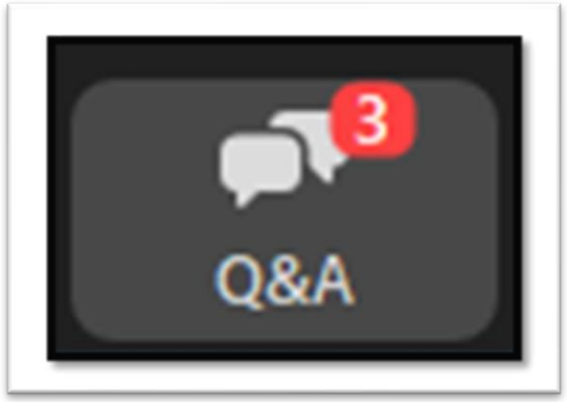
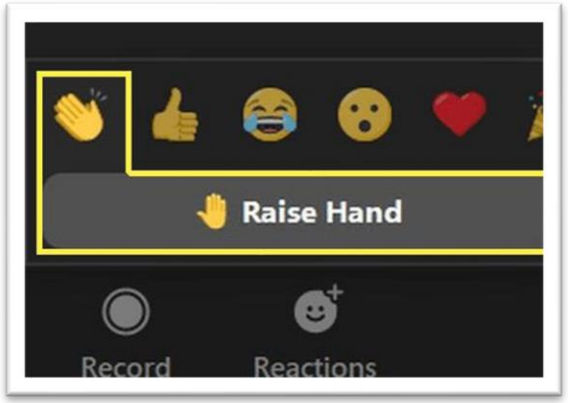
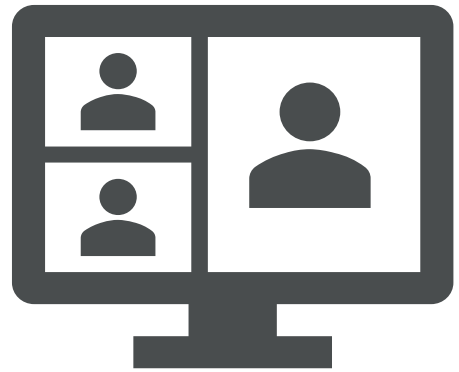
State Spotlight: NC Medicaid's Journey in Leveraging NC HealthConnex for Quality and Population Health

January 30, 2025

Housekeeping







Ask Now

Enter your questions in the Q&A function in Zoom

Join In

To ask questions verbally, click on Zoom's "Raise Your Hand," and our team will unmute you.

Engage After

A recording of the event and slides/supporting materials will be sent to attendees.

Agenda

OVERVIEW OF NC MEDICAID

LEVERAGING NC HEALTHCONNEX

THE ROAD TO DIGITAL QUALITY MEASUREMENT

NCQA

Introduction

Larry Mull, MBA
Deputy Director – Program Evaluation,
NC Medicaid

Madison Shaffer, MPH
Quality Measurement Lead,
NC Medicaid

Sam Thompson, MSW
Executive Director,
North Carolina Health Information Exchange
Authority (NC HIEA)

Jessica Kuhn, MPH
Medicaid Quality and Population Health
Systems Analyst,
North Carolina Health Information
Exchange Authority (NC HIEA)

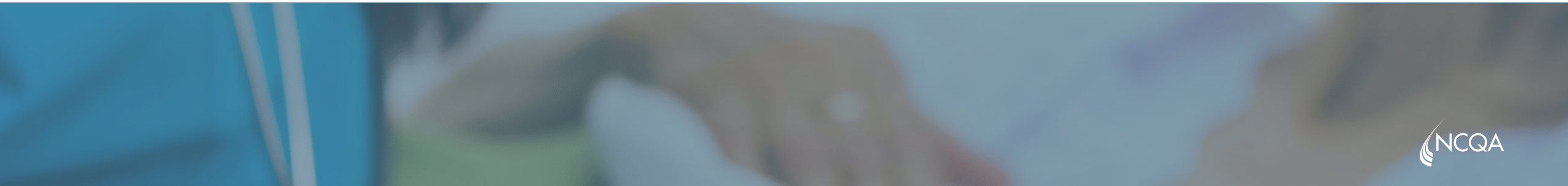
NCQA

Polling Question #1

What entity or organization are you primarily associated with?

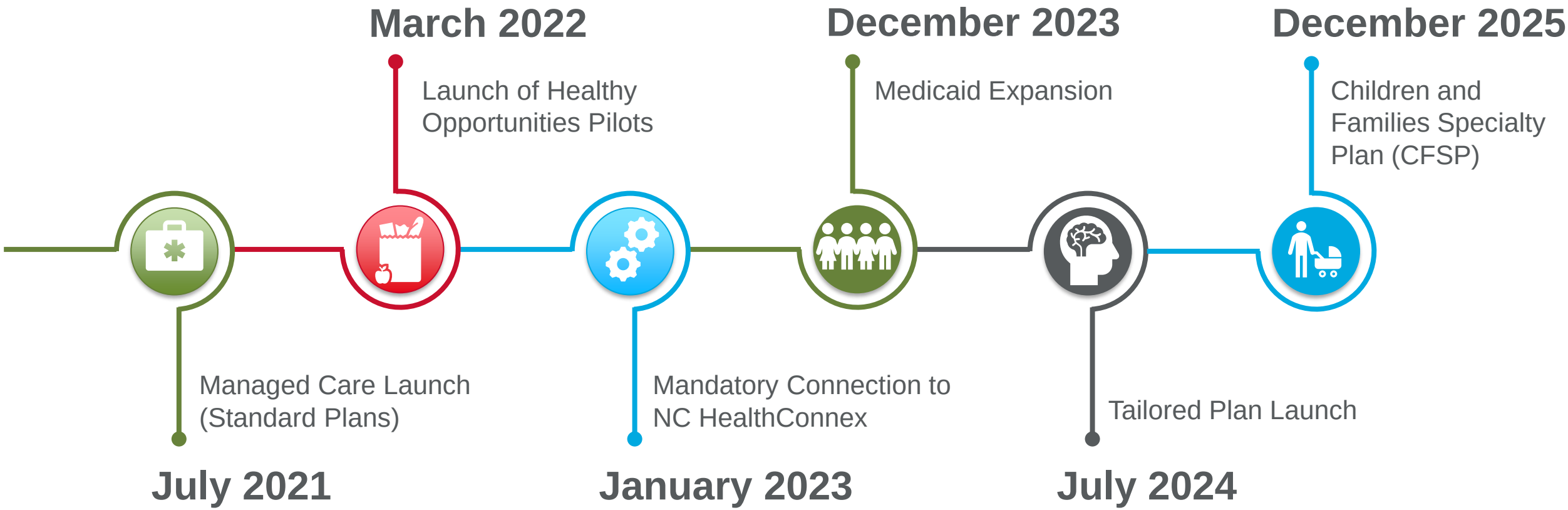
A. State Medicaid Agency
B. Other State Agency
C. Federal Organization
D. Health Plan
E. Healthcare Provider
F. Health Information Exchange (HIE)/Health Information Organization (HIO)/Data Aggregator
G. Other

Overview of NC Medicaid



Background

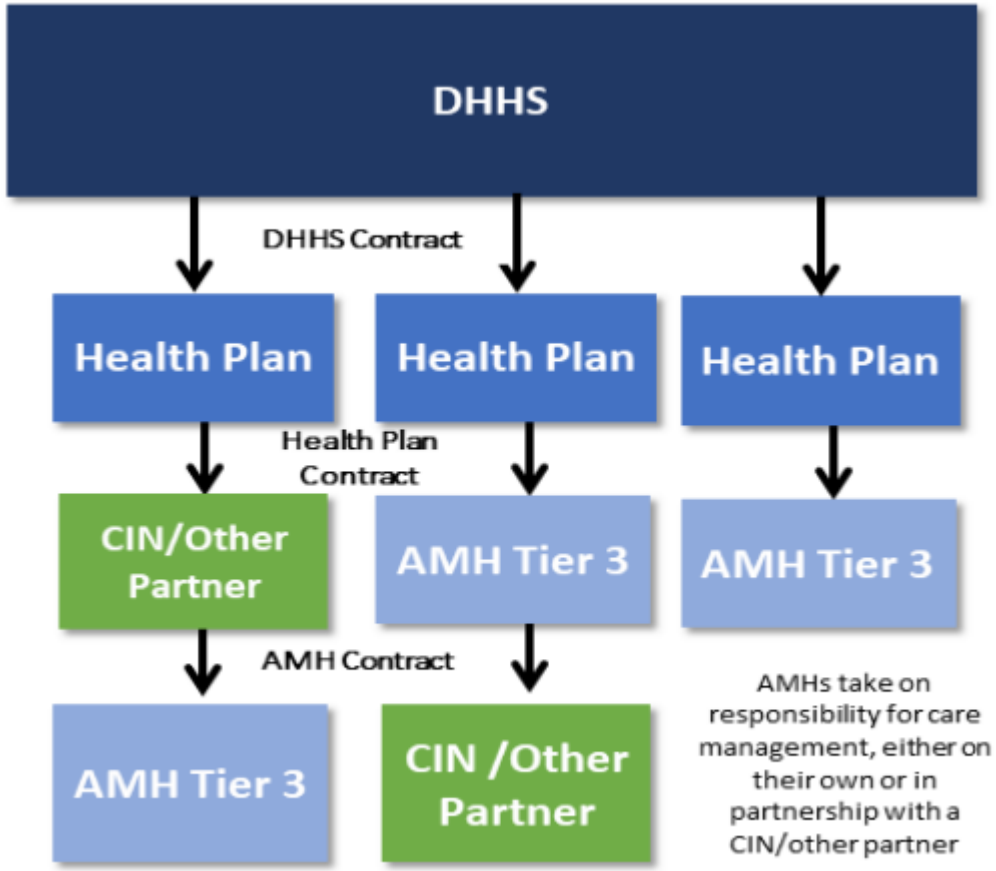
- NC Medicaid provides health care to over **3 million** eligible low-income adults, children, pregnant people, seniors, and people with disabilities.



NC Medicaid's Transition to Managed Care

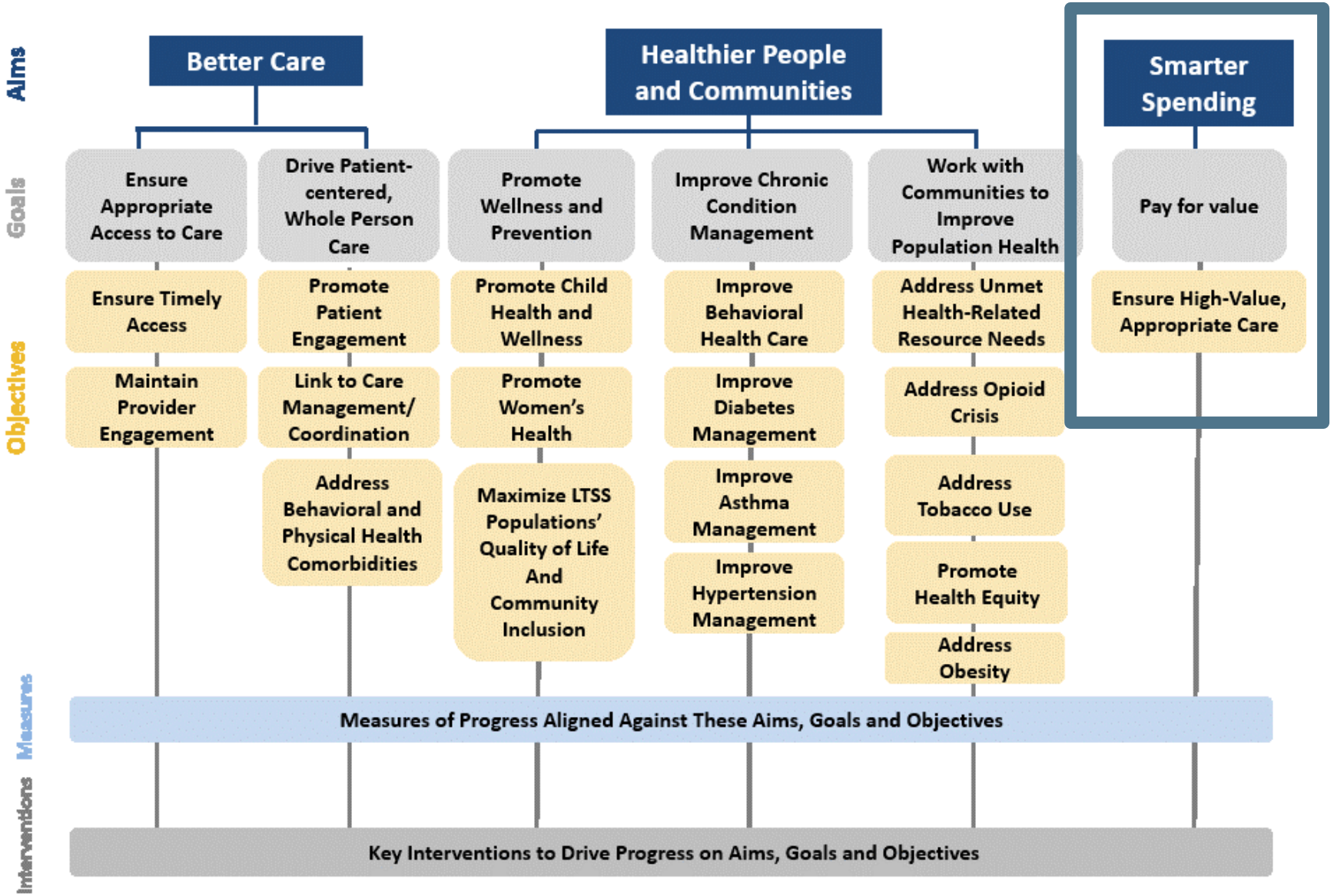
- In 2021, NC Medicaid transitioned to a managed care structure for the majority of its beneficiaries.
- Health plans are accountable for improvements in key quality indicators identified by NC Medicaid.
- The Advanced Medical Home (AMH) program serves as the primary vehicle for delivering care management under this new structure.
  - Many of these AMHs are independent clinician practices.

Figure 1. AMH Tier 3 Care Management Arrangement



Advanced Medical Home Provider Manual. May 16, 2024. https://medicaid.ncdhhs.gov/documents/providers/advanced-medical-home-provider-manual/open

NC Medicaid's Quality Strategy



North Carolina's Medicaid Managed Care Quality Strategy. April 11, 2023. https://medicaid.ncdhhs.gov/nc-medicaid-2023-quality-strategy/download?attachment

NCQA

Paying for Value

Table 1. Measures Selected for Use in Plan Assessments of AMH Practice Quality

Measure Name	Steward
Cervical Cancer Screening (CCS/CCS-E)	NCQA
Child and Adolescent Well-Care Visits (WCV)	NCQA
Childhood Immunization Status (Combination 10) (CIS/CIS-E)	NCQA
Chlamydia Screening in Women (CHL)	NCQA
Colorectal Cancer Screening (COL-E)	NCQA
Controlling High Blood Pressure (CBP)	NCQA
Glycemic Status Assessment for Patients with Diabetes (GSD)	NCQA
Immunizations for Adolescents (Combination 2) (IMA/IMA-E)	NCQA
Plan All-Cause Readmissions (PCR) [Observed versus Expected Ratio]	NCQA
Prenatal and Postpartum Care (PPC)	NCQA
Screening for Depression and Follow-Up Plan	CMS
Total Cost of Care (TCOC)	Health Partners
Well-Child Visits in the First 30 Months of Life (W30)	NCQA

- Health plans can negotiate performance incentive payments with Advanced Medical Homes (AMHs) based on a set of relevant measures (see Table 1).
- Plans are not required to use *all* the AMH measures, but any quality measures they choose must be from this set.

North Carolina's Medicaid Quality Measurement Technical Specifications Manual. January 2025. https://medicaid.ncdhhs.gov/medicaid-managed-care-quality-measurement-technical-specifications-manual/download?attachment

NC Medicaid's Data Landscape

Table 1. Measures Selected for Use in Plan Assessments of AMH Practice Quality

Measure Name	Steward
Cervical Cancer Screening (CCS/CCS-E)	NCQA
Child and Adolescent Well-Care Visits (WCV)	NCQA
Childhood Immunization Status (Combination 10) (CIS/CIS-E)	NCQA
Chlamydia Screening in Women (CHL)	NCQA
Colorectal Cancer Screening (COL-E)	NCQA
Controlling High Blood Pressure (CBP)	NCQA
Glycemic Status Assessment for Patients with Diabetes (GSD)	NCQA
Immunizations for Adolescents (Combination 2) (IMA/IMA-E)	NCQA
Plan All-Cause Readmissions (PCR) [Observed versus Expected Ratio]	NCQA
Prenatal and Postpartum Care (PPC)	NCQA
Screening for Depression and Follow-Up Plan	CMS
Total Cost of Care (TCOC)	Health Partners
Well-Child Visits in the First 30 Months of Life (W30)	NCQA

- NC Medicaid quality measure results are primarily derived from claims data submitted by providers and health plans.
  - These administrative data are complete and accurate but designed to describe services rendered, not the health of the patient.
- NC Medicaid needs clinical data to complete the picture, particularly for key health outcome metrics.

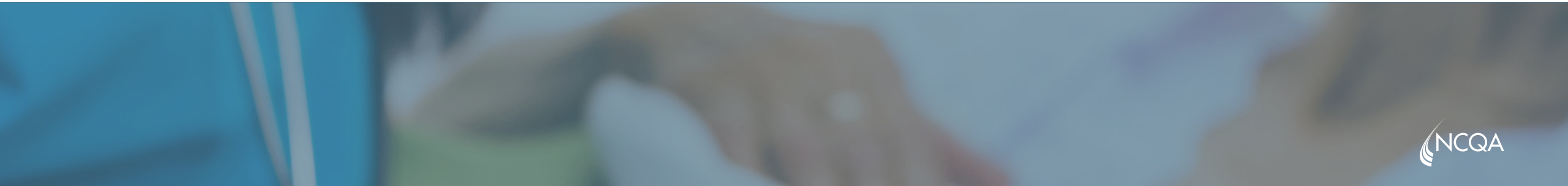
North Carolina's Medicaid Quality Measurement Technical Specifications Manual. January 2025. https://medicaid.ncdhhs.gov/medicaid-managed-care-quality-measurement-technical-specifications-manual/download?attachment

The Challenge

1. Clinical data elements used for NC Medicaid programs are currently incomplete, non-standardized, and duplicative.
2. Data exchange between health plans and providers requires many different interfaces.
3. Practices face increasing administrative burden related to data sharing.

How can we accurately and meaningfully understand the quality of care being provided to beneficiaries without adding to provider burden?

Leveraging NC HealthConnex



The North Carolina Health Information Exchange Authority (NC HIEA)

STATE-DESIGNATED

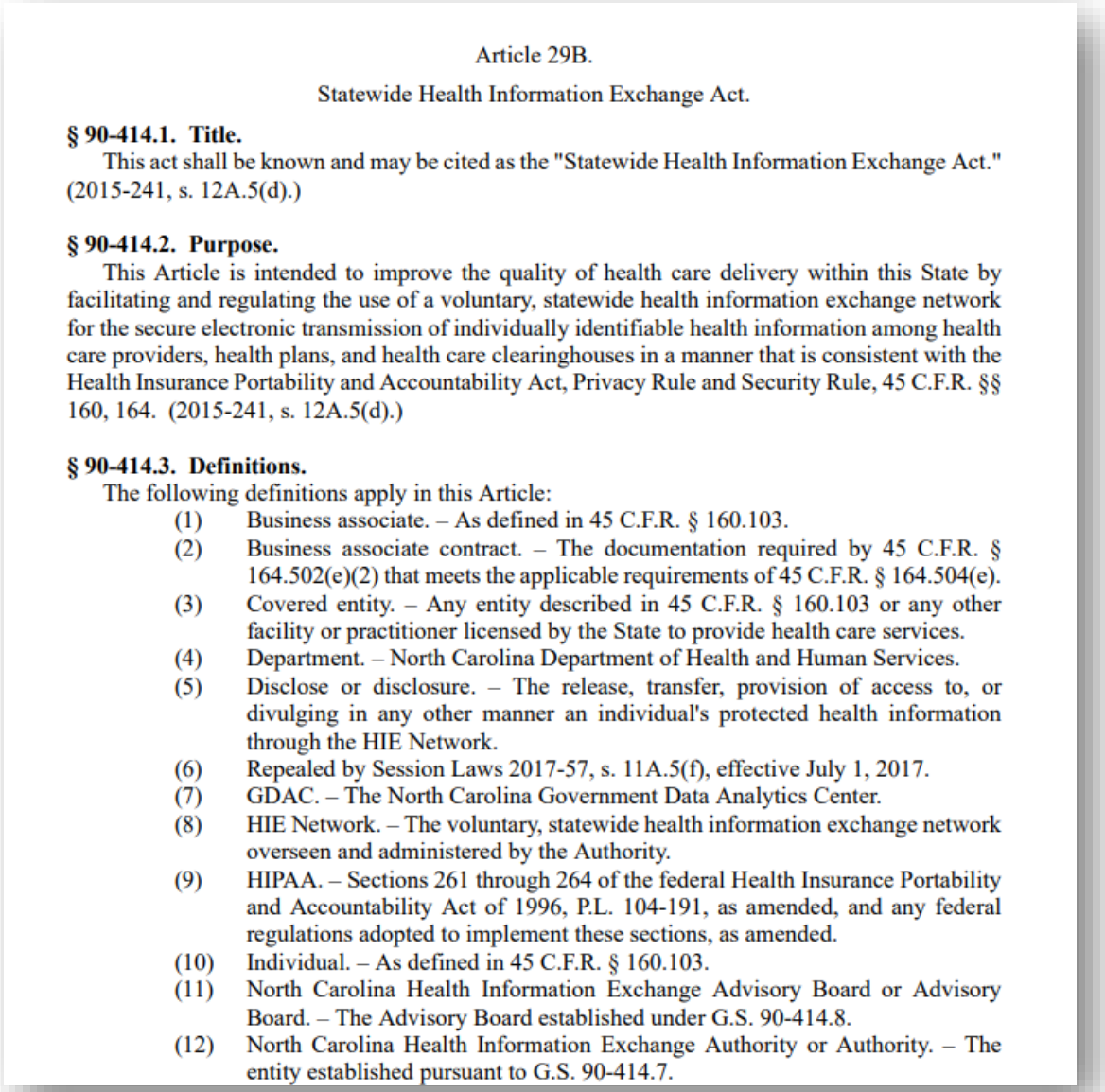
SECURE

PARTNERSHIP

- The North Carolina General Assembly established the NC HIEA in 2015 to facilitate the creation of a modernized HIE to better serve North Carolina's health care providers and their patients (NCGS 90-414.7)
- Part of the N.C. Department of Information Technology's Data Division
- Technology Partner is SAS Institute
- 12-member Advisory Board is made up of various health care representatives
- **Operates NC HealthConnex, North Carolina's statewide HIE**

NC Medicaid and NC HIEA Partnership

- The Statewide Health Information Exchange Act requires health care providers who receive state funds for the delivery of health care services (e.g., Medicaid, State Health Plan) to connect to and share patient data with NC HealthConnex.
- NC HIEA also supported NC Medicaid in COVID surveillance and “warm hand-offs” for high-risk patients during managed care launch.
  - As results were recognized, NC Medicaid saw additional potential for leveraging NC HealthConnex.



Article 29B.

Statewide Health Information Exchange Act.

§ 90-414.1. Title.

This act shall be known and may be cited as the "Statewide Health Information Exchange Act." (2015-241, s. 12A.5(d).)

§ 90-414.2. Purpose.

This Article is intended to improve the quality of health care delivery within this State by facilitating and regulating the use of a voluntary, statewide health information exchange network for the secure electronic transmission of individually identifiable health information among health care providers, health plans, and health care clearinghouses in a manner that is consistent with the Health Insurance Portability and Accountability Act, Privacy Rule and Security Rule, 45 C.F.R. §§ 160, 164. (2015-241, s. 12A.5(d).)

§ 90-414.3. Definitions.

The following definitions apply in this Article:

(1) Business associate. – As defined in 45 C.F.R. § 160.103.
(2) Business associate contract. – The documentation required by 45 C.F.R. § 164.502(e)(2) that meets the applicable requirements of 45 C.F.R. § 164.504(e).
(3) Covered entity. – Any entity described in 45 C.F.R. § 160.103 or any other facility or practitioner licensed by the State to provide health care services.
(4) Department. – North Carolina Department of Health and Human Services.
(5) Disclose or disclosure. – The release, transfer, provision of access to, or divulging in any other manner an individual's protected health information through the HIE Network.
(6) Repealed by Session Laws 2017-57, s. 11A.5(f), effective July 1, 2017.
(7) GDAC. – The North Carolina Government Data Analytics Center.
(8) HIE Network. – The voluntary, statewide health information exchange network overseen and administered by the Authority.
(9) HIPAA. – Sections 261 through 264 of the federal Health Insurance Portability and Accountability Act of 1996, P.L. 104-191, as amended, and any federal regulations adopted to implement these sections, as amended.
(10) Individual. – As defined in 45 C.F.R. § 160.103.
(11) North Carolina Health Information Exchange Advisory Board or Advisory Board. – The Advisory Board established under G.S. 90-414.8.
(12) North Carolina Health Information Exchange Authority or Authority. – The entity established pursuant to G.S. 90-414.7.

N.C. Gen. Stat. § 90-414. https://www.ncleg.net/EnactedLegislation/Statutes/PDF/ByArticle/Chapter_90/Article_29B.pdf

Use Case Overview

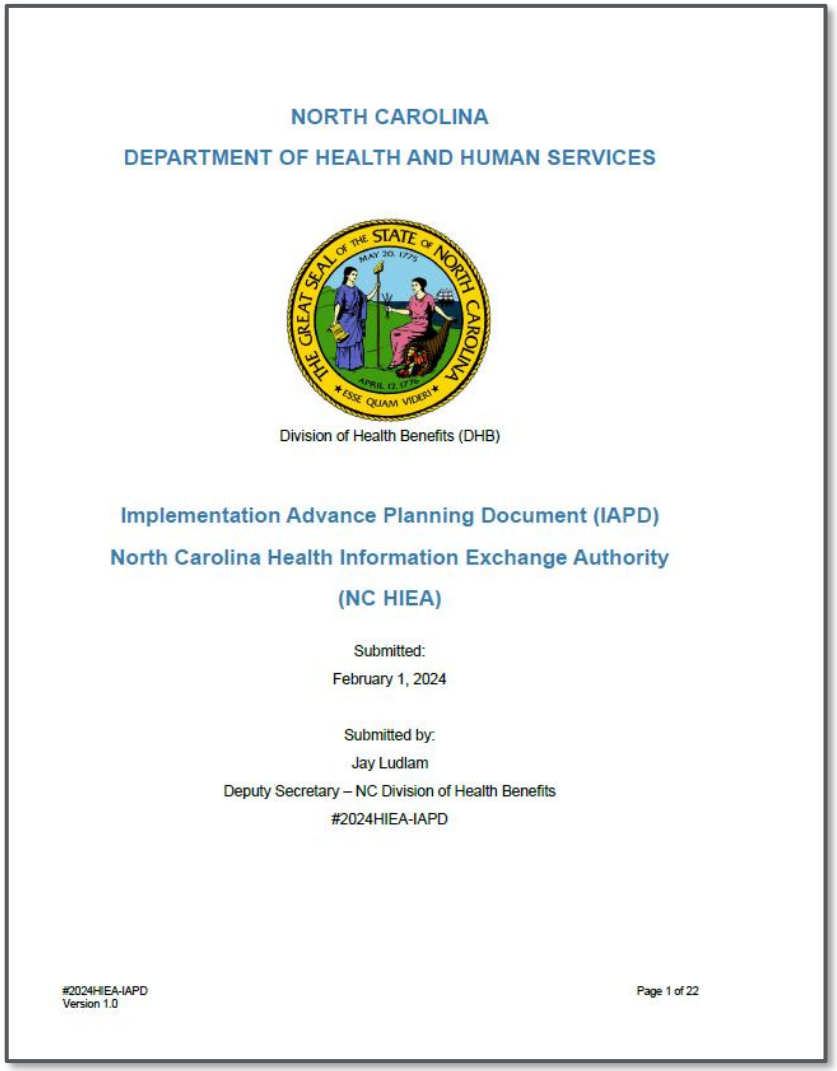
Digital Quality Measures (dQMs)	Develop the capabilities to calculate a selected set of Medicaid's high-priority quality measures combining both administrative data (i.e., claims and encounters) with clinical information from providers' EHRs to allow for more timely results.
Health-Related Social Needs (HRSN)	Develop the capabilities to share Medicaid beneficiaries' responses to HRSN screening questions with: (1) other providers; (2) Medicaid Prepaid Health Plans (PHPs); and (3) NC Medicaid.
Care Management (CM) Data Exchange	Improve the ability to exchange: (1) encounter data between PHPs and local care management entities; (2) transitions of care information when members move PHPs; and (3) care management interaction details.

Today's Focus: dQMs

Digital Quality Measures (dQMs)	Develop the capabilities to calculate a selected set of Medicaid's high-priority quality measures combining both administrative data (i.e., claims and encounters) with clinical information from providers' EHRs to allow for more timely results.

The CMS Advanced Planning Document (APD) Process

- An Advanced Planning Document (APD) is a detailed plan that states submit to the Centers for Medicare & Medicaid Services (CMS) to gain federal financial participation for their Medicaid IT projects/initiatives.
- On February 1, 2024, CMS approved an Implementation APD (IAPD) to support six months of planning.
  - Timeframe: April 1 – September 30, 2024
- On July 29, 2024, NC Medicaid submitted an updated IAPD (IAPD-U) to move into the Design, Development, and Implementation (DDI) phase of work.
  - Timeframe: October 1, 2024 – September 30, 2026



NORTH CAROLINA

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Division of Health Benefits (DHB)

Implementation Advance Planning Document (IAPD)

North Carolina Health Information Exchange Authority

(NC HIEA)

Submitted:

February 1, 2024

Submitted by:

Jay Ludlam

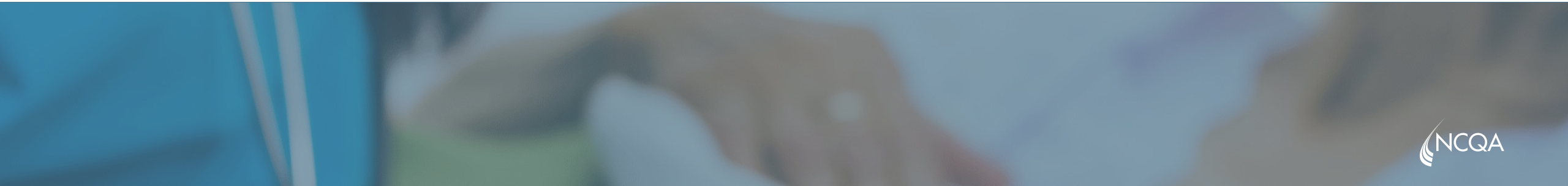
Deputy Secretary – NC Division of Health Benefits

#2024HIEA-IAPD

#2024HIEA-IAPD
Version 1.0

Page 1 of 22

The Road to Digital Quality Measures (dQMs)



Polling Question #2

Where are you/your organization at in your transition to digital quality measures (dQMs)?

A. Planning phase (evaluating dQMs for future implementation)

B. Early stages of implementation (initial setup, testing)

C. In the process of full implementation (integrating dQMs into workflow)

D. Fully implemented (dQMs are actively in use and integrated)

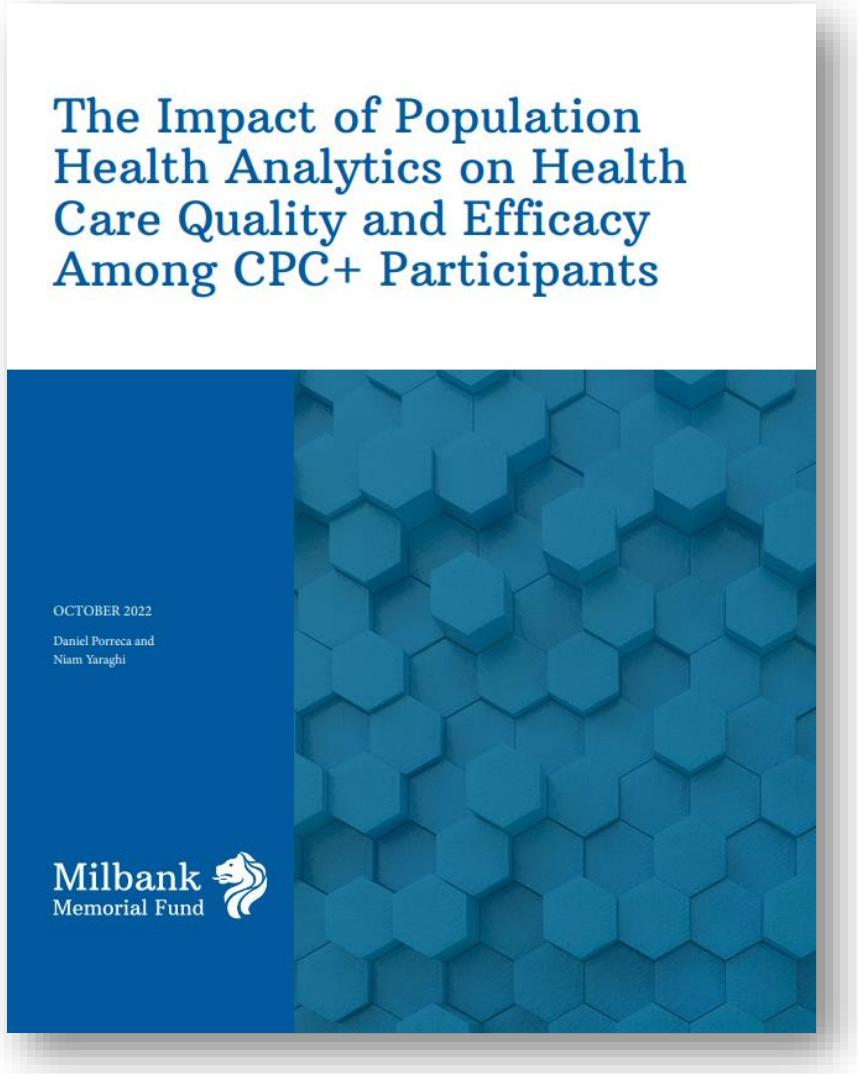
E. Not currently implementing dQMs

F. What are dQMs?

G. Other

Making the Case: What is the Value of NC's dQM Strategy?

1. **Align with Emerging Standards** (e.g., CMS' Digital Quality Measure Strategic Roadmap, federal interoperability goals, and reporting requirements for programs such as the Medicare Shared Savings Program)
2. **Reduce Administrative Burden** by reducing the number of interfaces providers must create and maintain to transmit data to health plans for quality performance.
3. **Improve Gap Reporting** by generating a single, consolidated care gap report that can inform quality improvement and patient outreach.
4. **Enhance Performance in Value-Based Payment Arrangements** by improving the collection of clinical data from providers' EHRs to support better, more complete quality measure results.[1]

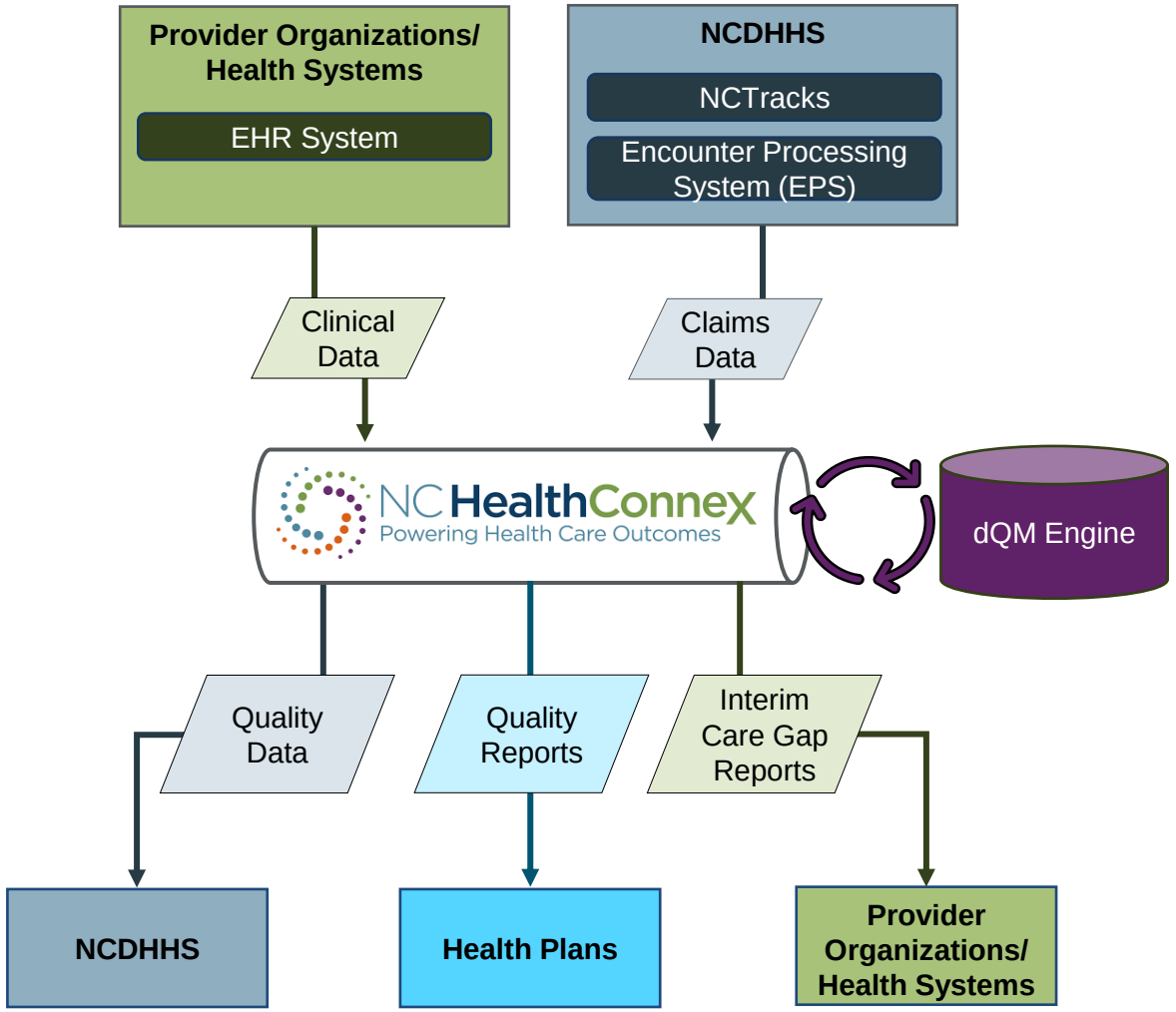


[1] Porreca D and Yaraghi N. The Impact of Population Health Analytics on Health Care Quality and Efficacy Among CPC+ Participants. Milbank Memorial Fund. October 6, 2022.

dQM Use Case: Future State

- CMS has a goal of transitioning to dQMs for all quality measures used in its reporting programs.
- Initial focus on three priority quality measures:
    1. Controlling High Blood Pressure (CBP)
    2. Glycemic Status Assessment for Patients with Diabetes (GSD)
    3. Screening for Depression and Follow-Up Plan (CDF)
- Standardized measure results can be shared via NC HealthConnex with health plans and providers to support quality improvement.

Figure 2. Future State dQM Data Flow Diagram.



Current Exchange of Priority Data Elements

- NC HIEA has been sharing a monthly extract of data elements with NC Medicaid and the health plans since 2021, known as the **Priority Data Elements.**
- These files include*:
  - Demographic information (e.g., address, phone number, race, ethnicity, gender, etc.)
  - Observations (e.g., systolic/diastolic blood pressure values, height, weight, BMI, etc.)
  - Diagnosis, Procedures, and Problems (e.g., depression screen, bipolar diagnosis, etc.)
  - Labs (e.g., HbA1c, glucose, total cholesterol, cervical cytology, HDL, LDL, etc.)
  - Medications
  - Future: Health-Related Social Needs (HRSN) screening information

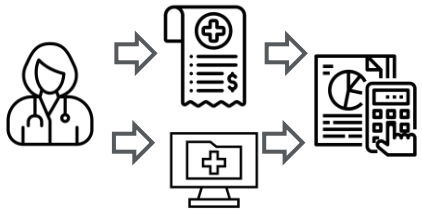
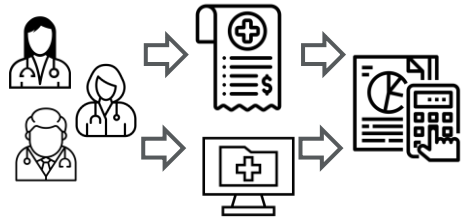
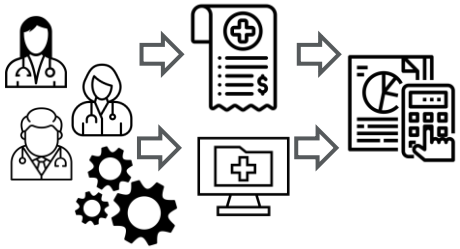
Figure 3. Screenshot of 2024 Priority Data Elements File.

OBSERVATION CODE	OBSERVATIONDESCRIPTION	OBSERVATIONCODING STANDARD	OBSERVATION VALUE	OBSERVATION UNITS
3141-9	WEIGHT	LN	18.597	KG
8480-6	SYSTOLIC BLOOD PRESSURE	LN	171	MM[HG]
8462-4	DIASTOLIC BLOOD PRESSURE	LN	86	MM[HG]
8302-2	BODY HEIGHT	LN	166.4	CM
29463-7	BODY WEIGHT	LN	77.111	KG
39156-5	BMI	LN	27.86	KG/M2
39156-5	BMI	LN	46.92	KG/M2
29463-7	WEIGHT	LN	282	[LB_AV]
8302-2	HEIGHT	LN	65	[IN_I]
8480-6	BLOOD PRESSURE SYSTOLIC	LN	122	MM[HG]
8462-4	BLOOD PRESSURE DIASTOLIC	LN	85	MM[HG]
8480-6	SYSTOLIC BLOOD PRESSURE	LN	131	MM[HG]
8462-4	DIASTOLIC BLOOD PRESSURE	LN	70	MM[HG]
8480-6	SYSTOLIC BLOOD PRESSURE	LN	111	MM[HG]
8462-4	DIASTOLIC BLOOD PRESSURE	LN	70	MM[HG]
8302-2	BODY HEIGHT	LN	165.1	CM
29463-7	BODY WEIGHT	LN	95.074	KG
39156-5	BMI	LN	34.88	KG/M2
8462-4	DIASTOLIC BLOOD PRESSURE	LN	68	MM[HG]

*Associated encounter information is sent where available.

Early Returns in the Controlling High Blood Pressure (CBP) Measure

The 2022 national average for Medicaid HMOs for Controlling High Blood Pressure was 60.9%.

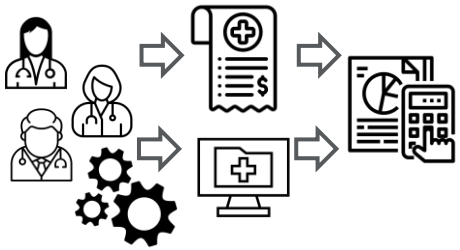
Traditional	Supplemental Data from HIE	Additional HIE Connections	Improvements in HIE Submissions
			
2020 CBP Rate: **4.58%**	2020 CBP Rate: **20%**	2022 CBP Rate: **40.92%**	2023 CBP Rate: **52.5%**

Source: Synthesis of NC Medicaid administrative data and NC HealthConnex clinical data, 2020-2024.

Early Returns in the Controlling High Blood Pressure (CBP) Measure

Of those beneficiaries diagnosed with hypertension, how many were identified as having their blood pressure under control via administrative (i.e., claims) versus clinical data?

Improvements in HIE Submissions



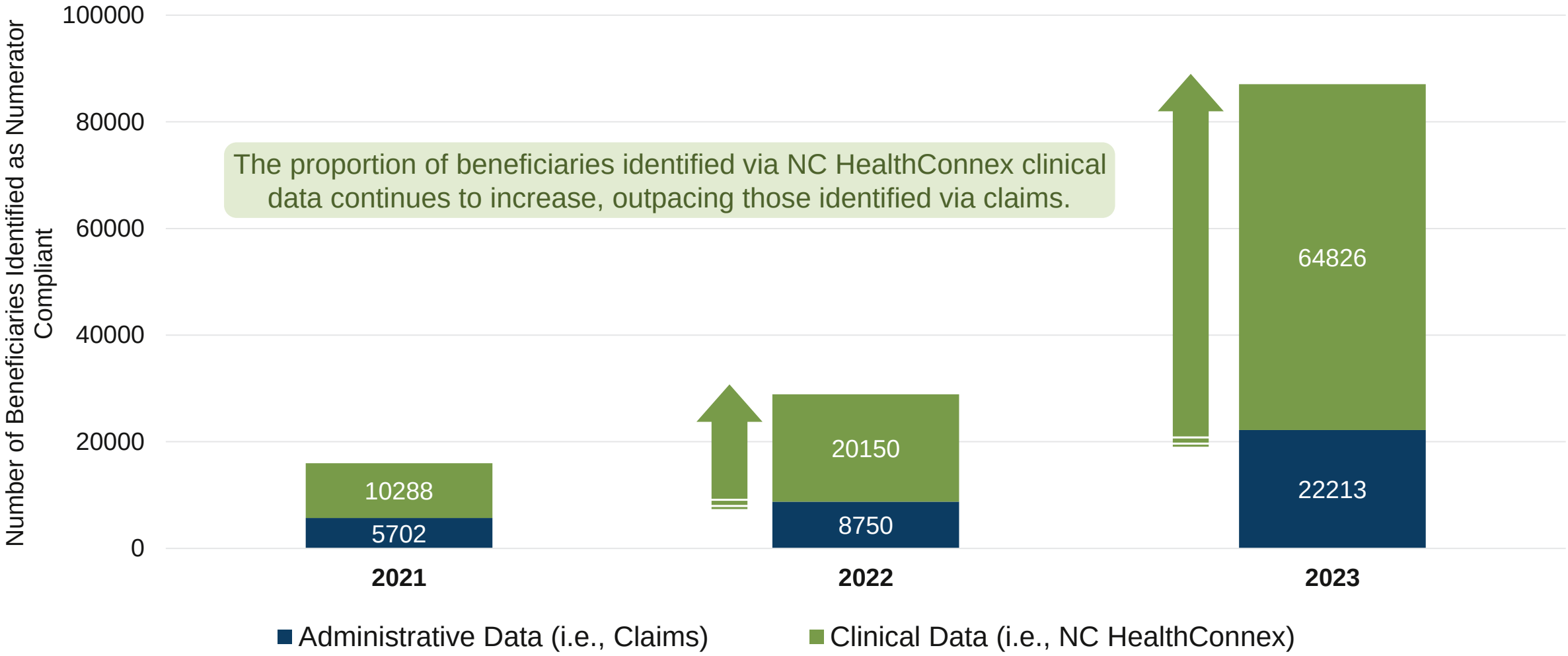
2023 CBP Rate:
52.5%

Source: Synthesis of NC Medicaid administrative data and NC HealthConnex clinical data, 2020-2024.

NCQA

A Deeper Look: The Impact of Clinical Data in Identifying Health Outcomes

Figure 4. Number of Medicaid Beneficiaries with Hypertension Identified as Having Their Blood Pressure Under Control by Source (Administrative vs. Clinical Data).



Source: Synthesis of NC Medicaid administrative data and NC HealthConnex clinical data, 2020-2024.

NCQA

The Importance of Member-Level Data

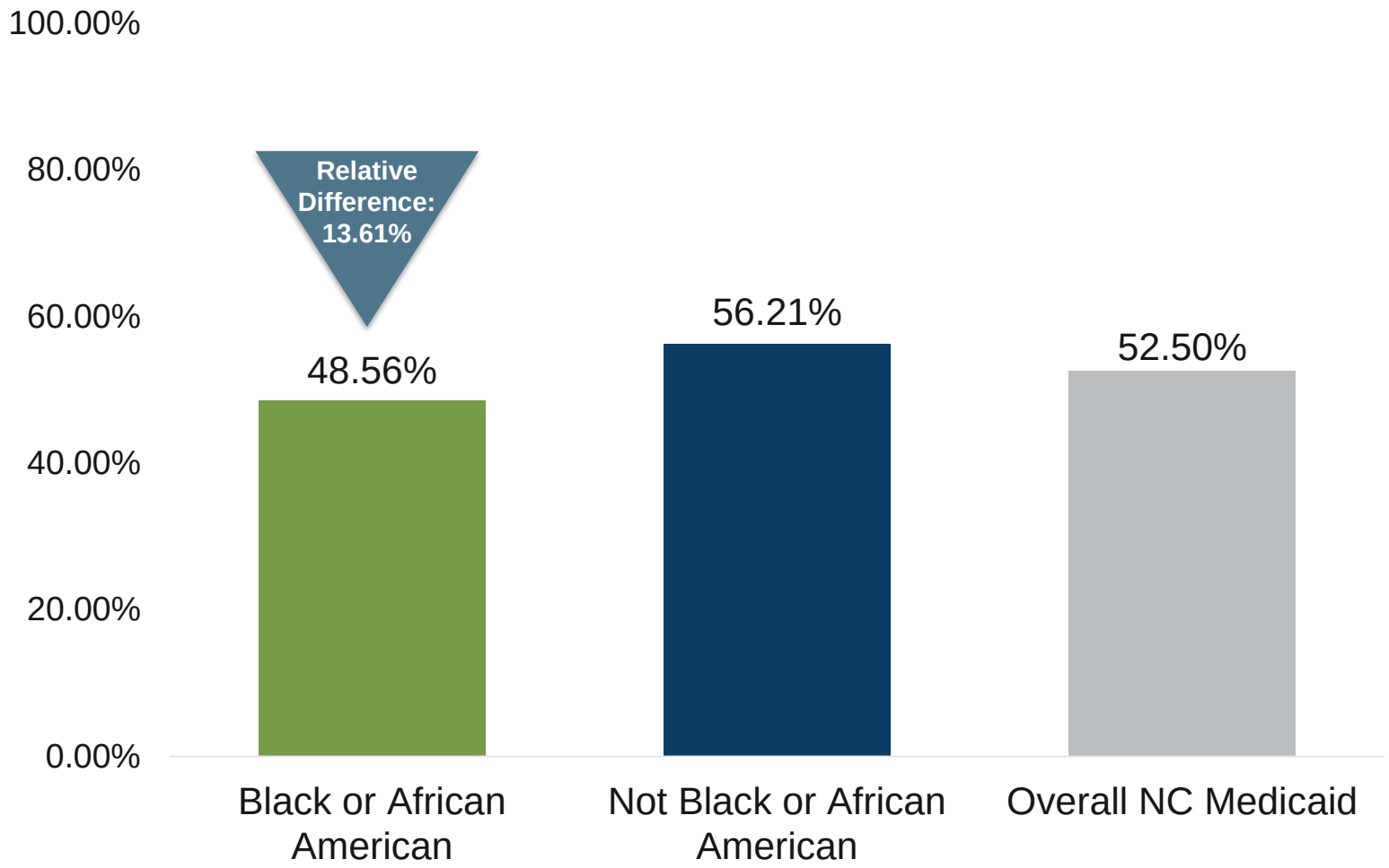
- Of the 40 states that reported NCQA's Controlling High Blood Pressure (CBP) measure for Medicaid Core Set Reporting in Federal Fiscal Year (FFY) 2023, **three-quarters of states reported using only the hybrid methodology.**[1]
- The hybrid methodology does not provide the flexibility needed to identify gaps in care at the beneficiary level or to disaggregate data in ways that can support quality improvement efforts.
- NCQA is looking to phase out the hybrid methodology by MY2029.[2]
  - In MY2028 CBP will transition to Electronic Clinical Data Systems (ECDS) only reporting.

[1] Medicaid and CHIP Scorecard 2024. https://www.medicaid.gov/state-overviews/scorecard/main
[2] NCQA HEDIS Hybrid Timeline. https://www.ncqa.org/blog/ncqas-proposed-timeline-for-retiring-and-replacing-hedis-hybrid-measures/

Example: Examining Blood Pressure Control by Race

- **Accurate patient-level data** supports individual care gap closure and effectively evaluating population health.
- This allows NC Medicaid to monitor how priority populations are faring compared to their respective reference groups, informing targeted interventions and aiding in the evaluation of programs/initiatives.

Figure 5. Rate of Controlling High Blood Pressure for the NC Medicaid Population, Measurement Year 2023, Stratified by Binary Race.



The Road to dQMs: Where Have We Been?

1. **Medicaid Enrollment Data:** Receive beneficiary enrollment data from the 834 file.
2. **Priority Data Element Files:** Share clinical data that can be used as supplemental for various measures (e.g., Controlling High Blood Pressure, Glycemic Status Assessment for Patients with Diabetes).
3. **NCQA's Data Aggregator Validation Program:** 2023 and 2024 participation in the program with two large hospital systems.
4. **Data Quality:** Examination of the quality of data currently being received from EHRs.

Figure 6. Examples of Unusable Values from the Priority Data Element Files.

OBSERVATIONUNITS
1
2
BMI
CM
G
IN
INCHES
KG
KG/M2
KG/M?
KG/METER(2)
LB

OBSERVATIONVALUE
$ lbs
(Post treatment BP 134/80; HR 70) lbs
(crying) lbs
(unable to weigh) lbs
* 30 lbs per mom lbs

OBSERVATIONVALUE
94 mm Hg
96 mm Hg
98 mm Hg
99 mm Hg
?? not cooperative mm Hg
right arm124 mm Hg

The Road to dQMs: Where Are We Going?

1. **Integrating Medicaid Claims Data:** Ongoing efforts to integrate claims data into NC HealthConnex.
2. **Improving Data Quality:** Collaborating with providers on improving data quality for our three priority quality measures, including technical upgrades and workflow changes.
3. **Expanding NCQA Data Aggregator Validation Program Participation:** Take additional clusters through the program to increase the number of validated data streams.
4. **Exploring dQM Vendors:** Researching vendors and software for dQMs.
5. **Leveraging Emerging Standards:** Investigating how we can incorporate FHIR (Fast Healthcare Interoperability Resources) into our solution.
6. **Supporting Early Adopters:** Developing a financial model to support early adopters in this work.

Polling Question #3

What have you found to be the most challenging aspect of the digital quality transition?

A. Data quality and accuracy

B. Integration with existing systems

C. Resource constraints

D. Subject matter expertise about industry standards

E. Technical infrastructure

F. Change management

Acknowledgments

A special thank you to the many groups that continue to support this work, including:

- Manatt Health,
- SAS Institute,
- Accenture, and
- Our colleagues across the North Carolina Department of Health and Human Services (NCDHHS) and the North Carolina Department of Information Technology (NCDIT).

Want to keep tabs on our journey?

Check out the NC HIEA's HIE Medicaid Services (HMS) Program website:
https://hiea.nc.gov/hie-medicaid-services

Contact Information

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Health Benefits

Larry Mull, MBA
Deputy Director, Program Evaluation

larry.mull@dhhs.nc.gov

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Health Benefits

Madison Shaffer, MPH
Quality Measurement Lead

madison.shaffer@dhhs.nc.gov

NCDIT NORTH CAROLINA DEPARTMENT OF INFORMATION TECHNOLOGY
Health Information Exchange

Sam Thompson, MSW
Executive Director

sam.thompson@nc.gov

NCDIT NORTH CAROLINA DEPARTMENT OF INFORMATION TECHNOLOGY
Health Information Exchange

Jessica Kuhn, MPH
Medicaid Quality and Population Health Systems Analyst

jess.kuhn@nc.gov

Questions

Polling Question #4

If you are interested in a follow-up, please indicate below what you would like to discuss:

A. Data Aggregator Validation

B. Advanced Planning Document (APD) Process

C. HIE Improvement

D. Other

NCQA Upcoming Events- Register Now!

Join the Conversation: Public Comment for HEDIS Measures

February 27, 1:00pm – 2:00pm ET

Join us as HEDIS measure experts and developers present updates to HEDIS measures out for public comment. Learn more about which measures are moving to ECDS reporting or have changes to their specifications.

Register here!

Be Part of the Process: Public Comment for Updates to NCQA Standards

March 5, 3:00pm-4:00pm ET

Join NCQA as we review updates to NCQA standards that are up for public comment. We will be discussing changes to Utilization Management (UM) and Managed Behavioral Health Organization (MBHO) Accreditation and much more!

Register here!

NCQA HEALTH QUALITY FORUM

Registration Is Open

April 7-8, 2025

Baltimore Marriott Waterfront | Baltimore, MD

ncqaforum.org

#NCQAForum

MARYLAND


NCQA
Thank you