

Update on Division of Health Care Statistics (DHCS) Electronic Health Record Activities

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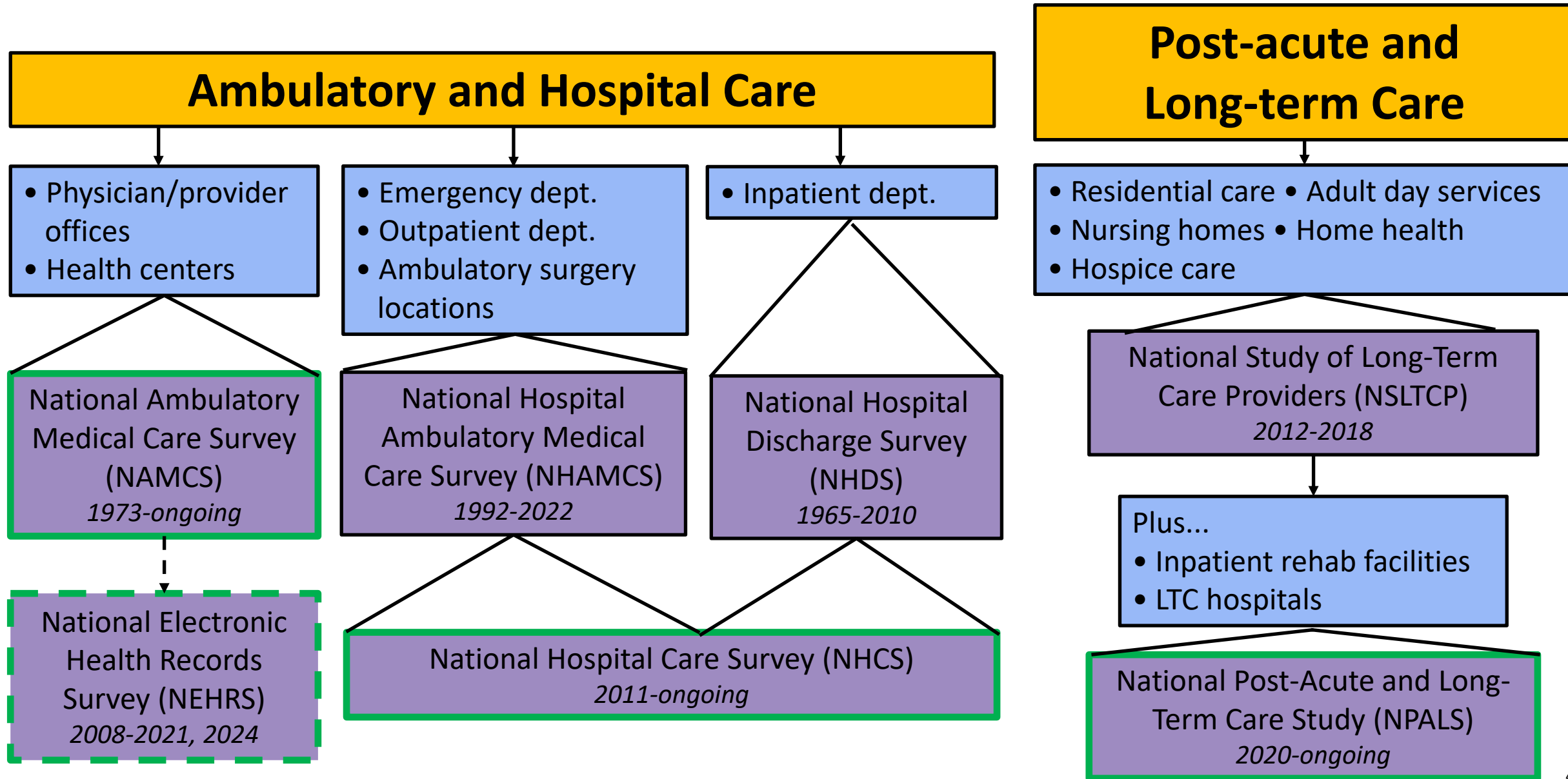
Overview of the National Health Care Surveys

National Health Care Surveys



- Produce accurate objective, nationally-representative statistics on health care to inform health care policy and serve a variety of research needs.
- Are establishment surveys, not household surveys.
- Provide estimates about the universe of encounters with providers, not the population.
- Historically, patient-level data largely abstracted from medical or administrative data.
- Include health care provider surveys to understand this population's experience providing care.

National Health Care Surveys Spectrum of Care



Building Capacity for EHR Data Collection

Built Infrastructure: First NCHS CIPSEA Compliant Cloud



- DHCS has built a CIPSEA compliant Enclave on the OCIO managed Azure EDAV cloud.
- Starting with the 2024 data collections, all NHCS and NAMCS electronic data will be collected, processed, analyzed, and stored on the CIPSEA compliant EDAV Enclave.
- Impact:
 - Makes EHR data collection more sustainable.
 - Provides faster processing time for “big data.”
 - Example: Processed 2021 National Hospital Care Survey data on the cloud.
 - On-premise, it took 10-12 days to process 1.2 million EHR records.
 - On the cloud, it took less than 1 day to process 1.2 million EHR records.
 - Allows easier use of open-source technologies such as R and Python, particularly for AI techniques.
 - More cost effective.

EHR Standards: Exploring Fast Healthcare Interoperability Resources (FHIR)



- DHCS has developed a Health Care Surveys HL7 FHIR Content Implementation Guide V1.0, STU 1 [Health Care Surveys Content IG Home - Health Care Surveys Content Implementation Guide \(IG\) v1.0.1 \(fhir.org\)](#)
- Currently, conducting a FHIR pilot study with several clinical sites:
 - Critical first step to assess feasibility of FHIR data exchange approaches to improve volume, quality, completeness, and timeliness of data from clinical sites without increasing the burden.
 - Automated transmission of EHR data
 - Data transmitted within 72 hours of encounter close
 - Leveraging open-source reference architecture that aligns with what is successfully used by CDC's Electronic Case Reporting (e-CR).

EHR Data Collection for NHCS and NAMCS

Electronic Data Collection: National Hospital Care Survey (NHCS)



- The first national estimates, based on modelling, on inpatient discharges and ED visits will be released in 2024.
- Public use files (PUF) for inpatient stays and ED visits will be released March/April 2024, the first release after 14 years of data collection.
 - Program set-ups will be available in SAS, Stata and R.
- Monies were received through the HHS OS-PCORTF to develop algorithms that utilize machine learning techniques and natural language processing to analyze EHR clinical notes to improve the identification of patients with opioid-involved and stimulant encounters.

EHR Data Collection: National Ambulatory Medical Care Survey (NAMCS) Health Center (HC) Component



- Restricted data from the 2021 and 2022 NAMCS HC Component are available through the NCHS Research Data Center.
- By Summer 2024, preliminary national estimates, including estimates for maternal health visits, will be released as part of an interactive data visualization.
- By Fall 2024, a public use file (PUF) for the 2022 NAMCS HC data will be released, the first PUF released for EHR data from the redesigned NAMCS HC Component.
- Monies were received through the HHS OS-PCORTF to link NAMCS HC data to:
 - National Death Index, HUD administrative data, and Medicaid data

EHR Data Collection: National Ambulatory Medical Care Survey (NAMC) Provider Component



- Working with AthenaHealth, an EHR vendor, to collect encounter data from their approximately 95,000 clinicians (e.g., physicians, PAs, and NPs) that are registered in National Health Care Surveys public health reporting registry.
 - By July 2024, test data will be sent to NCHS for validation.
 - In 2025, if funding is available, production EHR data for all these providers will be transmitted to NCHS.

Thank you!



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.

