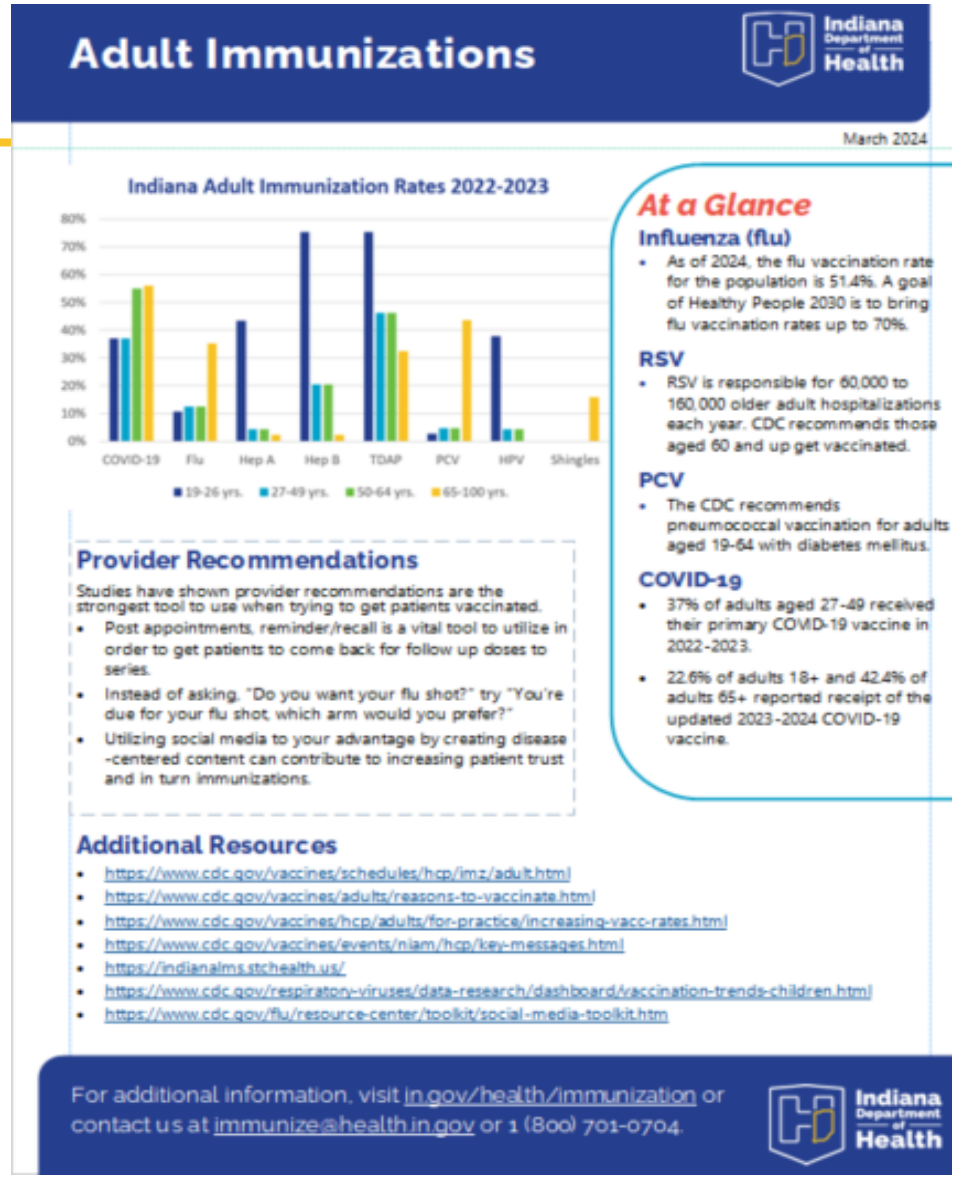
Software used: Tableau V2022.2

Uses a palate that is friendly for individuals with color vision deficiency.

Concise navigation guide provided aides data accessibility for all interested.

Impact

- Helped identify
  - significant changes in coverage rates for adult Immunization
  - intervention entry points
    - changes to our IIS, policy level, grassroots level
- Was used as a precursor to the idea of developing an infographic targeting providers



Adult Immunizations

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March 2024

Indiana Adult Immunization Rates 2022-2023

At a Glance

Influenza (flu)

- As of 2024, the flu vaccination rate for the population is 51.4%. A goal of Healthy People 2030 is to bring flu vaccination rates up to 70%.

RSV

- RSV is responsible for 60,000 to 160,000 older adult hospitalizations each year. CDC recommends those aged 60 and up get vaccinated.

PCV

- The CDC recommends pneumococcal vaccination for adults aged 19-64 with diabetes mellitus.

COVID-19

- 37% of adults aged 27-49 received their primary COVID-19 vaccine in 2022-2023.
- 22.6% of adults 18+ and 42.4% of adults 65+ reported receipt of the updated 2023-2024 COVID-19 vaccine.

Provider Recommendations

Studies have shown provider recommendations are the strongest tool to use when trying to get patients vaccinated.

- Post appointments, reminder/recall is a vital tool to utilize in order to get patients to come back for follow up doses to series.
- Instead of asking, "Do you want your flu shot?" try "You're due for your flu shot, which arm would you prefer?"
- Utilizing social media to your advantage by creating disease -centered content can contribute to increasing patient trust and in turn immunizations.

Additional Resources

- https://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html
- https://www.cdc.gov/vaccines/adults/reasons-to-vaccinate.html
- https://www.cdc.gov/vaccines/hcp/adults/for-practice/increasing-vacc-rates.html
- https://www.cdc.gov/vaccines/events/niam/hcp/key-messages.html
- https://indianaims.stchealth.us/
- https://www.cdc.gov/respiratory-viruses/data-research/dashboard/vaccination-trends-children.html
- https://www.cdc.gov/flu/resource-center/toolkit/social-media-toolkit.htm

For additional information, visit in.gov/health/immunization or contact us at immunize@health.in.gov or 1 (800) 701-0704.

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Challenges

- Reporting for adult immunizations is not required for providers in the state of Indiana
- The state's immunization information system (IIS), CHIRP, does not have the functionality to record patient status, such as pregnancy, when vaccines like Tdap are administered
- There are issues related to recording and maintaining accurate demographic data, particularly racial data for adults receiving vaccines
- Vaccines, like PCV, with recommended dosage differs across sub-types, are reported based on brand name in the state's IIS

Next Steps

- Improve immunization data quality starting at its source – providers
- Leverage the state's IIS and allowing providers to record additional patient level data
- Improving the quality of our public dashboards – enhance data accessibility
- Improve immunization rates for all recommended adult vaccines among all Hoosiers

Well developed dashboards display trends and reveal issues that may not have been as apparent.

Thank you!

Any Questions?

Contact

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