Agenda

Alek Sripipatana, PhD, MPH

- Director for Data and Evaluation, Office of Quality Improvement, Bureau of Primary Health Care

Matthew Rahn

- Deputy Director of Standards, Office of the National Coordinator for Health IT, US Department of Health and Human Services

Jason Greer

- CEO, Colorado Community Managed Care Network

Andrew Hamilton, RN, BSN, MS

- CIO, AllianceChicago

UDS Modernization Updates

NACHC Policy and Issues Forum
March 9, 2023

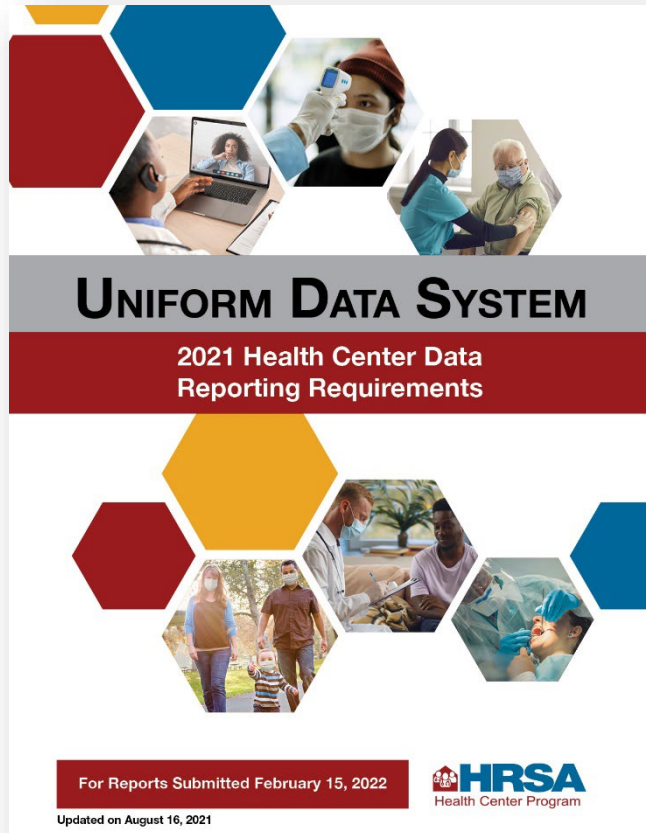**Alek Sripipatana, PhD MPH**

Data and Evaluation Director, Office of Quality Improvement

Health Resources and Services Administration (HRSA), Bureau of Primary Health Care (BPHC)

Vision: Healthy Communities, Healthy People

What is the UDS?

UNIFORM DATA SYSTEM

2021 Health Center Data Reporting Requirements

For Reports Submitted February 15, 2022

Updated on August 16, 2021

HRSA Health Center Program

- The Uniform Data System (UDS) is a standard data set that is reported annually and provides consistent information about health centers, including:
  - Patient characteristics
  - Services provided
  - Clinical processes and health outcomes
  - Patients' use of services
  - Staffing
  - Costs and revenues

HRSA Health Center Program

UDS Data Elements
What does it capture?

Data Element Category	Tables and Forms
Demographics	• Patients by ZIP Code Table • Table 3A: Patients by Age and Sex assigned at birth • Table 3B: Race/Ethnicity and Sexual Orientation and Gender Identity (SOGI) • Table 4: Income (% FPG), Insurance Status, Special Populations (Ag. works, Homeless, Veteran, etc.)
Staffing	• Table 5: FTE type (Physicians, Mental Health, Dental, etc.), Visits, and Patients • Table 5: Service Detail Addendum
Clinical	• Table 6A: Diagnoses and Services Rendered • Table 6B: Clinical Quality Measures (Process) • Table 7: Clinical Quality Measures (Outcome)
Financial	• Tables 8A: Financial Costs • Table 9D: Patient Related Revenue • Table 9E: Other Revenue (Including grant/contract revenue, H80)
Other	• Appendix D: Health Information Technology (HIT) • Appendix E: Other Data Elements – MAT • Appendix F: Workforce

For more information, read the UDS General Information Fact Sheet and 2022 UDS Manual (pg. 12-13)

HRSA
Health Center Program

UDS Modernization Initiative

Reduce Reporting Burden
Automate data submission, provide enhanced UDS reporting capabilities, promote transparency and integrate stakeholder feedback.
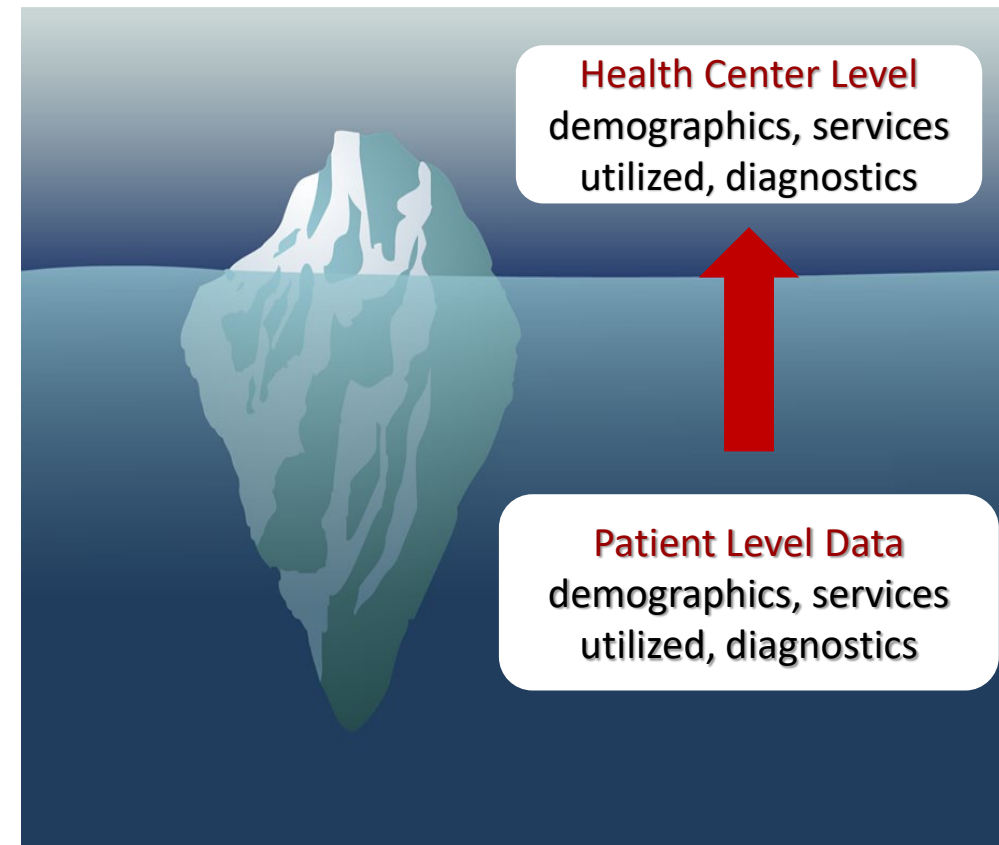
Better Measure Impact
Improve the quality of UDS data to reflect improvements in patient-centered care and an evolving primary health care setting.
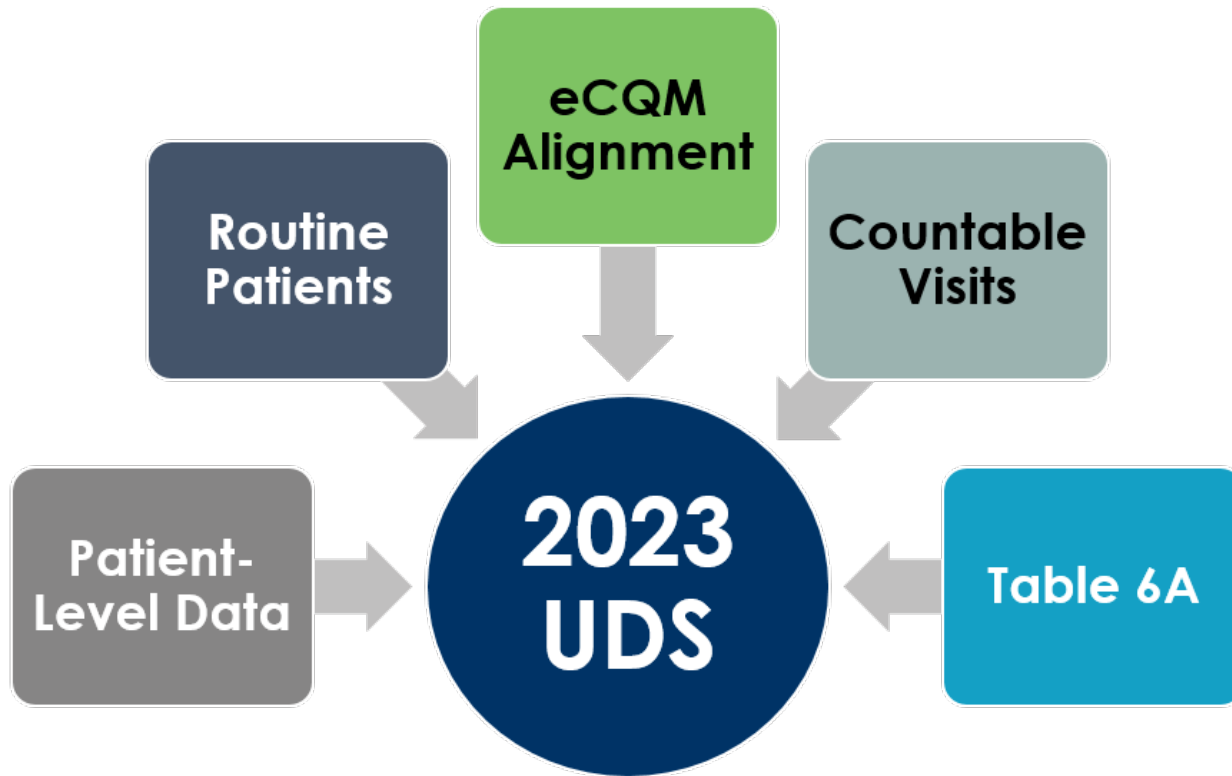
Promote Transparency
Provide an open transparent decision-making process on UDS changes such as measure selection, information technology, and reporting improvements.

Health Center Level
demographics, services utilized, diagnostics

Patient Level Data
demographics, services utilized, diagnostics

Uniform Data System Modernization Initiative

HRSA
Health Center Program

Introduce Patient-Level Data Reporting:
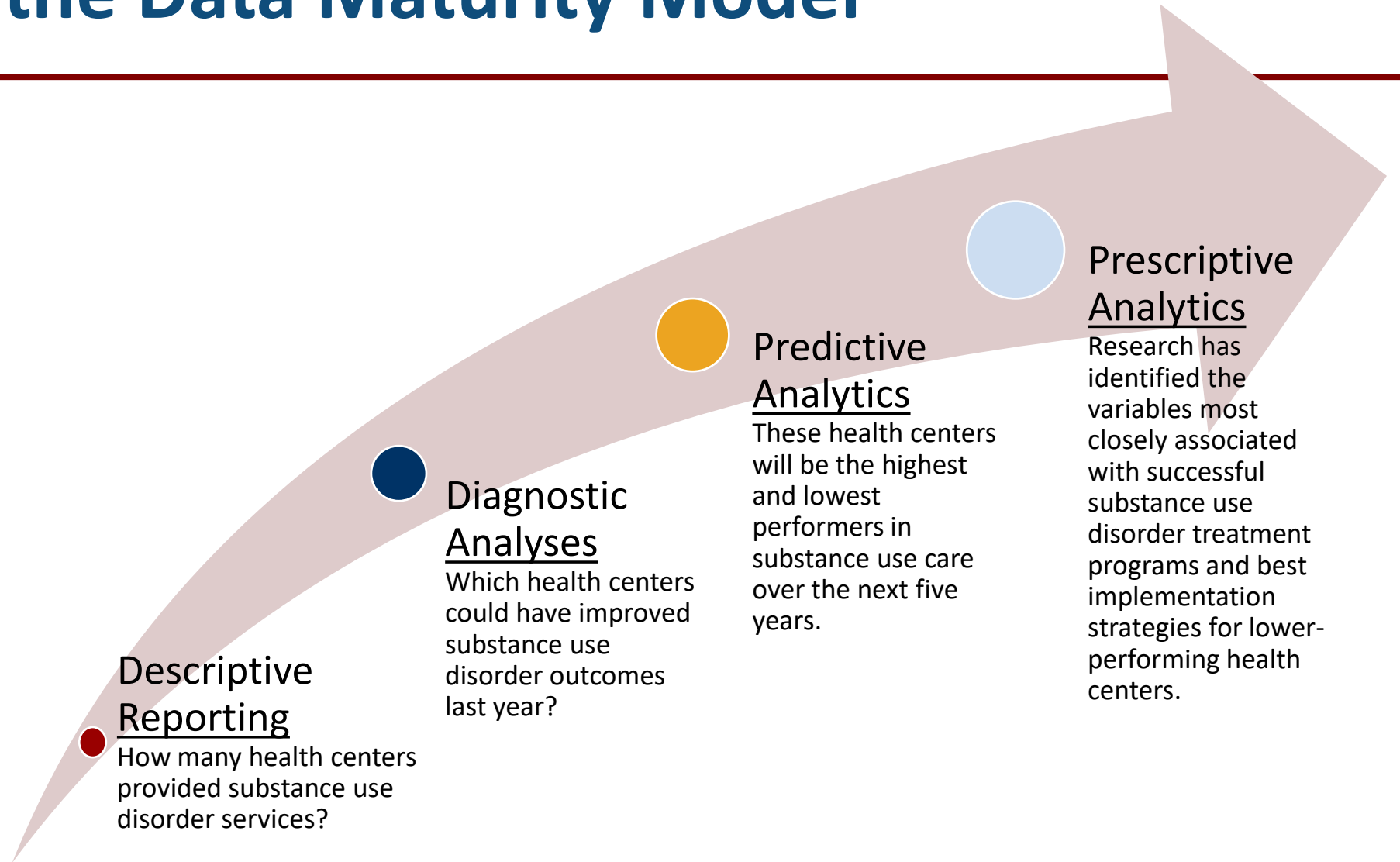## UDS Modernization and UDS+ Implementation

Patient-Level Data (UDS+):
- Will reduce reporting burden, improve data quality, and increase granularity to better evaluate Health Center Program services and outcomes
- Will help better identify training and technical assistance needs
- Will advance quality improvement research and actions to improve equitable access to high-quality, cost-effective care
- FY 22 ARP-UDS+ supplemental investment of $88.6M for HCs, including LALs
- FY 22 HCCN investment of more than $43M to 49 recipients

Advancing the Data Maturity Model

Current State

Available Uniform Data System (UDS) data are *aggregated* and *retrospective* which leaves many questions unanswered and does not fully utilize the predictive power of data for decision making
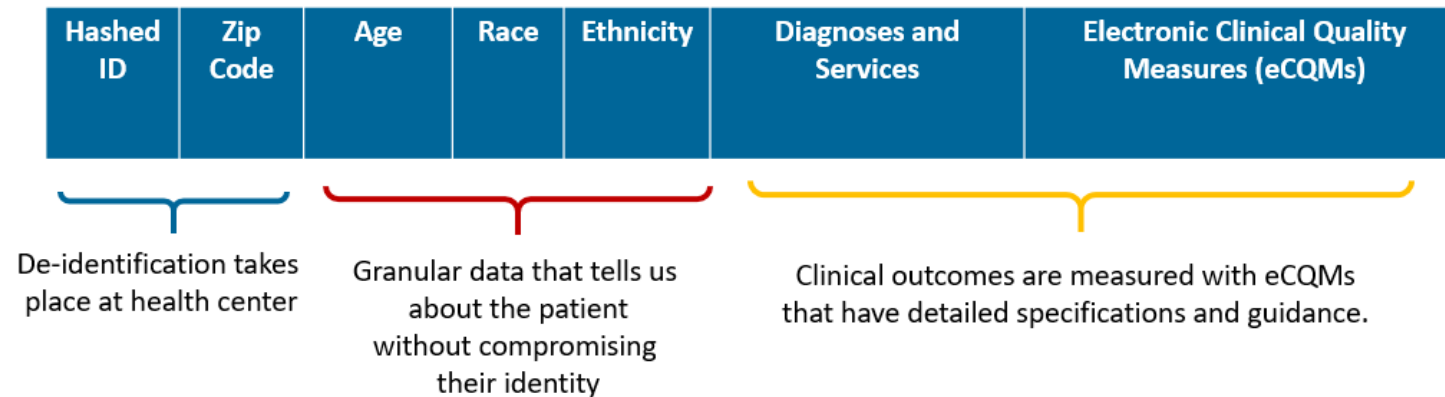
Descriptive Reporting
How many health centers provided substance use disorder services?

Diagnostic Analyses
Which health centers could have improved substance use disorder outcomes last year?

Predictive Analytics
These health centers will be the highest and lowest performers in substance use care over the next five years.

Prescriptive Analytics
Research has identified the variables most closely associated with successful substance use disorder treatment programs and best implementation strategies for lower-performing health centers.

UDS Patient Level Submission (UDS+)

UDS+ is...

- De-identified patient level data
- Applicable to UDS Tables PBZC, 3A, 3B, 4, 6A, 6B, and 7

UDS+ is not...

- Full copies of data directly from patients' electronic medical records.

| Hashed ID | Zip Code | Age | Race | Ethnicity | Diagnoses and Services | Electronic Clinical Quality Measures (eCQMs) |

De-identification takes place at health center

Granular data that tells us about the patient without compromising their identity

Clinical outcomes are measured with eCQMs that have detailed specifications and guidance.

For more information, visit: Uniform Data System (UDS) Modernization Initiative
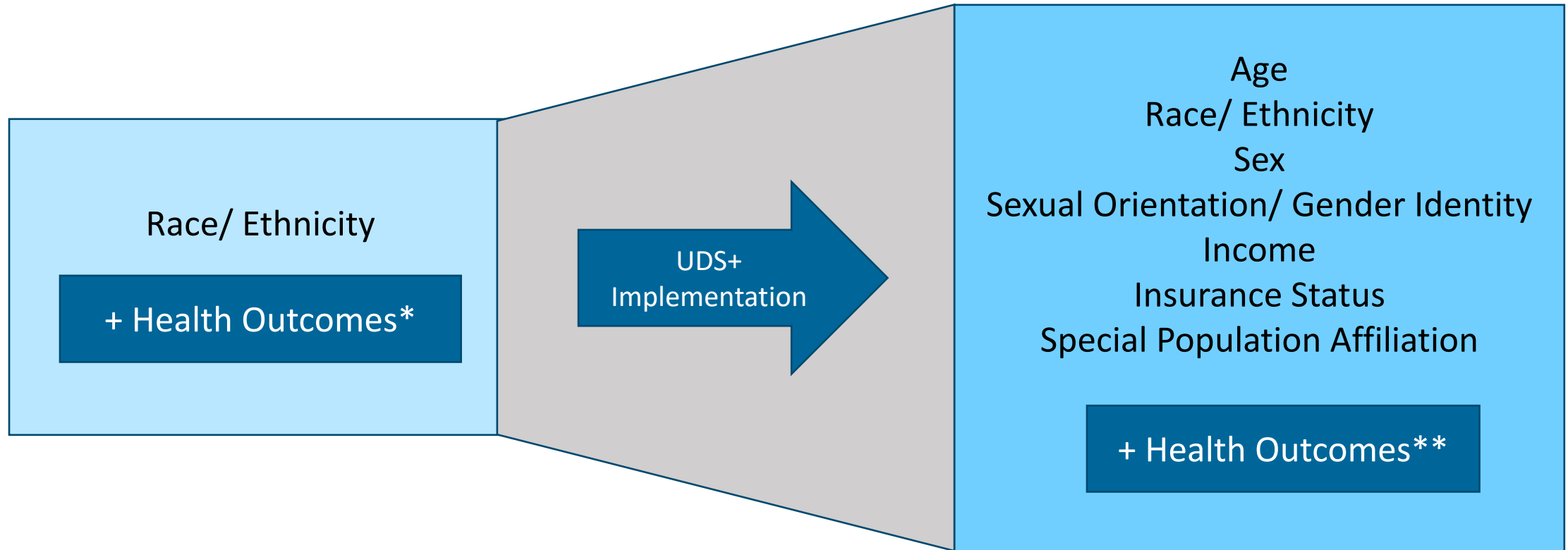
HRSA
Health Center Program

Overall Value of UDS+

- Improved preparedness for public health emergencies.
- Reduced reporting burden for health centers by harmonizing with digital quality measures reporting efforts.
- Improved ability to communicate the complexity of the patient populations health centers serve and provide evidence for aligned reimbursements for care provided.
- Better inform investments and interventions based on trends identified in patient-level data (e.g., targeted needs of specific communities/patients, social determinants of health).
- Alignment with Office of the National Coordinator for Health Information Technology's (ONC) certification requirements for health IT.
- Additional enhancements to the Promoting Interoperability Program through collaboration between U.S. Department of Health and Human Services agencies.
- Improved evaluation of program services and health outcomes.
- Improved knowledge and participation in the development and adoption of data and technology standards by public health professionals.
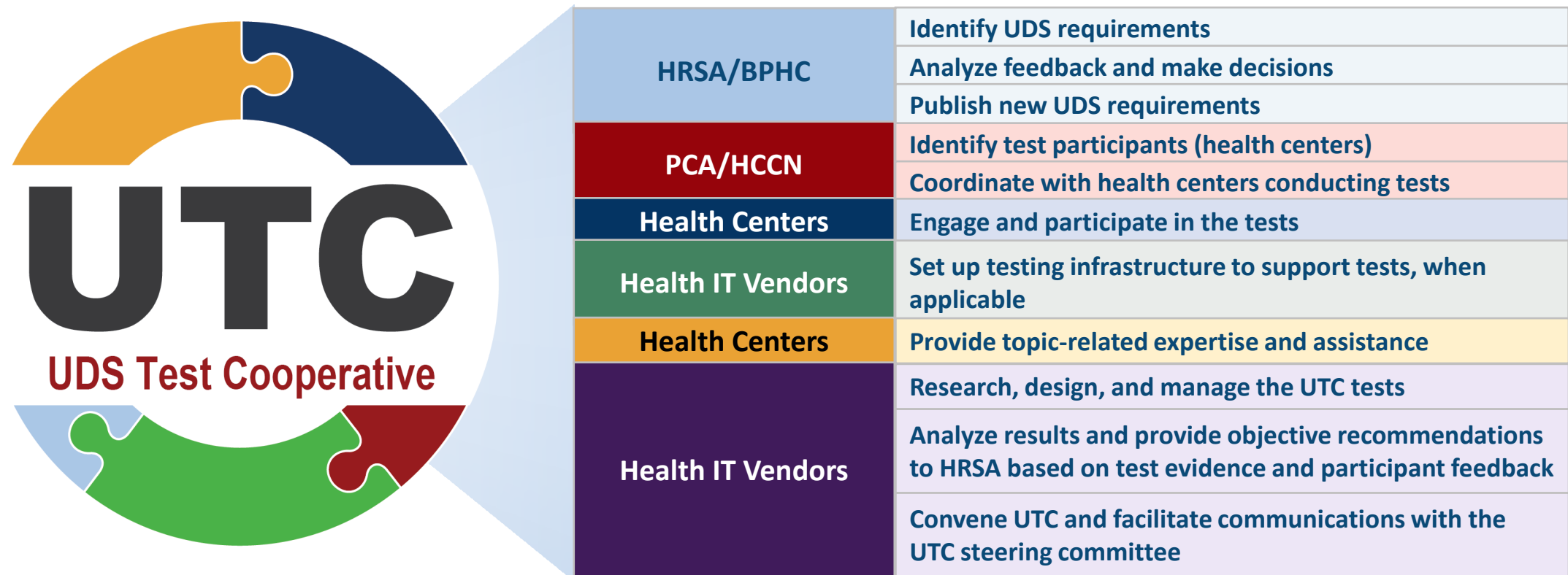
Uses for UDS Patient Level Data

Race/ Ethnicity

+ Health Outcomes*

UDS+ Implementation

Age
Race/ Ethnicity
Sex
Sexual Orientation/ Gender Identity
Income
Insurance Status
Special Population Affiliation

+ Health Outcomes**

* Current UDS measures with disaggregated data by race/ethnicity available: Controlling High Blood Pressure, Diabetes: Hemoglobin A1c Poor, Low Birth Weight Control
** UDS+ all 18 CQMS will be able to be disaggregated by these categories

UDS Test Cooperative (UTC)

A forum for representative stakeholders to provide feedback on potential UDS changes.

Stakeholder	Role
HRSA/BPHC	Identify UDS requirements
	Analyze feedback and make decisions
	Publish new UDS requirements
PCA/HCCN	Identify test participants (health centers)
	Coordinate with health centers conducting tests
Health Centers	Engage and participate in the tests
Health IT Vendors	Set up testing infrastructure to support tests, when applicable
Health Centers	Provide topic-related expertise and assistance
Health IT Vendors	Research, design, and manage the UTC tests
	Analyze results and provide objective recommendations to HRSA based on test evidence and participant feedback
	Convene UTC and facilitate communications with the UTC steering committee

To join the UTC, please communicate your interest to HRSA using the BPHC Contact Form.

UTC Member Roles

The UTC convenes almost monthly to discuss the latest UDS+ developments and address stakeholder UDS+ questions

UTC Chairs

- Collaborate with the UTC convener to develop the strategy and direction of the UTC
- Ensure the Steering Committee functions properly
- Serve as a key leader during meetings to help ensure deliberations are efficient and effective

UTC Steering Committee

- Serves as primary UTC collaborative body
- Provide strategic and tactical guidance on test planning, etc.
- PCAs/HCCNs liaisons for their members to identify participants and help ensure successful test outcomes

UTC Members

- Provides information on types of resources needed for successful outcomes
- Provides access to data systems used for testing
- Participates in conducting tests
- Receives early access to test results

UTC Steering Committee

HRSA Region	States	Organization Name	Name	Email
Region 1	CT, ME, MA, NH, RI, VT	Ohio Shared Information Services, Inc.	Heidi Gerner	heidi.gerner@osisonline.net
Region 2	NJ, NY, PR, VI	Open Door Family Medical Center	Denise Egan	degan@odfmc.org
Region 3	DE, DC, MD, PA, VA, WV	Delaware Valley Community Health, Inc.	Isiah Nathaniel	nathanieli@dvch.org
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	Coastal Family Health Center	Stacey Curry	scurry@coastalfamilyhealth.org
Region 5	IL, IN, MI, MN, OH, WI	Alliance Chicago	**Andrew Hamilton***	ahamilton@alliancechicago.org
Region 6	AR, LA, NM, OK, TX	Presbyterian Medical Services Health Center	Kent Mosbrucker	kent.mosbrucker@pmsnm.org
Region 7	IA, KS, MO, NE	Center for Health Care Quality	Sam Joseph	sjoseph@mo-pca.org
Region 8	CO, MT, ND, SD, UT, WY	Colorado Community Managed Care Network	**Jason Greer***	jason@ccmcn.com
Region 9	AZ, CA, HI, NV, AS, MP, FM, GU, MH, PW	OCHIN	Lindsey Haase	haasel@ochin.org
Region 10	AK, ID, OR, WA	Tanana Chiefs Conference	Melissa Clemente	melissa.clemente@tananachiefs.org

*Andrew Hamilton and Jason Greer act as the UTC Steering Committee Co-Chairs.

Leveraging the UTC to Test UDS Innovations

Completed 2019 | **Completed 2020** | **Testing 2023**

eCQM Alignment

Standardize reporting across federal qualified health centers by aligning eCQMs to reduce manual calculation and reporting burden

Routine Patients

Define and calculate CQM performance for routine patients to improve the accuracy and usefulness of health center CQM reporting

Countable Visits

Collect and report UDS countable visits by using electronic standards to increase data reliability and reduce variability

Table 6A

Align diagnoses and services in Table 6A with national value sets and use electronic standards to improve consistency and accuracy

UDS+ FHIR IG

Validating that FHIR servers accurately adhere to UDS FHIR specifications

HRSA
Health Center Program

UDS+ Implementation Timeline

May 23, 2022: ARP-UDS+ Funding

ARP UDS+ supplemental funding opportunity is released to support health centers and look-a-likes build capacity for patient level reporting

Q4 2022: UTC IG Technical Review

UDS+ proof of concept with UDS Test Cooperative (UTC) using synthetic data

Q3 2023: Publication

Publish Final UDS+ FHIR Implementation Guide & reporting options

February 15, 2024

Health centers submit patient-level data for CY 2023 UDS reporting

September 2022: UDS+ FHIR Implementation Guide *(in progress)*

Draft UDS+ Implementation Guide available to UTC for input

Q1-Q2 2023: Pilot Testing

Identify pilots for iterative testing using both synthetic and live health center data

HRSA
Health Center Program

Questions that HRSA and UTC are Addressing

- **De-identification**
  - What are the considerations around de-identification of data and removal of Personally Identifiable Information (PII)/Protected Health Information (PHI)?
- **Collection/extraction of data: UDS qualifying encounters**
  - How does legacy UDS data extraction of qualifying encounters occur and what are potential gaps during the UDS+ process?
- **UDS+ data validation**
  - What are the current processes for validation of data completeness, quality, and correctness, including data clean-up, mapping, and/or end results?
- **UDS+ submission and "re-submission"**
  - What are common issues with UDS legacy submission to prevent/reduce issues in UDS+ (e.g., missing grouping of patients, missing data, mapping problems, upload problems, etc.)?

UTC Eligibility for UDS+ PoC

Eligible Stakeholders:

- Health centers, Primary Care Associations (PCAs), Health Center Controlled Networks (HCCNs), National Training and Technical Assistance Partners (NTTAPs), HIT vendors, third party vendors

Technology Required:

- Bulk-FHIR enabled EHR system
- A Backend Service App (BSA)
- Trust Services mechanism
- Be able to generate or download and utilize synthetic or live data (file can be provided)
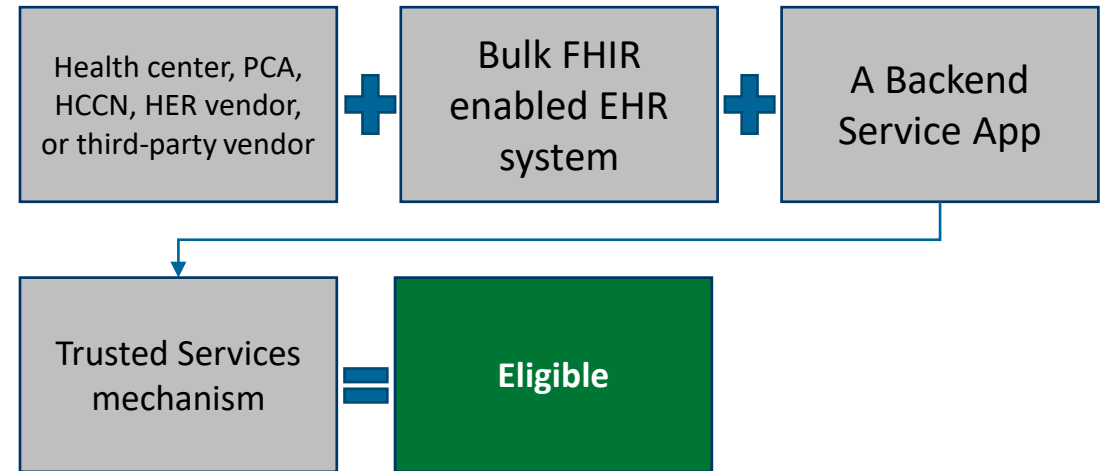
Resources

For the latest UTC and UDS+ information, please subscribe to the Primary Care Digest and visit the UDS+ technical assistance webpages:

- UTC
- UDS Modernization Initiative
- UDS Modernization FAQ
- UDS+ FHIR IG (Watch the HL7 video for information about how to read a FHIG IG)

If your team wishes to participate in a readiness assessment to discuss UDS+ submissions, please request one through the BPHC Contact Form.

Thank You!

Office of Quality Improvement (OQI)

Bureau of Primary Health Care (BPHC)

Health Resources and Services Administration (HRSA)

Send inquiries via the BPHC Contact Form *(select UDS Modernization).*

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bphc.hrsa.gov

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Connect with HRSA

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www.HRSA.gov

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USCDI and UDS+ Presentation

March 9, 2023

The Office of the National Coordinator for
Health Information Technology

Office of the National Coordinator for Health IT

Standards

Certification

Exchange

Coordination

Office of the National Coordinator for Health IT

- **Founded in 2004 by executive order, established in statute in 2009**

- **ONC is charged with formulating the federal government's health IT strategy to advance national goals for better and safer health care through an interoperable nationwide health IT infrastructure**

HITECH Act 2009

21st Century Cures Act 2016

Laying the foundation of EHRs across the industry

- $40B CMS investment to subsidize EHRs for hospitals and ambulatory providers
- ONC certification of EHR systems to support CMS and CDC programs
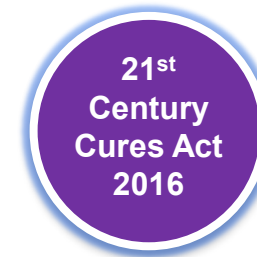
Leveraging EHRs to drive value

- Information blocking: Prohibits providers, technology developers, and health information networks from interfering with access, exchange, and use of electronic health information
- Standards: Data and API standards for access "without special effort"
- TEFCA: Nationwide governance for health information exchange networks – Trusted Exchange Framework and Common Agreement

Progression toward Nation Wide Interoperability

HITECH Act (Meaningful Use MU)

- American Recovery and Reinvestment Act (ARRA)
- Health Information Technology for Economic and Clinical Health (HITECH Act)
- 2011/2014 Edition of Certification
- Terminology Requirements
- Consolidated Clinical Document Architecture (C-CDA) Transitions of Care
- Patient Portal, Electronic Clinical Quality Measures (eCQMs), Registry, Security

Medicare Access and CHIP Reauthorization Act (MACRA)

- 2015 Edition of Certification
- Application Programming Interface (API) Requirement
- Initial Common Data Elements (CDEs): Vital Signs, Date of Birth
- Unique Device Identification (UDI) for Medical Devices, Health Concerns, Goals

21st Century Cures

- Federal Health Information Technology Strategic Plan
- **Migration of MU Common Clinical Data Set to the United States Core Data for Interoperability (USCDI)**
- Removing barriers to data sharing for clinical use
- Information Blocking regulatory authority
- Creation of Interoperability Standards Advisory
- EHR Vendors Required to Implement FHIR (by the end of 2022)
- Patient Access Expansion
- Payer Exchange Requirements

2023 and Beyond Future

- Centers for Medicare and Medicaid Services (CMS) moves to digital quality measures
- **United States Core Data for Interoperability (USCDI) version 2 & 3**
- **United States Core Data for Interoperability Plus (USCDI+)**

ONC Initiative Highlights

Initiative	Where'd it come from?	One liner
Trusted Exchange Framework and Common Agreement (TEFCA)	21st Century Cures Act	Nationwide, network-based connectivity for six exchange purposes
Information Blocking	21st Century Cures Act	Consequences for not sharing data when its required or permitted, and exceptions for when "actors" can't
Health IT Certification	HITECH and Cures Acts	Assurance that health IT meets certain conformance requirements for functionality and standards
US Core Data for Interoperability (USCDI)	ONC standards policy	"data policy" that is referenced in our regulations and other HHS programs
USCDI+	ONC standards coordination	Federal partner coordination to align and build on ("plus up") USCDI data
Health IT Advisory Committee	21st Century Cures Act	ONC's federal advisory committee
SDO collaboration	HITECH/Cures	Financial and staff engagement in the trenches working with SDOs
HHS Health IT Alignment	Secretary management policy	Directs ONC to play a role in procurement language, actions, and policies that intersect with health IT standards

ONC Certification: The Foundation of Health IT

ONC certification is now the **foundation of the US digital healthcare infrastructure**, covering 600+ health IT products used by 96% of hospitals and over 90% of clinical offices and required by numerous federal programs. Health IT systems regularly certified to keep pace with advances in medicine, technology, and policy.

ONC Health IT Certification:

- Establishes baseline technical capabilities for interoperability
- Promotes the exchange of electronic health information
- Establishes baseline privacy and security requirements
- Increases transparency in the functionality and use of certified health IT

The Use of Certified Health IT

Since ONC launched the Health IT Certification Program in 2010, almost all hospitals and approximately 3/4 of ambulatory providers now use certified EHRs.

22 Federal Programs

use ONC's Health IT Certification Program, accounting for hundreds of thousands of providers

Patient Empowerment

In the past ten years, the proportion of hospitals that let patients view their records has significantly increased.

24% (2012) → 97% (2019)

Interoperability

70% of hospitals reported integrating data into their EHR from sources outside their health system (as of 2019).

New HHS Policy on Alignment of Health IT Activities

Interoperability

E Pluribus Unum

Micky Tripathi and Steven Posnack | AUGUST 5, 2022

As our nation transitions to a digital healthcare system, our stakeholders are discovering new opportunities for using health information technology to advance health care delivery, public health, and research to improve people's lives. The federal government is no exception in this regard; agencies across the Department of Health and Human Services (HHS) are beginning to leverage the data and capabilities available through electronic health records for a broad range of federal activities and programs, including product safety and surveillance, real world data and real world evidence for regulatory approvals, research, pandemic response, and social service integration, to name just a few.

While this is an exciting development for HHS overall, it does call for more proactive alignment and coordination of health IT activities across the department to ensure that we are operating as efficiently and cohesively as possible. To that end, Secretary Becerra has put into place a department-wide management policy directing ONC to engage with HHS agencies to align and coordinate health IT-related activities in support of HHS health IT and interoperability goals. Specifically, the secretary has directed ONC to establish and oversee a consistent HHS-wide approach for: 1) incorporating standard health IT requirements language in all applicable HHS funding programs, contracts, and policies; and 2) providing direct ONC assistance to HHS agencies to maximize the use of HHS-approved standards and authorities (such as Section 3004 of the Public Health Service Act) in their agency programs.

While it won't happen overnight, what we expect to see over time is greater consistency in health IT-based activities across HHS, which should result in lower cost and higher effectiveness agency programs, more sharing of data and health IT infrastructure across programs and agencies, and lower burden on health care providers, technology developers, and other stakeholders who engage with multiple HHS agencies. Maximizing federal use of open-industry, non-proprietary, scalable standards and approaches – such as the US Core Data for Interoperability (USCDI) and FHIR APIs as called for by the 21st Century Cures Act – will multiply the impact of the department's regulations and purchasing power to reinforce HHS health IT and interoperability goals. It will also directly support key Biden-Harris Administration priorities in health equity, federal customer experience and service delivery, and promoting competition. ONC already works collaboratively with our federal agency partners, and we are excited to be able to better support our sister HHS agencies and ensure that HHS is more than the sum of its parts.

- **HHS Health IT Alignment Policy established in July 2022**

- **Secretary directs ONC to establish and oversee a consistent HHS-wide approach for:**

  1. incorporating <u>standard health IT requirements</u> language in all applicable HHS funding programs, contracts, and policies; and

  2. providing direct ONC assistance to HHS agencies to <u>maximize the use of HHS-approved standards and authorities</u>

United States Core Data for Interoperability (USCDI)
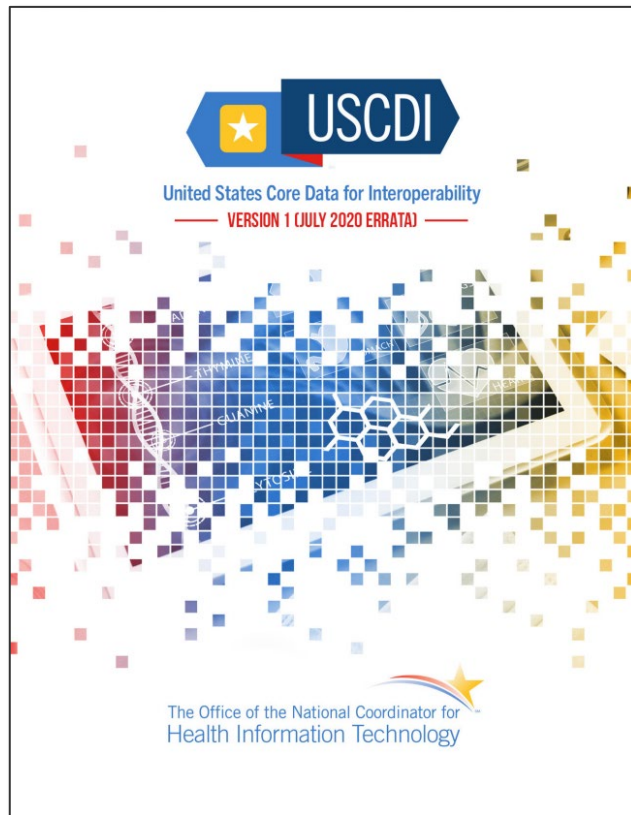
USCDI v1 Summary of Data Classes and Data Elements

Allergies and Intolerances
- Substance (Medication)
- Substance (Drug Class)
- Reaction

Assessment and Plan of Treatment
- Assessment and Plan of Treatment

Care Team Members
- Care Team Members

Clinical Notes
- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- Progress Note

Goals
- Patient Goals

Health Concerns
- Health Concerns

Immunizations
- Immunizations

Laboratory
- Tests
- Values/Results

Medications
- Medications

Patient Demographics
- First Name
- Last Name
- Previous Name
- Middle Name (incl Middle Initial)
- Suffix
- Birth Sex
- Date of Birth
- Race
- Ethnicity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address

Problems
- Problems

Procedures
- Procedures

Provenance
- Author Time Stamp
- Author Organization

Smoking Status
- Smoking Status

Unique Device Identifier(s) for a Patient's Implantable Device(s)
- Unique Device Identifier(s) for a Patient's Implantable Device(s)

Vital Signs
- Diastolic Blood Pressure
- Systolic Blood Pressure
- Body Height
- Body Weight
- Heart Rate
- Respiratory Rate
- Body Temperature
- Pulse Oximetry
- Inhaled Oxygen Concentration
- BMI Percentile (2 - 20 Years)
- Weight-for-length Percentile (Birth - 36 Months)
- Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

- **ONC standard for minimum dataset required for interoperability**
  - Defines required data elements and vocabulary standards
  - Agnostic to format

- **Updated on annual cycle with federal agency and industry input**
  - Updates based on multiple criteria including standards maturity and public/industry priority

- www.healthit.gov/uscdi

USCDI Version 3 (July 2022)

Allergies and Intolerances
- Substance (Medication)
- Substance (Drug Class)
- Reaction

Assessment and Plan of Treatment
- Assessment and Plan of Treatment
- SDOH Assessment

Care Team Member(s)
- Care Team Member Name
- Care Team Member Identifier
- Care Team Member Role
- Care Team Member Location
- Care Team Member Telecom

Clinical Notes
- Consultation Note
- Discharge Summary Note
- History & Physical
- Procedure Note
- Progress Note

Clinical Tests
- Clinical Test
- Clinical Test Result/Report

Diagnostic Imaging
- Diagnostic Imaging Test
- Diagnostic Imaging Report

Encounter Information
- Encounter Type
- Encounter Diagnosis
- Encounter Time
- Encounter Location
- Encounter Disposition

Goals
- Patient Goals
- SDOH Goals

Health Insurance Information ⭐
- Coverage Status ⭐
- Coverage Type ⭐
- Relationship to Subscriber ⭐
- Member Identifier ⭐
- Subscriber Identifier ⭐
- Group Number ⭐
- Payer Identifier ⭐

Health Status/Assessments
- Health Concerns ➡
- Functional Status ⭐
- Disability Status ⭐
- Mental / Cognitive Status ⭐
- Pregnancy Status ⭐
- Smoking Status ➡

Immunizations
- Immunizations

Laboratory
- Test
- Values/Results
- Specimen Type ⭐
- Result Status ⭐

Medications
- Medications
- Dose ⭐
- Dose Unit of Measure ⭐
- Indication ⭐
- Fill Status ⭐

Problems
- Problems
- SDOH Problems/Health Concerns
- Date of Diagnosis
- Date of Resolution

Patient Demographics/Information
- First Name
- Last Name
- Middle Name (Including middle initial)
- Suffix
- Previous Name
- Date of Birth
- Date of Death ⭐
- Race
- Ethnicity
- Tribal Affiliation ⭐
- Sex
- Sexual Orientation
- Gender Identity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address
- Related Person's Name ⭐
- Related Person's Relationship ⭐
- Occupation ⭐
- Occupation Industry ⭐

Procedures
- Procedures
- SDOH Interventions
- Reason for Referral ⭐

Provenance
- Author Organization
- Author Time Stamp

Unique Device Identifier(s) for a Patient's Implantable Device(s)
- Unique Device Identifier(s) for a patient's implantable device(s)

Vital Signs
- Systolic blood pressure
- Diastolic blood pressure
- Heart Rate
- Respiratory rate
- Body temperature
- Body height
- Body weight
- Pulse oximetry
- Inhaled oxygen concentration
- BMI Percentile (2 - 20 years)
- Weight-for-length Percentile (Birth - 24 Months)
- Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

⭐ New Data Classes and Elements ➡ Data Element Reclassified

FHIR API Requirements

- **Open "application programming interfaces" (APIs) and apps are what make it easy to check your bank account or buy stocks or order meal delivery on your smartphone**
    - We want providers and patients to have that same experience the health care system

- **21st Century Cures Act requires availability of APIs that can be accessed "without special effort"**
    - ONC rule takes steps to prevent business and technical barriers to information-sharing

- **As of January 2023, all certified technology developers are required to deploy a standard FHIR API (individual and bulk) across their entire customer base**
    - Will create a climate for innovation as apps can now be developed that will work across all EHR systems

What is FHIR? Why is it different? Why is it exciting?

If C-CDA is a deluxe pizza…………………………

FHIR is a specific slice
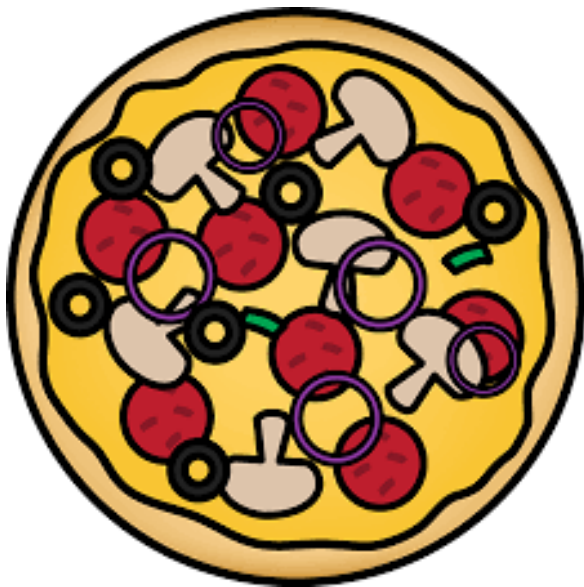
You can't ask for just a slice of pepperoni
It's a snapshot of a whole set of data

I only want a slice of pepperoni
More precise data access, less unneeded data exchanged
Allows for greater specialization of apps/services

USCDI+: Extending Beyond the USCDI

- Unique agency or program-specific data systems and requirements sometimes not fully met by USCDI

- ONC USCDI+ initiative helps federal partners build on USCDI to support specific program needs

- Allows ONC to better serve federal partners, data owners, users and providers

- Assures that extensions build from the same foundation, and creates the opportunity for aligning similar data needs across agency programs

CDC Public Health

CMS Quality Measurement

HRSA FQHC Reporting

NCI Cancer Data

Coming soon!
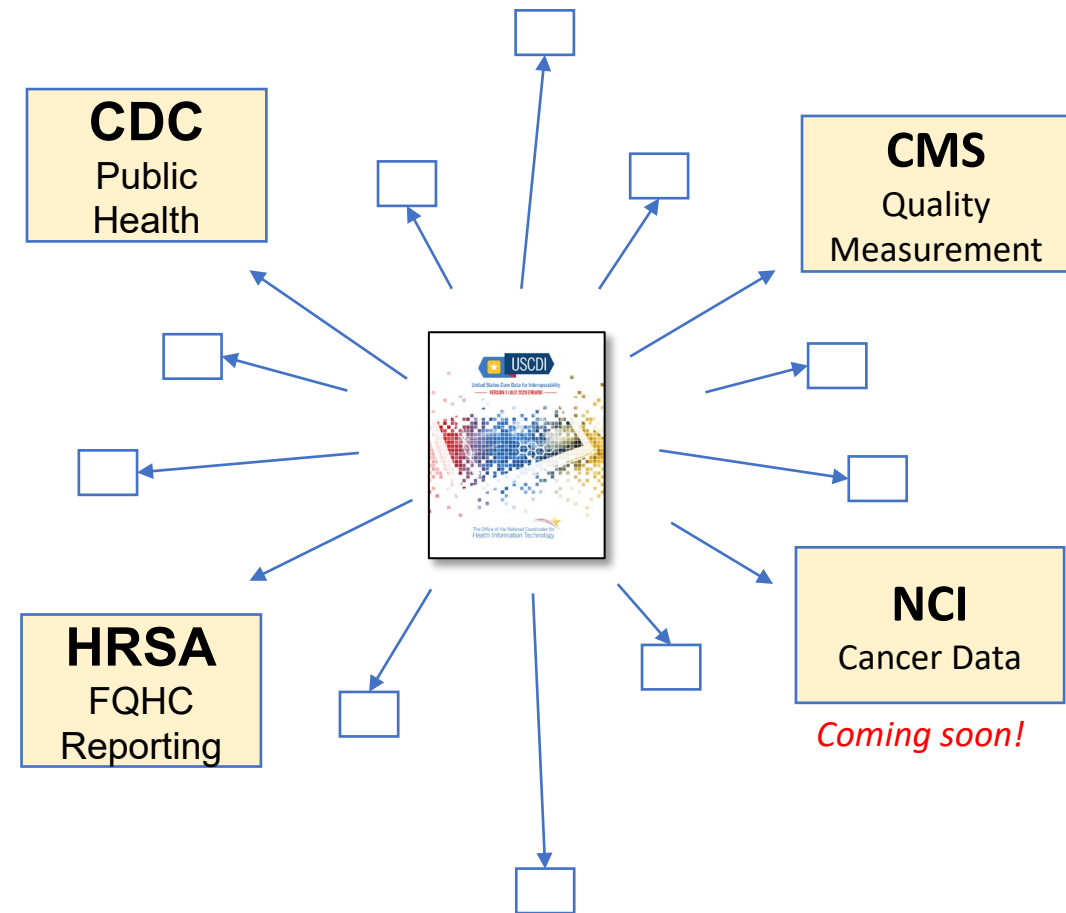
Draft UDS+ Implementation Guide (IG)

- Based on the UTC, Health Center, HCCN, and HIT Vendor feedback the Draft UDS+ Implementation guide has been updated to version 0.2.0

- HRSA and the ONC teams are working towards release version 0.3.0 of the IG.

Where are we with UDS+? And Where are we going?
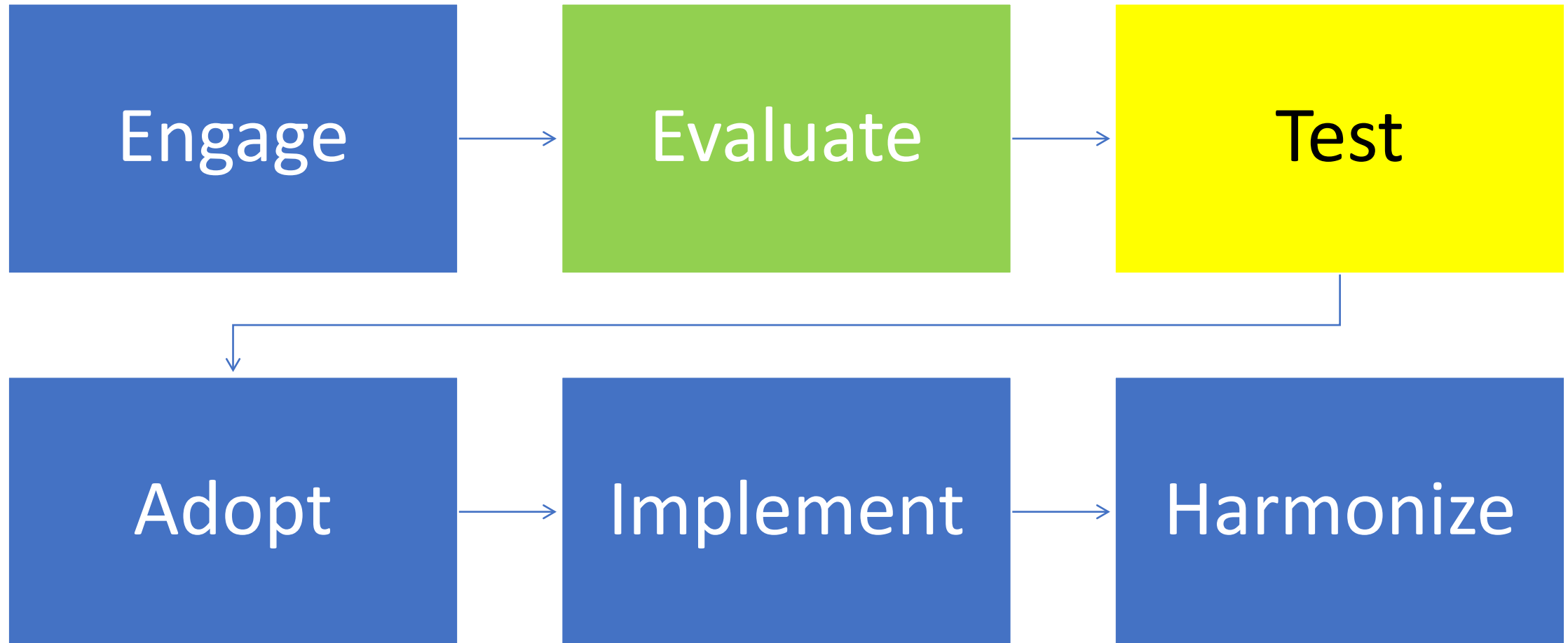
Engage → Evaluate → Test

Adopt → Implement → Harmonize

Matthew Rahn

Deputy Director, Standards Division, OTECH, ONC

Matthew.Rahn@hhs.gov

HealthIT.gov

UDS Modernization Initiative

Reduce Reporting Burden

Automate data submission, provide enhanced UDS reporting capabilities, promote transparency and integrate stakeholder feedback.

Better Measure Impact

Improve the quality of UDS data to reflect improvements in patient-centered care and an evolving primary health care setting.

Promote Transparency

Provide an open transparent decision-making process on UDS changes such as measure selection, information technology, and reporting improvements.

Health Center Level
demographics, services utilized, diagnostics

Patient Level Data
demographics, services utilized, diagnostics

Uniform Data System Modernization Initiative

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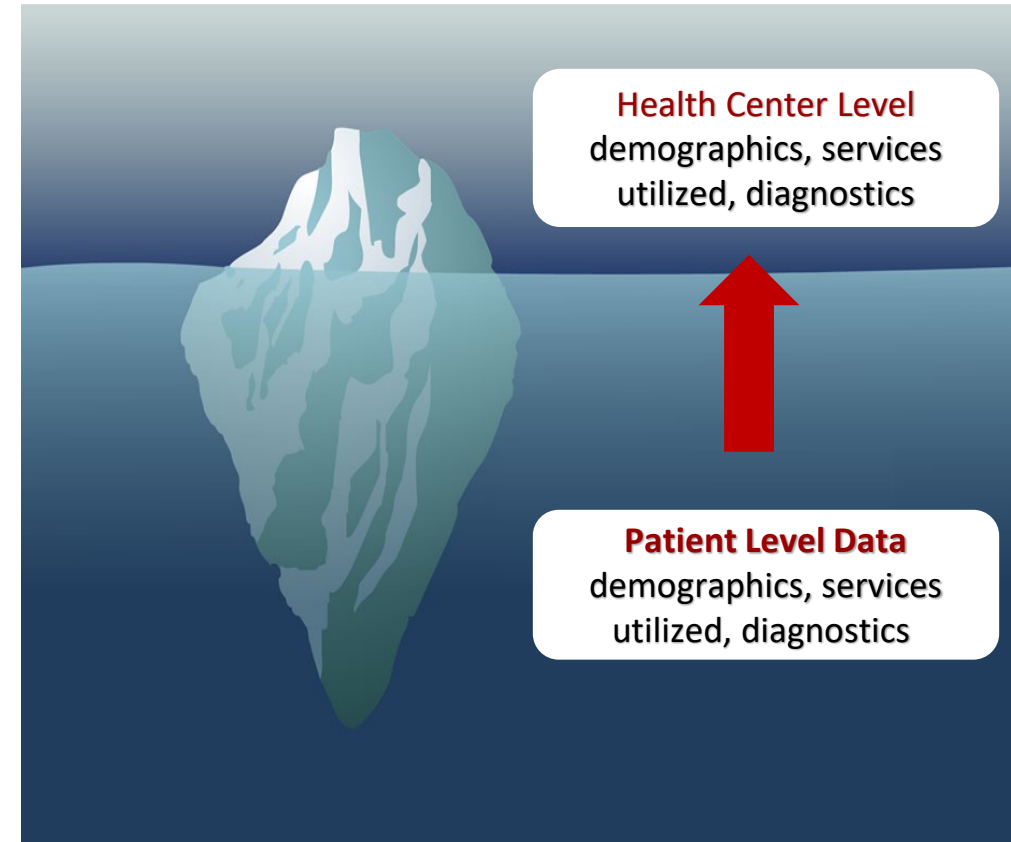
UDS+ Provides Data on Trends and Health Outcomes
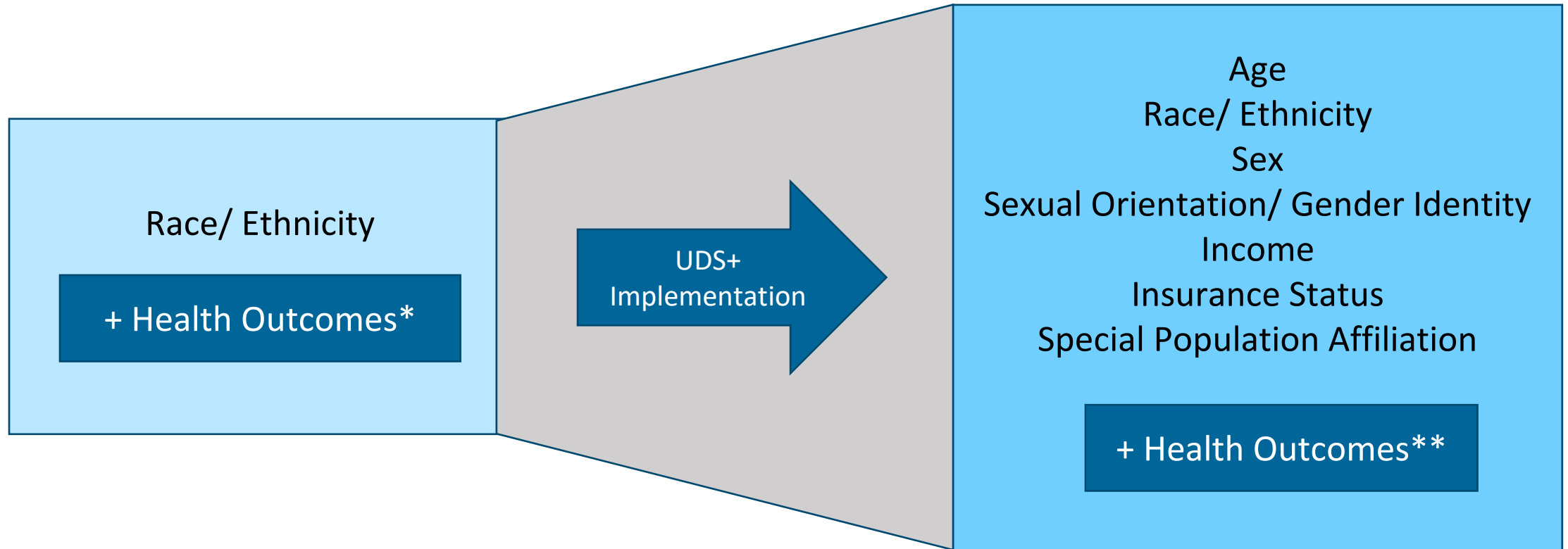
Race/ Ethnicity

+ Health Outcomes*

UDS+ Implementation →

Age
Race/ Ethnicity
Sex
Sexual Orientation/ Gender Identity
Income
Insurance Status
Special Population Affiliation

+ Health Outcomes**

* Current UDS measures with disaggregated data by race/ethnicity available: Controlling High Blood Pressure, Diabetes: Hemoglobin A1c Poor, Low Birth Weight Control
** UDS+ all 18 CQMS will be able to be disaggregated by these categories

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Overall Value of UDS+

- More prepared for the next public health emergency.
- Reduce reporting burden for health centers by harmonizing with digital quality measure reporting efforts.
- Identify potential creation of new funding opportunities based on data (e.g., target needs of specific communities/patients, e.g., housing insecure).
- Aligning with ONC's certification requirements for health IT.
- Collaboration between CMS, ONC, and the CDC may lead to additional updates/advances to the Promoting Interoperability Program.
- Identify data quality and warehousing needs.
- Better measure program services and health outcomes (e.g., immunization rates <2).
- Ensure public health professionals have greater awareness of, and a seat at the table, when data/ tech standards are being developed/ adopted nationwide.

UDS Test Cooperative (UTC)

A forum for representative stakeholders to provide feedback on potential UDS changes.

HRSA/BPHC	**Identify UDS requirements**
	Analyze feedback and make decisions
	Publish new UDS requirements
PCA/HCCN	**Identify test participants (health centers)**
	Coordinate with health centers conducting tests
Health Centers	**Engage and participate in the tests**
Health IT Vendors	**Set up testing infrastructure to support tests, when applicable**
NTTAPs	**Provide topic-related expertise and assistance**
UTC Coordinator	**Research, design, and manage the UTC tests**
	Analyze results and provide objective recommendations to HRSA based on test evidence and participant feedback
	Convene UTC and facilitate communications with the UTC steering committee

To join the UTC, please communicate your interest to HRSA using the BPHC Contact Form.

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UTC Steering Committee

HRSA Region	States	Organization Name	Name	Email
Region 1	CT, ME, MA, NH, RI, VT	Ohio Shared Information Services, Inc.	Heidi Gerner	heidi.gerner@osisonline.net
Region 2	NJ, NY, PR, VI	Open Door Family Medical Center	Denise Egan	degan@odfmc.org
Region 3	DE, DC, MD, PA, VA, WV	Delaware Valley Community Health, Inc.	Isiah Nathaniel	nathanieli@dvch.org
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	Coastal Family Health Center	Stacey Curry	scurry@coastalfamilyhealth.org
Region 5	IL, IN, MI, MN, OH, WI	Alliance Chicago	Andrew Hamilton	ahamilton@alliancechicago.org
Region 6	AR, LA, NM, OK, TX	Presbyterian Medical Services Health Center	Kent Mosbrucker	kent.mosbrucker@pmsnm.org
Region 7	IA, KS, MO, NE	Center for Health Care Quality	Sam Joseph	sjoseph@mo-pca.org
Region 8	CO, MT, ND, SD, UT, WY	Colorado Community Managed Care Network	Jason Greer	jason@ccmcn.com
Region 9	AZ, CA, HI, NV, AS, MP, FM, GU, MH, PW	OCHIN	Lindsey Haase	haasel@ochin.org
Region 10	AK, ID, OR, WA	Tanana Chiefs Conference	Melissa Clemente	melissa.clemente@tananachiefs.org

UDS+ Salesforce Community

Andrew Hamilton, RN, BSN, MS

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What is FHIR?

- **F**ast **H**ealthcare **I**nteroperability **R**esource (FHIR)

- The "IT Standard" supports the exchange of data between Healthcare IT Systems

- The standard is "modular" therefore it can support many types of data exchanges

- "Certified" EHR Systems are required to use/support FHIR

- Learn more about FHIR here: FHIR Fact Sheets | HealthIT.gov

Why is FHIR an Improvement?

- Strong focus on easy to implement data sharing

- Multiple Implementation Library's and many "starter kits" have been developed

- Utilizes existing web services and standards (in and outside of healthcare)

- Supports a "human-readable" format for ease of use by developers

- Is flexible and adaptable

FHIR Resources

- All sharable content is defined as a "FHIR Resource"

- Each Resources contains:

  - Common way to define and represent the data types in the exchange

  - Common set of metadata

  - Human readable information about the resources and data

- A collection of Resources sent (or received) related to a specific event (trigger) is a "FHIR Message"

FHIR Implementation Guide (FHIR IG)

- The instruction manual or details for technology developers to implement the FHIR data exchange

- The Implementation Guide includes technical details about the FHIR Resources and Messages involved in the exchange as well as a description of how the data will flow in the exchange

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SMART on FHIR

- Provides a way for "apps" to connect to HIT systems that use FHIR

- The "app" contains a set of permissions for data sharing between systems

- Examples of SMART on FHIR apps include:

Bulk FHIR

- Is the use of FHIR to exchange large data sets (usually for analytic purposes)

- The 21st Century Cures Act requires EHR vendors to support the export of USCDI v1 & the US FHIR Core Implementation Guide

Cures Act Final Rule: Standards-based Application Programming Interface (API) Certification Criterion (healthit.gov)

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UDS + & FHIR

UDS +

- Uses "Bulk FHIR" to send disaggregated data from the HRSA Grantees' HIT System to HRSA for UDS Reporting

- A draft of the Bulk FHIR Implementation Guide has been shared with individuals that are participating in the UDS Test Cooperative (UTC) meetings

- UDS + testing will begin soon

- Based on the results of the testing, an updated UDS + FHIR IG will be created and shared

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UDS + technical information

- UDS + leverages

  - US FHIR Core Implementation Guide (with noted extensions of data elements needed for HRSA Reporting)

  - US FHIR QI Core Implementation Guide (with data extensions)

- The UDS + Implementation Guide describes the data extensions in detail included how data is deidentified

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UDS + Basic Data Workflow
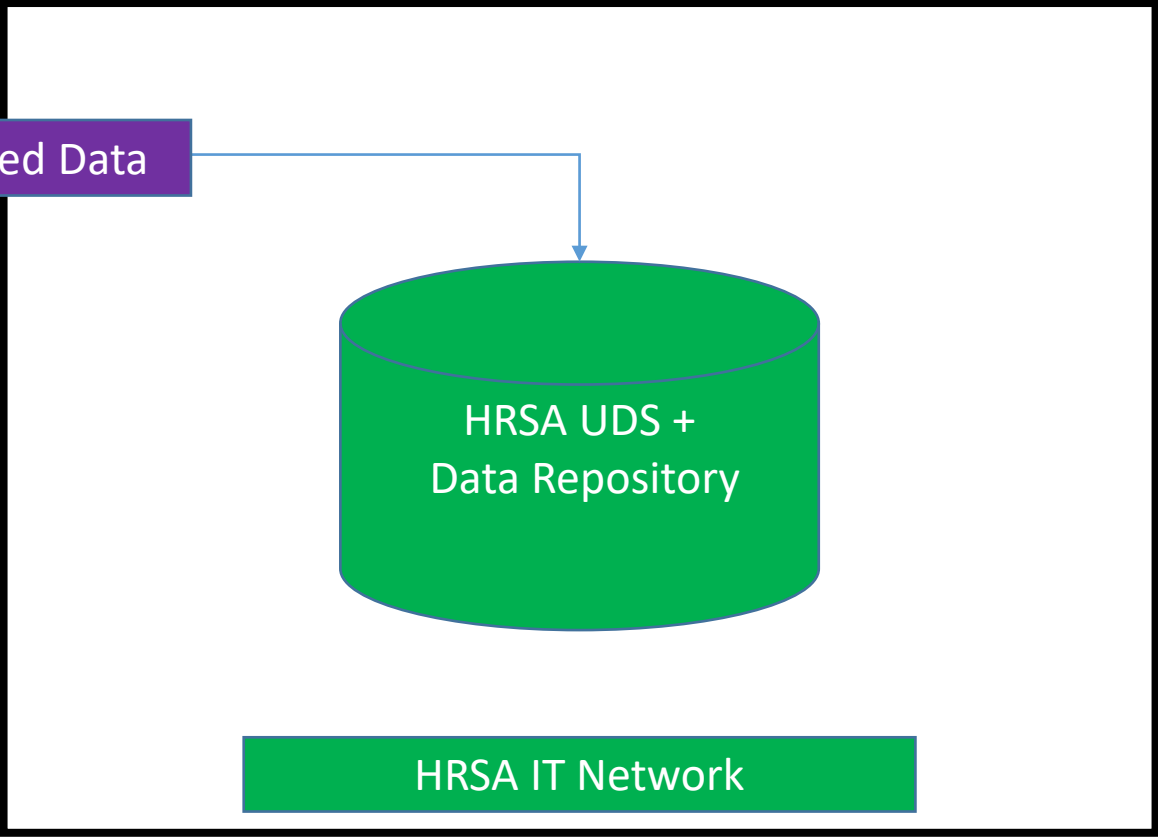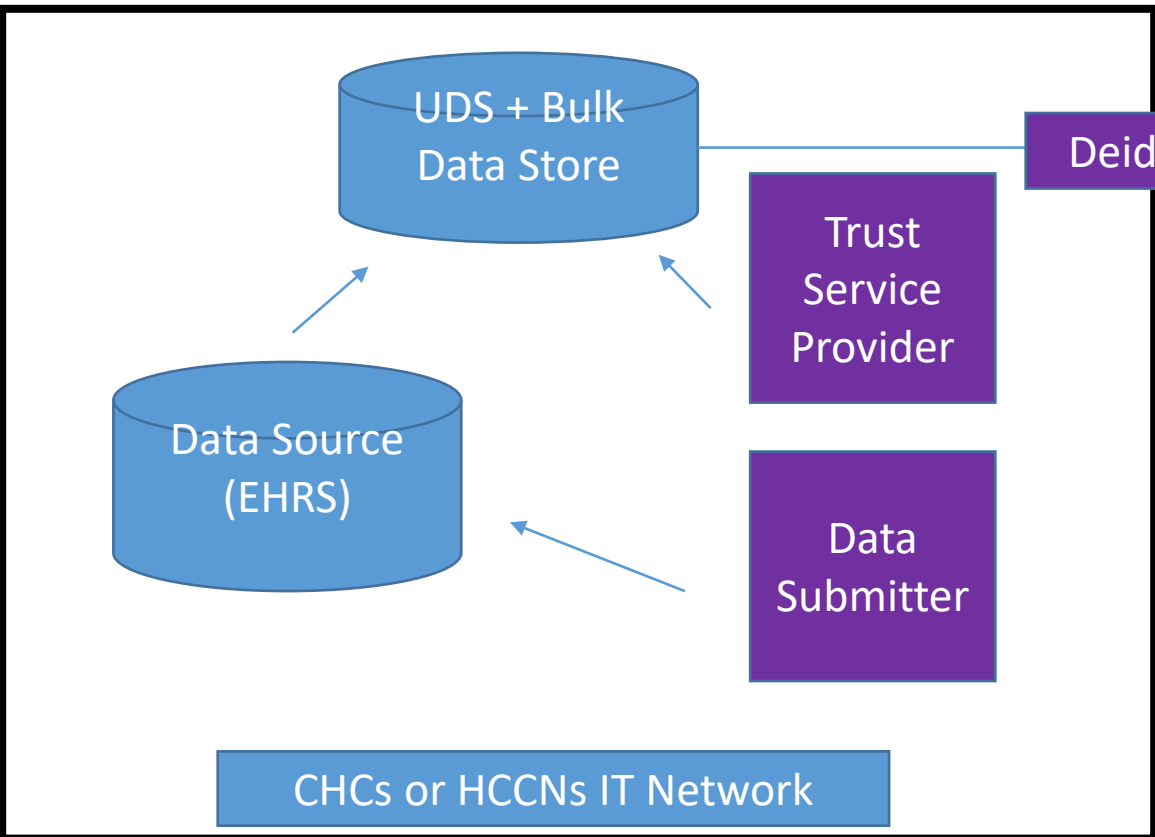
UDS + & Trust Service Provider

- Trust Service Provider

  - Responsible to deliver services including pseudonymization, anonymization, de-identification and re-identification

- The Trust Service Provider will operate "behind the firewall" and part of the CHCs/HCCNs HIT Network

- The Trust Service Provider will perform the function of de-identification as specified in the UDS + FHIR IG

- A link between the identifiable data and the de-identified data will be stored by the Trust Service Provider (on the CHCs/HCCNs Network)

How to get started

Next Steps

- If you are not part of the UTC, you can join by contacting BPHC using the BPHC Contact Form.

- After you join the UTC, request a link to access the most up to date version of the UDS + Implementation Guide

- Determine if you have someone on your team that has the skills and knowledge to review the UDS + FHIR Implementation Guide

- Work with your HCCN or PCA to learn more about UDS +

- Contact your region's UTC Steering Committee Representative

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Tips to get started

- Determine what path you plan to take to report UDS + (directly, with your HCCN/PCA) and which HIT System you will use to submit the data

- What staff resources are available to dedicate to this effort?

- What is version of your current HIT System?

- Is your HIT System Certified by ONC? Are you using the most current version?

- What FHIR resources has your EHR vendor made avilable?

- Has any customer of the EHR vendor deployed any FHIR apps/resources?

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HCCN Strengths

- **Capacity**
  - More time and resources available to dedicate towards development both within and outside scope of HCCN grant
  - Can spend time in "pilot" phase to understand issues and troubleshooting before expanding to CHCs

- **Scalability**
  - Ability to help more CHCs and make changes network-wide
  - Consistent development model across all CHCs with less effort

- **Technical Expertise and Assistance**
  - Primary focus is support for HCCN sites
  - Secondary focus is communicating issues and lessons learned for other sites and vendors looking to implement FHIR API + other technical solutions

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