

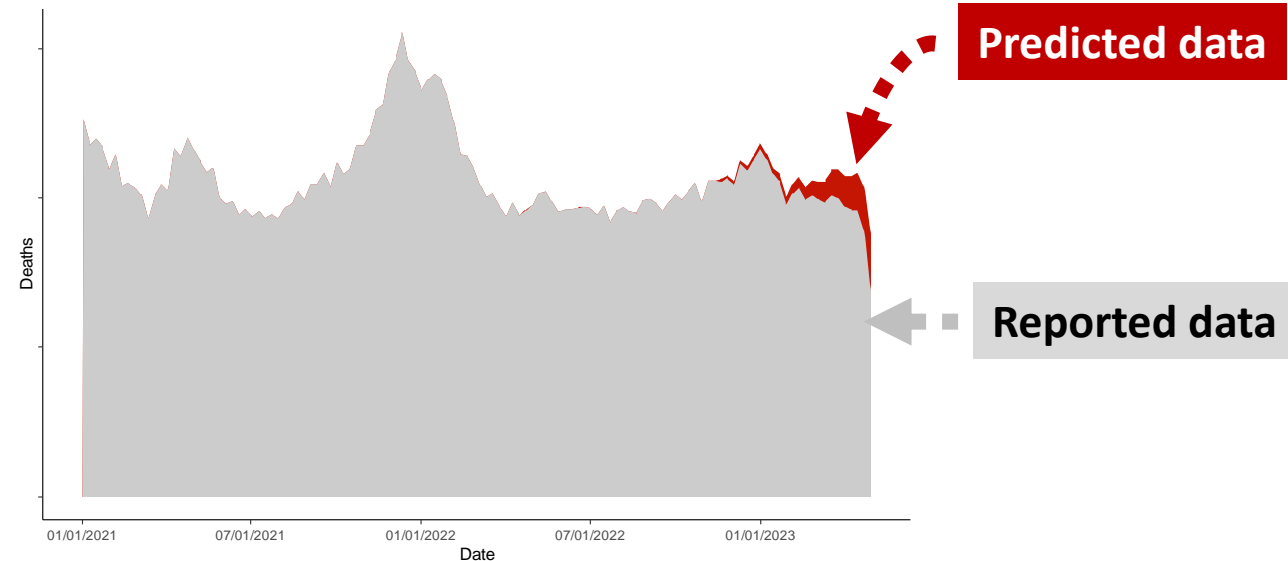
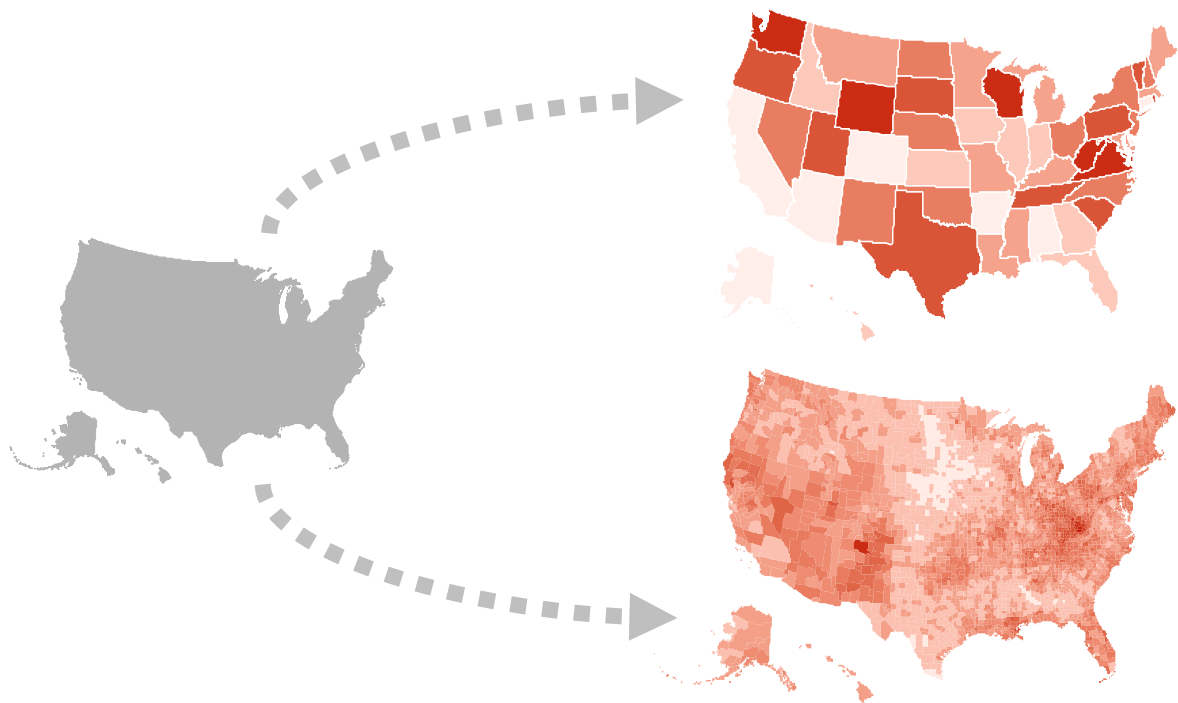
Model-Based Early Estimates Update: NCHS Board of Scientific Counselors

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September 14, 2023

Model-Based Early Estimates: Goals

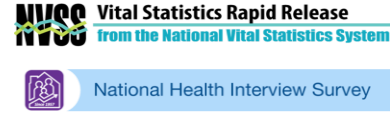
- Improve the timeliness and granularity of data
- Enable data to action



Model-Based Early Estimates: Design

**Integrate data
from various
sources**

**NCHS Data Systems
+
Auxiliary Data**



**Data analysis +
estimation**

Small area estimation
Nowcasting
Predictive modeling

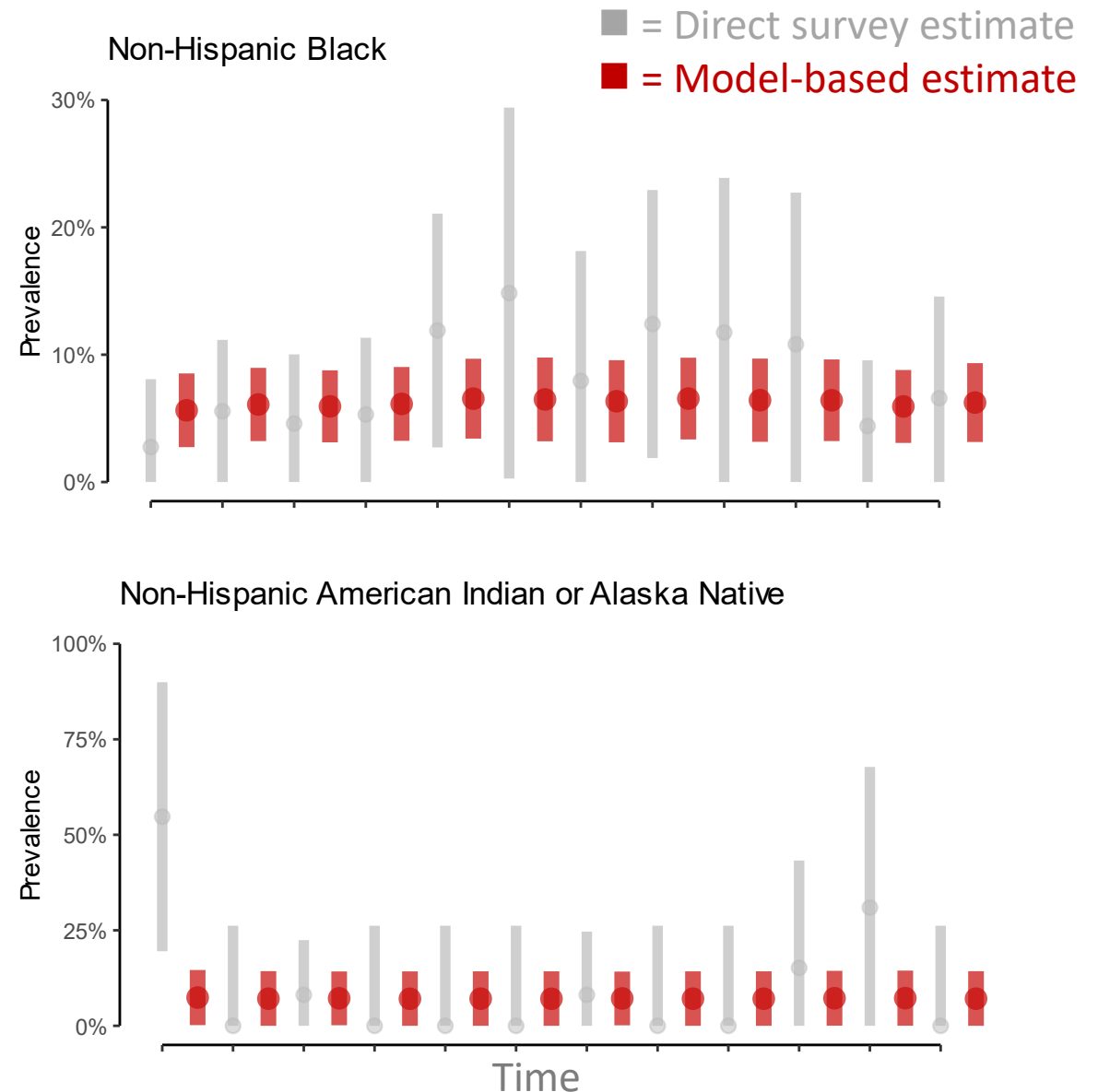
Interactive maps and charts
Machine-readable data files
Automated updates

**Data quality
checks +
evaluation**

**Data
visualization +
dissemination**

Model-Based Early Estimates: First Product

- ▶ **Goal:** Evaluate methods to produce and disseminate estimates for small subgroups
 - ▶ Publish estimates where data are often suppressed
 - ▶ Assist measurement and tracking of disparities
- ▶ **Solution:** Enhancements to an existing small domain modeling approach/tool
 - ▶ Added functionality
 - ▶ Improved transparency
 - ▶ Evaluations underway
- ▶ Can use this tool to generate model-based estimates for small subpopulations using NCHS data systems



Model-Based Early Estimates: Timeline

Implementation and Production

Ongoing Research and Development

September 2023

- ▶ Analytic tool for small domain estimation

- ▶ Continuous evaluation of estimates and methods

January 2024

- ▶ County-level estimates of deaths, births
- ▶ State-level estimates from NHIS

- ▶ Analytic support to data divisions and data users

September 2024

- ▶ Analytic pipelines for other data systems
- ▶ Evaluation of methods for combining non-probability and probability data

- ▶ Research on new and emerging data science methods

Questions?

www.cdc.gov/nchs

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

