

# Data Modernization Initiative: Updates from the National Vital Statistics System (NVSS)

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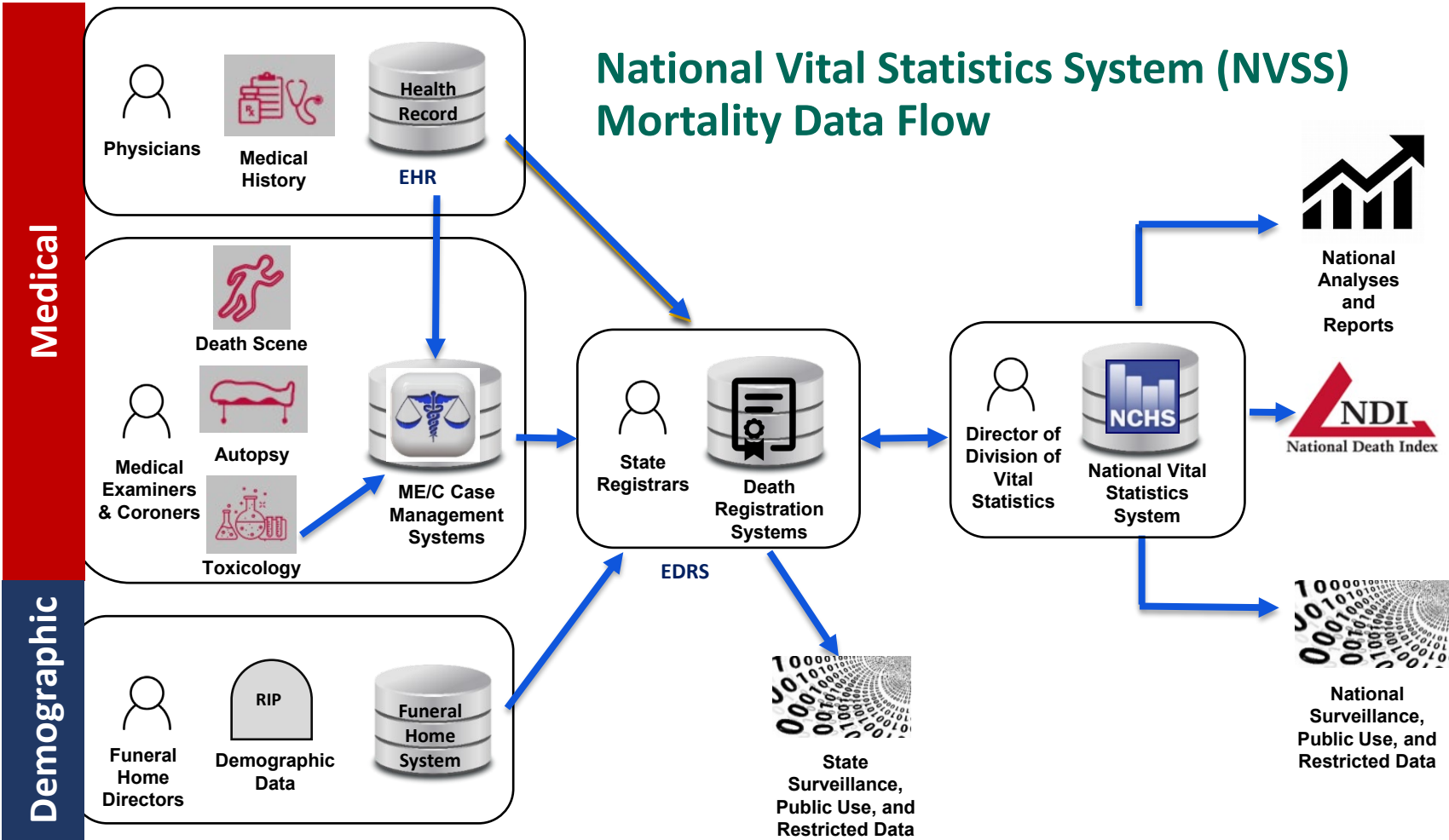
## What does a modernized NVSS look like?

- A modern NVSS will be reliable, efficient, and able to provide timely high-quality data for public health research and surveillance to inform policy and emergency response.

## NVSS Modernization... Questions for BSC Consideration

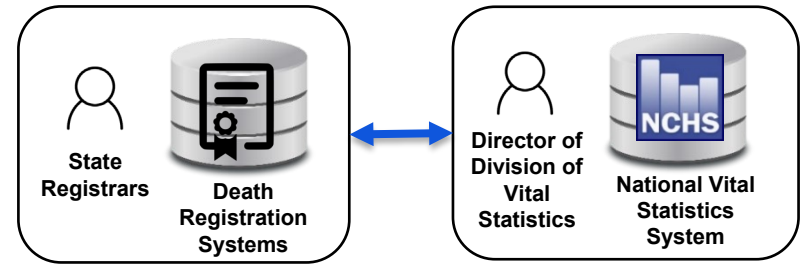
- Are our goals and focus areas consistent with the needs of the public health surveillance and research community?
- What are we missing in our data modernization efforts (i.e., what should we be doing that we aren't)?
- Conversely, are there things we are doing that we shouldn't (i.e., are we on the wrong track with anything)?

# National Vital Statistics System (NVSS) Mortality Data Flow



# State Electronic Death Registration System (EDRS) to NCHS Data Flow

- VRDR FHIR IG (Vital Records Death Reporting, Fast Healthcare Interoperability Resources Implementation Guide) Development
- Bidirectional data flow / messaging
  - API development / implementation
  - STEVE (NAPHSIS operated system)
- NCHS Internal System Modernization
  - Modify data tracking / review processes and tools



# Accelerating Data Modernization in Jurisdictions

Epidemiology and Laboratory Capacity (ELC) Cooperative Agreement Funding

## ELC: Accelerating Data Modernization in Jurisdictions - FY21 Funding

- Tier 1 – Core Data Modernization Infrastructure (\$46M)
  - All 64 ELC recipients eligible for funding
- Tier 2 – Electronic Case Reporting (eCR) Scale-Up (\$77M)
  - All 64 ELC recipients eligible for funding; amount based on recipient eCR status
    - Level 1 – Funding Range \$200,000 - \$810,000
    - Level 2 – Funding Range \$1,100,000 - \$1,545,000
- **Tier 3 – National Vital Statistics (NVSS Modernization)**

## ELC: Tier 3 Funding

- **\$77 Million** for National Vital Statistics System modernization
- 57 ELC recipients who are part of the NVSS (i.e., 50 states, NYC, DC, AS, CNMI, GU, PR, USVI) will each receive **\$1,350,000**
- 24-month performance period



## ELC: Tier 3 - Goal

Move all jurisdictions closer to supporting FHIR-based, bi-directional interoperability between their EDRS and NCHS by July 2023, with the expectations of being ready to fully support within one year of the end of the project funding period.

## What specifically will jurisdictions be working on...

- Make necessary upgrades to existing systems to support FHIR standards and record-level messaging
- Implement application programming interfaces (API's) to support sending and receipt of FHIR messages
- Engage in testing and piloting between EDRS and NCHS

## Other things jurisdictions might choose to do (optional activities)

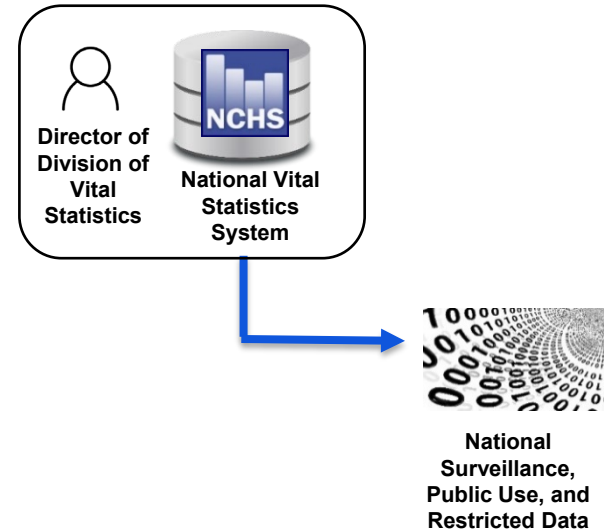
- Propose and implement additional projects, with CDC approval.
- Examples:
  - FHIR-based interoperability between medical examiner/coroner case management systems and EDRS
  - Pilot interoperability between hospital EHR and recipient electronic birth/death registration systems
  - Interoperability between recipient's EDRS and one or more surveillance systems or registries
  - Maintain existing system, including personnel and operating environment and supporting software necessary for them to function

## Other NVSS Modernization Focus Areas

- A geocoding service that can code address on birth and death records as they are received by NCHS and return to jurisdictions
- Develop FHIR standards for birth data and for medical death investigation
- Expanded and improve training and materials to support jurisdictional modernization efforts
- Query system for public release of provisional death data.

## Enhanced External Access to Provisional Mortality Data

- CDC WONDER Enhancements
  - New query screen for provisional data
  - Add week of death
  - Add state of death occurrence (currently only by residence)
  - Modernized and enhanced API
  - Updated Monthly



# NVSS Modernization Discussion Questions

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- What are we missing in our data modernization efforts (i.e., what should we be doing that we aren't)?
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