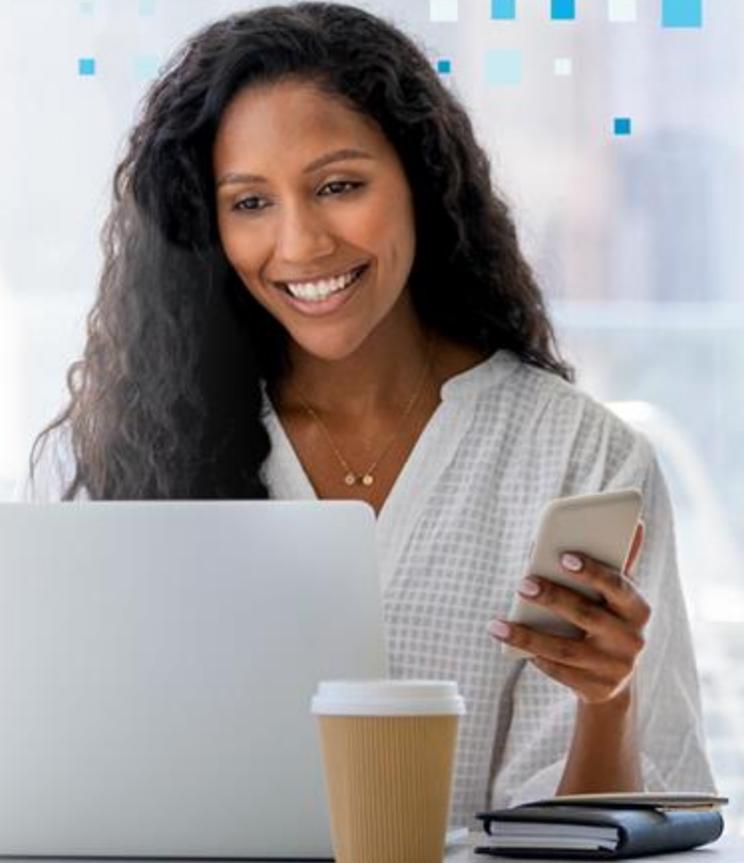




We will begin momentarily





Understanding the Practical Data Hurdles to Operationalizing HEDIS® dQMs



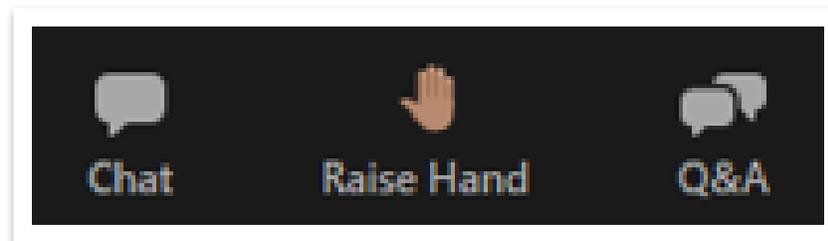
Housekeeping

Slides & Recording will be sent after the session

Please complete the survey at the end of the session

How to Submit Questions During the Webinar

- 1) Locate the 'Q&A' icon on the menu bar.
- 2) During the webinar, please submit questions via the 'Q&A' box.
- 3) Your question will be responded to live by one of the presenters.



Speakers



Trent J. Gavazzi
Payvider Strategy
CareEvolution



Vik Kheterpal, MD
Medical Informatics
CareEvolution

Discussion Outline



1. Who we are

2. Background context

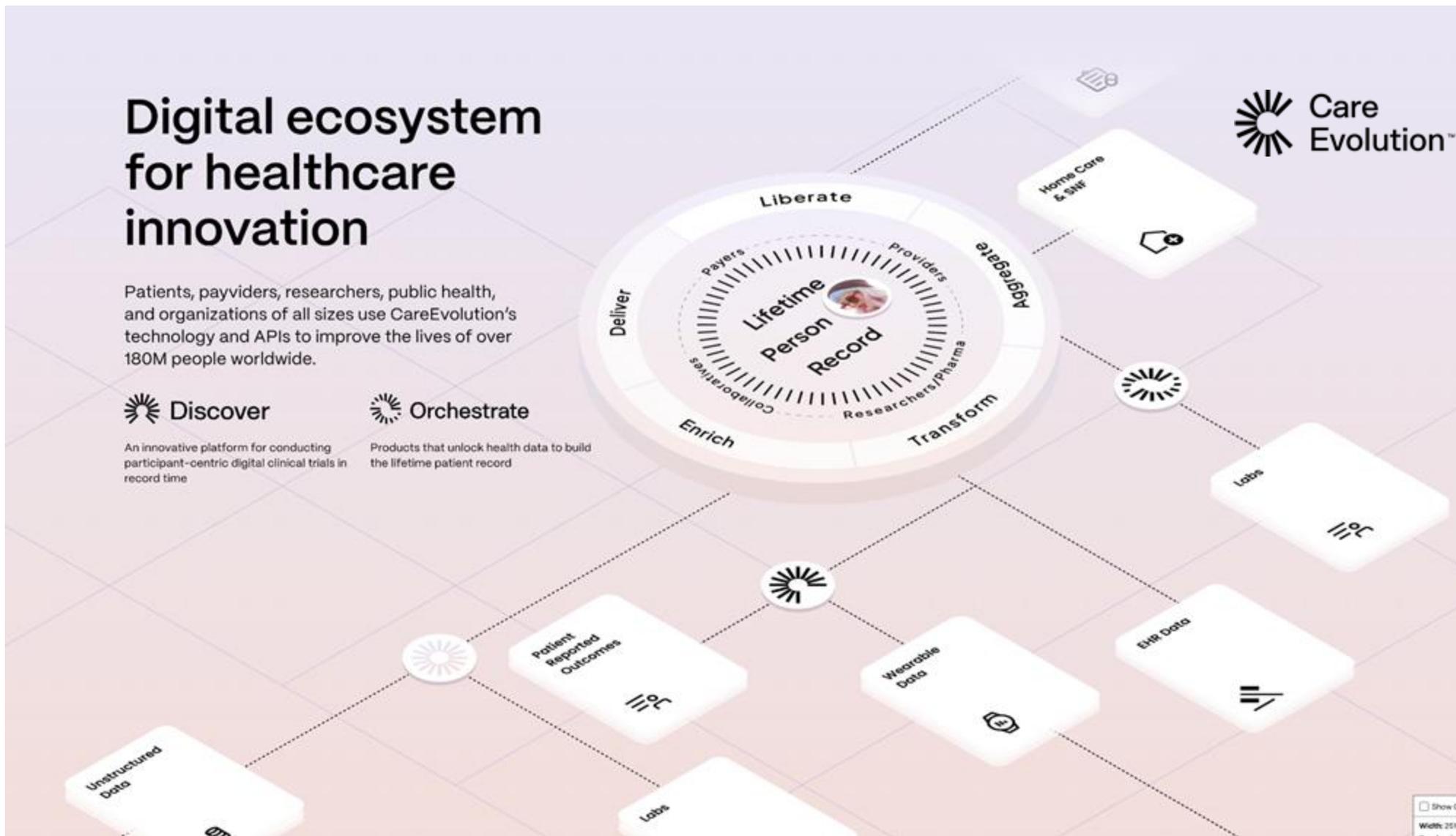
- a. Dec 2025 update along the Digital HEDIS journey - picking up momentum!
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5. Key practical initiatives health plans can undertake to get ready for 2029

We Connect Healthcare - Building Bridges Among Digital Islands of Automation



Healthcare data integration, curation, & enrichment solutions at scale for the largest orgs globally

Digital Clinical Trials

Enables researchers the ability to achieve agility, speed, and reliability – launching digital health trials and studies in hours (not days, weeks, or months)

250M+

Patient Records Across Clients

10B+

Continuity of Care Documents Processed

640K

Active Weekly Users

6,500+

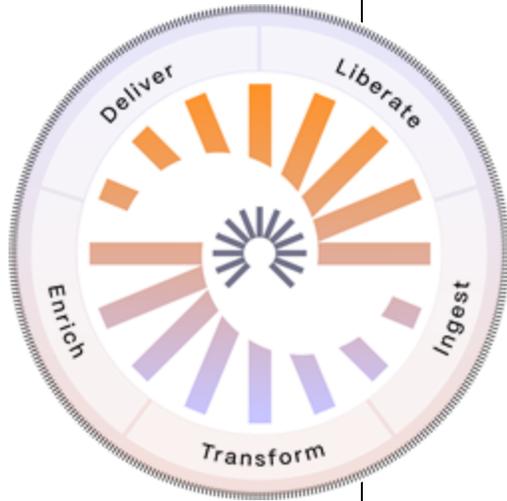
Health Information Technology Interfaces

17M

Surveys Delivered

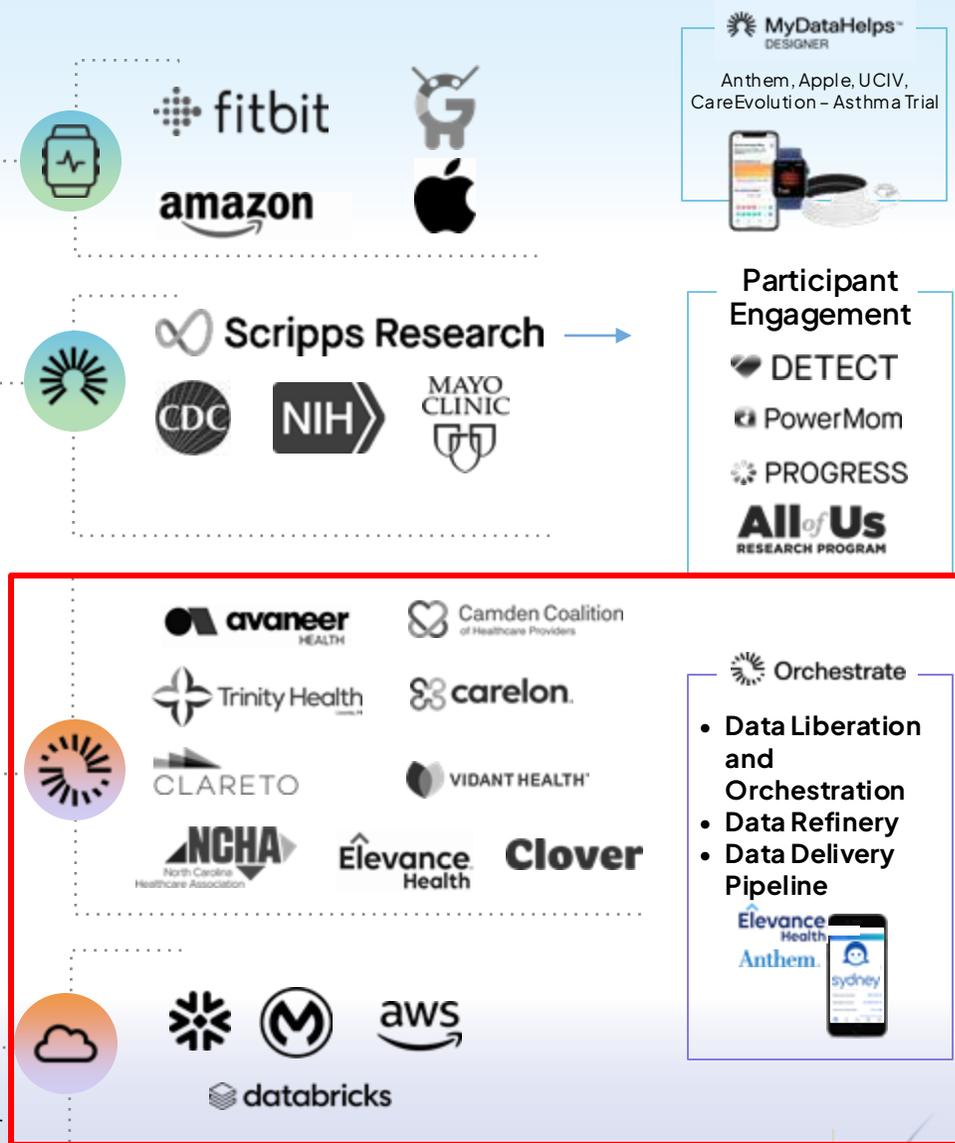
1.9M+

Research & Wellness Participants

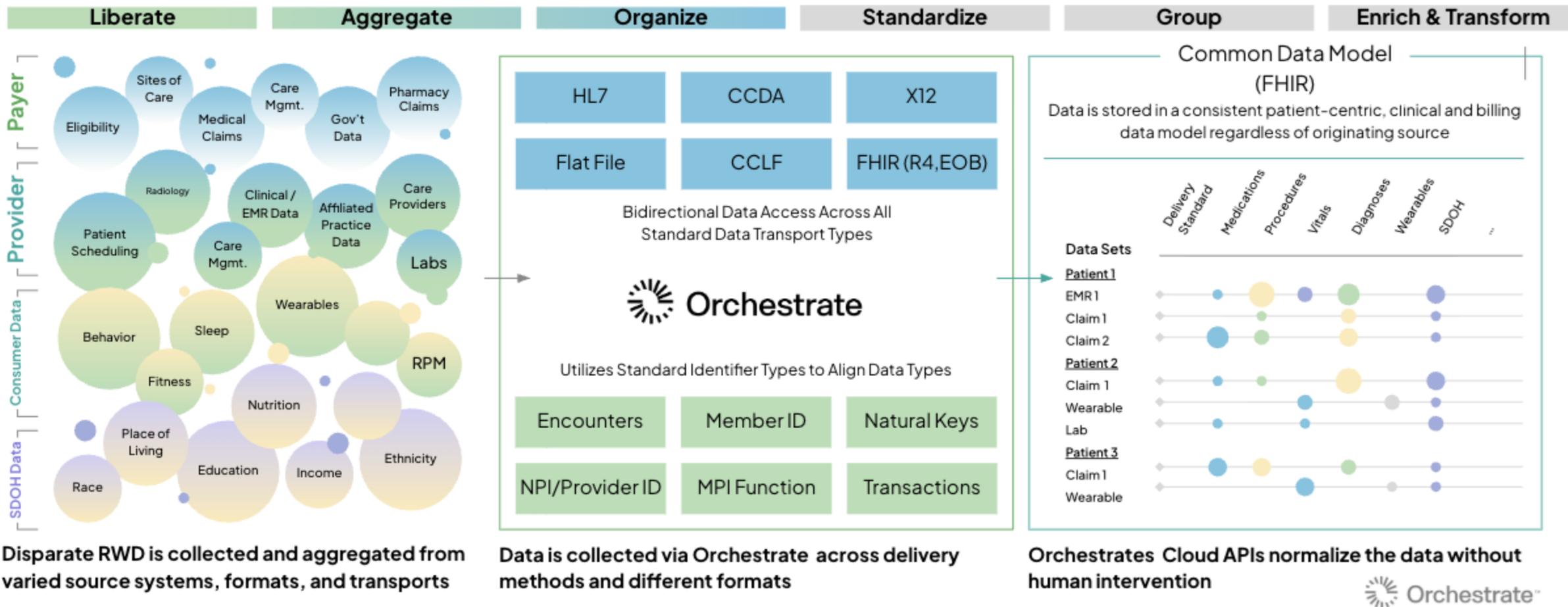


Interoperability

Beyond basic connectivity and exchange, CareEvolution's data management of Interoperability solutions enables analytics for provider-payer-consumer convergence on an enterprise-level



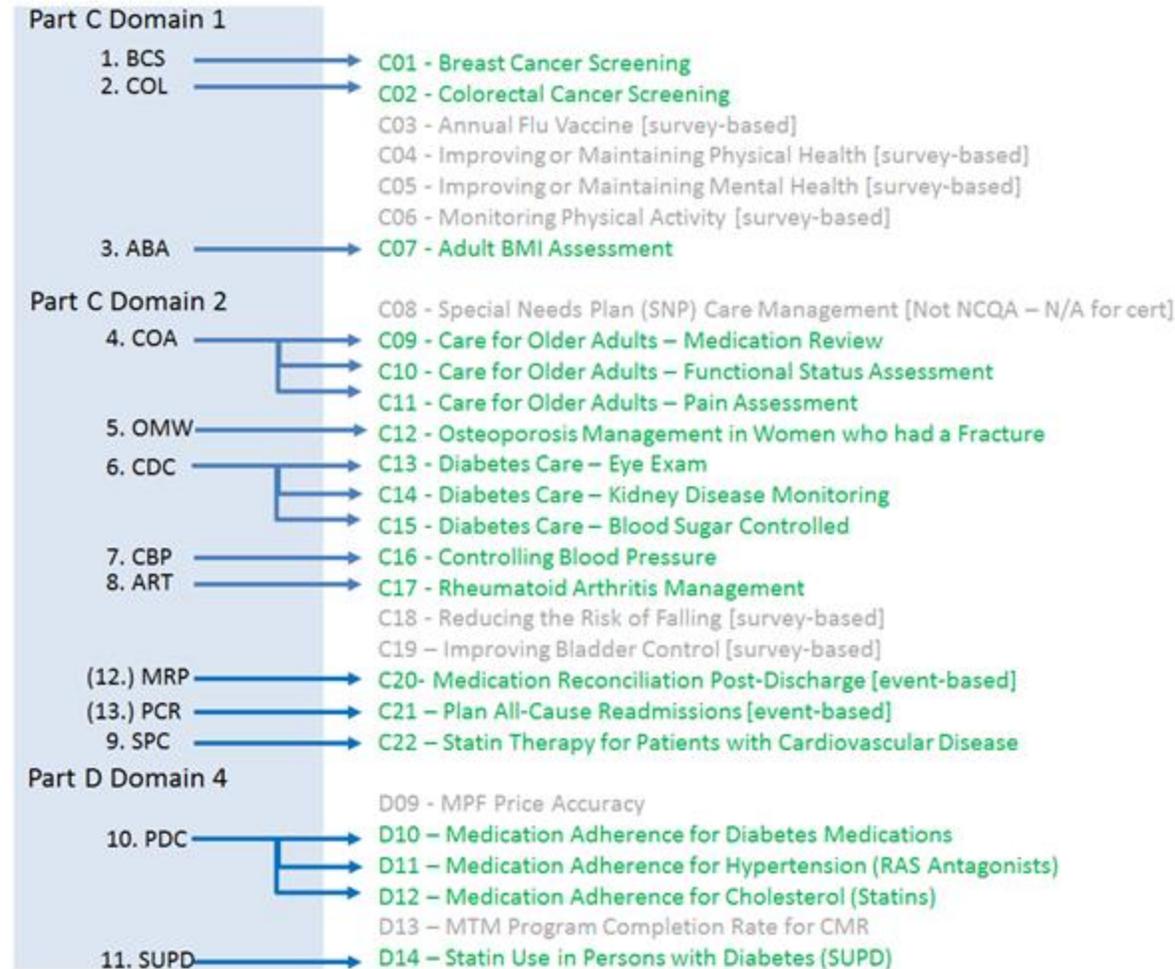
Ingestion and Aggregation of Raw Crude → Appropriate Fuel For Rocket Engines (like dQM)



Our Battle Scars Addressing Quality Measures for Providers and Payers



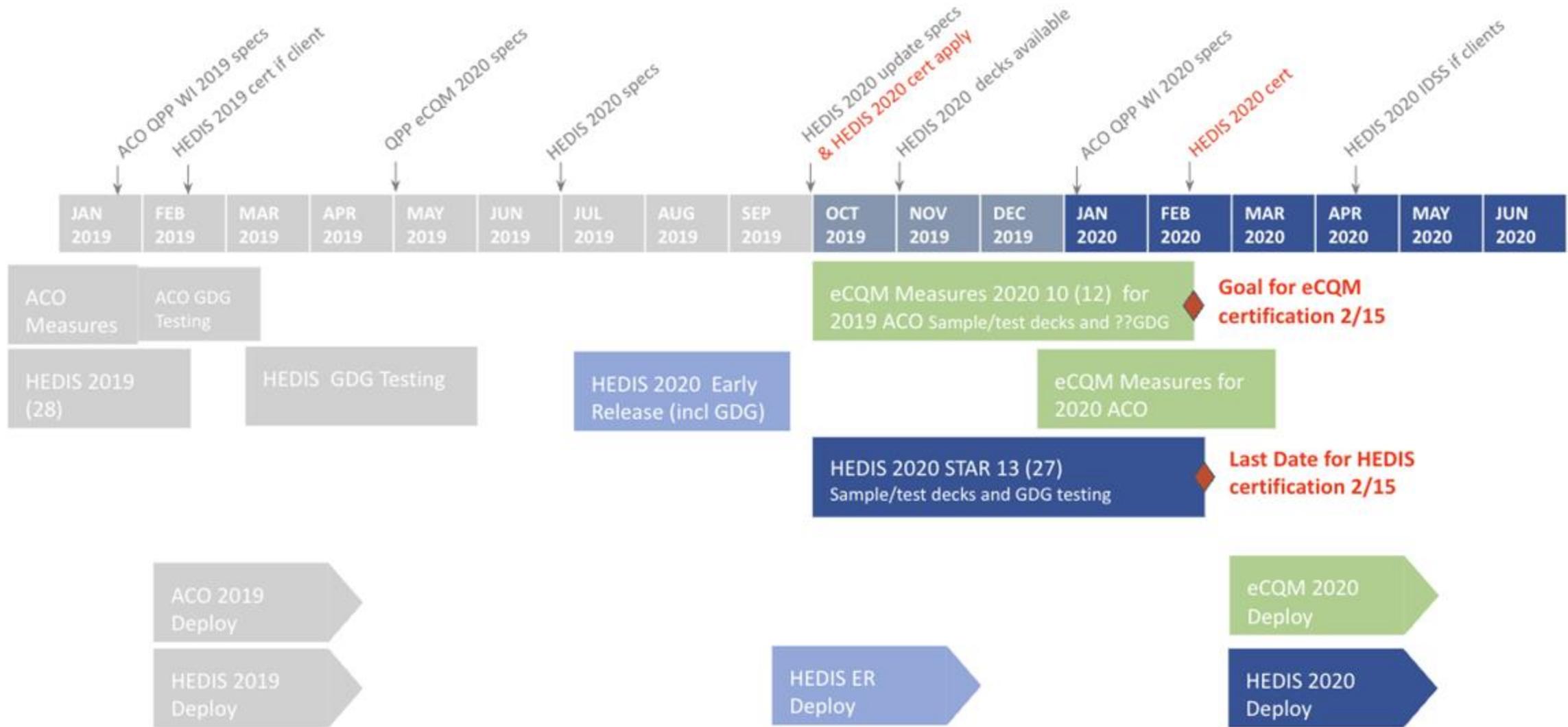
A look back at 2020 and our measure planning process across HEDIS, STARS, ACO, MIPS



Our Battle Scars Addressing Quality Measures for Providers and Payers



A look back at 2020 and our measure planning process across HEDIS, STARS, ACO, MIPS



Measure Definition and Adoption Chaos Prior to dQMs



Simple example of Breast Cancer Screening - same measure steward. Brute force diligent work by clinicians, informaticists, database wonks continuously just to deliver for the prior year!

HEDIS BCS 2020

DENOMINATOR:

Women age 52 to 74 years as of the end of the measurement period

No eligibility event. If measure had an event, would have supplemental data restriction.

EXCLUSIONS:

Conditional/Optional:

Bilateral mastectomy [ICD9CM, ICD10CM, ICD9PCS, ICD10PCS, CPT+CPTModifiers, SNOMED+Modifiers]

Left + Right mastectomy [ICD10CM, ICD10PCS, CPT+CPTModifiers, SNOMED+Modifiers]

Required:

Hospice [enrollment files, CPT, HCPCS, UBREV, SNOMED] - does not include orders

LTI - Medicare and age ≥ 66 as of end of measurement period and either enrolled in Institutional SNP or living in LTI as identified by LTI flag in MDDF. No supplemental or medical record data may be used. [enrollment files, MDDF]

Frailty - age ≥ 66 as of end of measurement period

AND frailty during measurement period [ICD10CM, CPT, HCPCS, SNOMED]

AND any of the following during the measurement period or the year prior to the measurement period:

- Two or more outpatient, observation, ED, nonacute inpatient encounters or nonacute inpatient discharges [CPT, HCPCS, UBREV, UBTOB, SNOMED] on different dates of service, with advanced illness [ICD10CM, SNOMED]

- One or more acute inpatient encounters or discharges [CPT, UBREV, UBTOB, SNOMED] with advanced illness [ICD10CM, SNOMED]

- Dispensed dementia medications [NDC, RXNORM] - does not include orders

eCQM CMS125v8 (2020)

DENOMINATOR:

Women age 51 to 74 years as of start of the measurement period

AND an encounter during the measurement period (office visit, annual wellness visit, established office visit, initial office visit, home healthcare services)

EXCLUSIONS:

Required:

Bilateral mastectomy [ICD9CM, ICD10CM, ICD10PCS, SNOMED]

Left + Right mastectomy [ICD9CM, ICD10CM, ICD10PCS, SNOMED+Modifiers]

2 unilateral mastectomies [CPT, SNOMED]

Required:

Hospice [SNOMED] - includes orders

LTI - age ≥ 65 as of start of measurement period and "Has Spent More Than 90 Days in Long Term Care" - cumulative days [CPT, SNOMED]

Frailty - age ≥ 65 as of start of measurement period

AND frailty during measurement period [ICD10CM, CPT, HCPCS, SNOMED] - allows orders

AND any of the following:

- Two or more outpatient, observation, ED, or nonacute inpatient encounters [CPT, HCPCS, SNOMED] with advanced illness [ICD10CM, SNOMED] that start within 2 years prior to the end of the measurement period

- An acute inpatient encounter [CPT, SNOMED] with advanced illness [ICD10CM, SNOMED] that starts within 2 years prior to the end of the measurement period

- Active dementia medications in the year before or during the measurement period [RXNORM] - does not include orders

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Key Takeaways from Dec 2025 Digital Quality Transition Update

Transition to dQM is accelerating and it is well worth it. The “lift” from the exceptionally expensive MRR continues to decrease if health plans employ effective clinical data sourcing and ECDS

Results for Measures Leveraging Electronic Clinical Data for HEDIS®



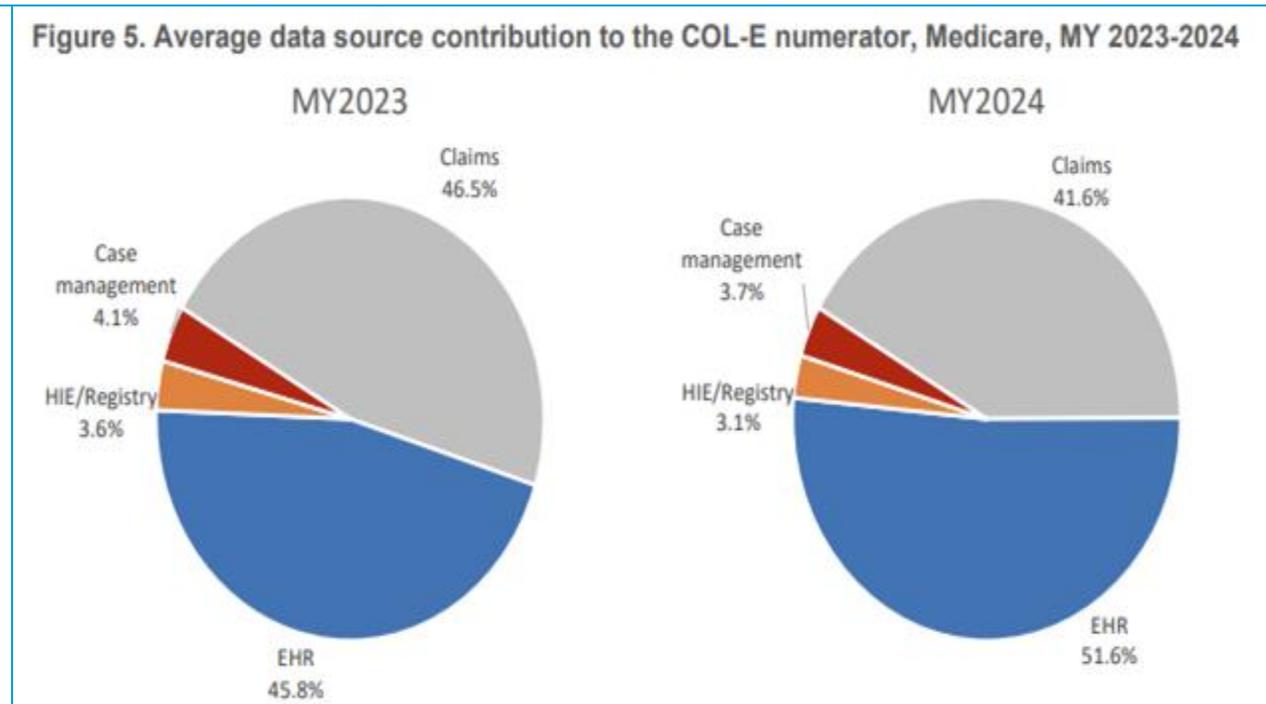
Special Report: Results for Measures Leveraging Electronic Clinical Data for HEDIS®

October 2025

This special report describes results for sixteen HEDIS® measures that use the *Electronic Clinical Data Systems reporting standard*.

Key Findings

- There was an increase in reportable submissions for most measures across all product lines compared to previous years.
- There was an increase in the contributions of non-claims data sources (i.e., EHR, HIE/registry and case management data) for numerator reporting.
- Generally, plans that used electronic, non-claims data sources had better performance than plans that used claims data alone.



<https://wpcdn.ncqa.org/www-prod/Special-Report-October-2025-Results-for-Measures-Leveraging-Electronic-Clinical-Data-for-HEDIS-1.pdf>

Reminder - The Digital HEDIS Transition Overall



10+ year journey to Digital HEDIS. dQM are a key complementary component of ECDS and achieving Digital HEDIS

	Administrative Administrative + supplemental	Hybrid Administrative + supplemental + medical record review	ECDS Administrative, EHRs, HIEs, registries, case management
Population	<ul style="list-style-type: none"> • Full eligible population 	<ul style="list-style-type: none"> • Systematic sample 	<ul style="list-style-type: none"> • Full eligible population
Data sources	<ul style="list-style-type: none"> • Supplemental data can't be used for the denominator 	<ul style="list-style-type: none"> • Supplemental data can't be used for the denominator 	<ul style="list-style-type: none"> • All relevant data sources can be used for any part of the measure
Data format	<ul style="list-style-type: none"> • Allows the use of data in nonstandard formats and layouts 	<ul style="list-style-type: none"> • Allows the use of data in nonstandard formats and layouts 	<ul style="list-style-type: none"> • Promotes the use of data stored in structured electronic formats that use standard layouts.
Data sharing	<ul style="list-style-type: none"> • No data-sharing mandate 	<ul style="list-style-type: none"> • No data-sharing mandate 	<ul style="list-style-type: none"> • Bidirectional data exchange • Data must be available to the care team upon request

NCQA <https://www.ncqa.org/resources/hedis-electronic-clinical-data-systems-ecds-reporting/>



How dQM are complementary to ECDS

dQM are a digital version of traditional measures while ECDS is a data collection and reporting method

ECDS

A reporting standard for HEDIS measures.

Structured way to aggregate electronic data.

Supports electronic exchange of clinical data.

eCQM

Use structured data captured electronically from an EHR.

Uses CQL for measure execution with the QDM data model.

dQM

Self-contained package of file; ELM and human readable information.

Published in a standard, interoperable format.

Computer interpretable, fully specified, standards-based (i.e., FHIR-CQL technical specification).

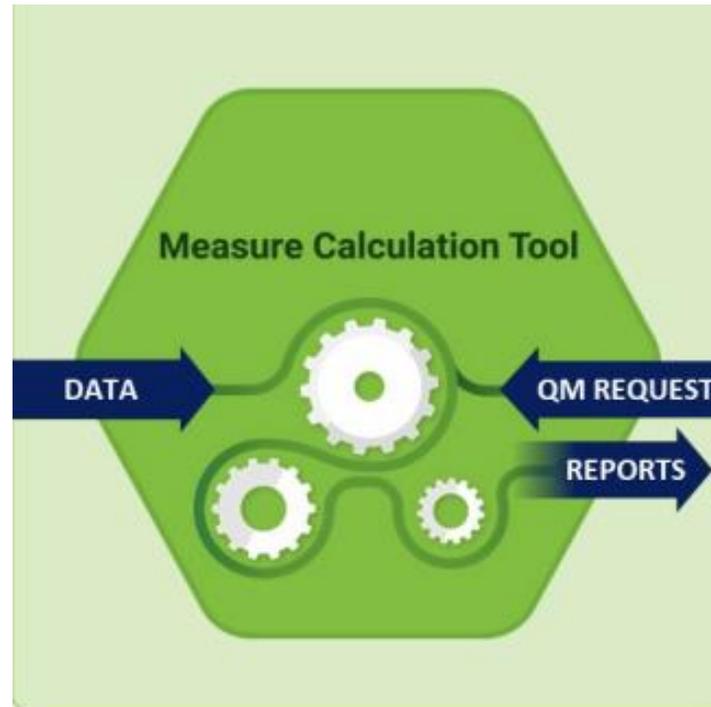
Supports clinical (EHR) and claims data.

NCQA <https://www.ncqa.org/digital-quality-transition/what-you-need-to-know/>

dQM: The Quality Measure Digital Calculator



Release measure definitions in machine computable (CQL) instead of PDF as “calculators” that can be embedded directly into adopter data pipelines. What CMS Describes as an MCT



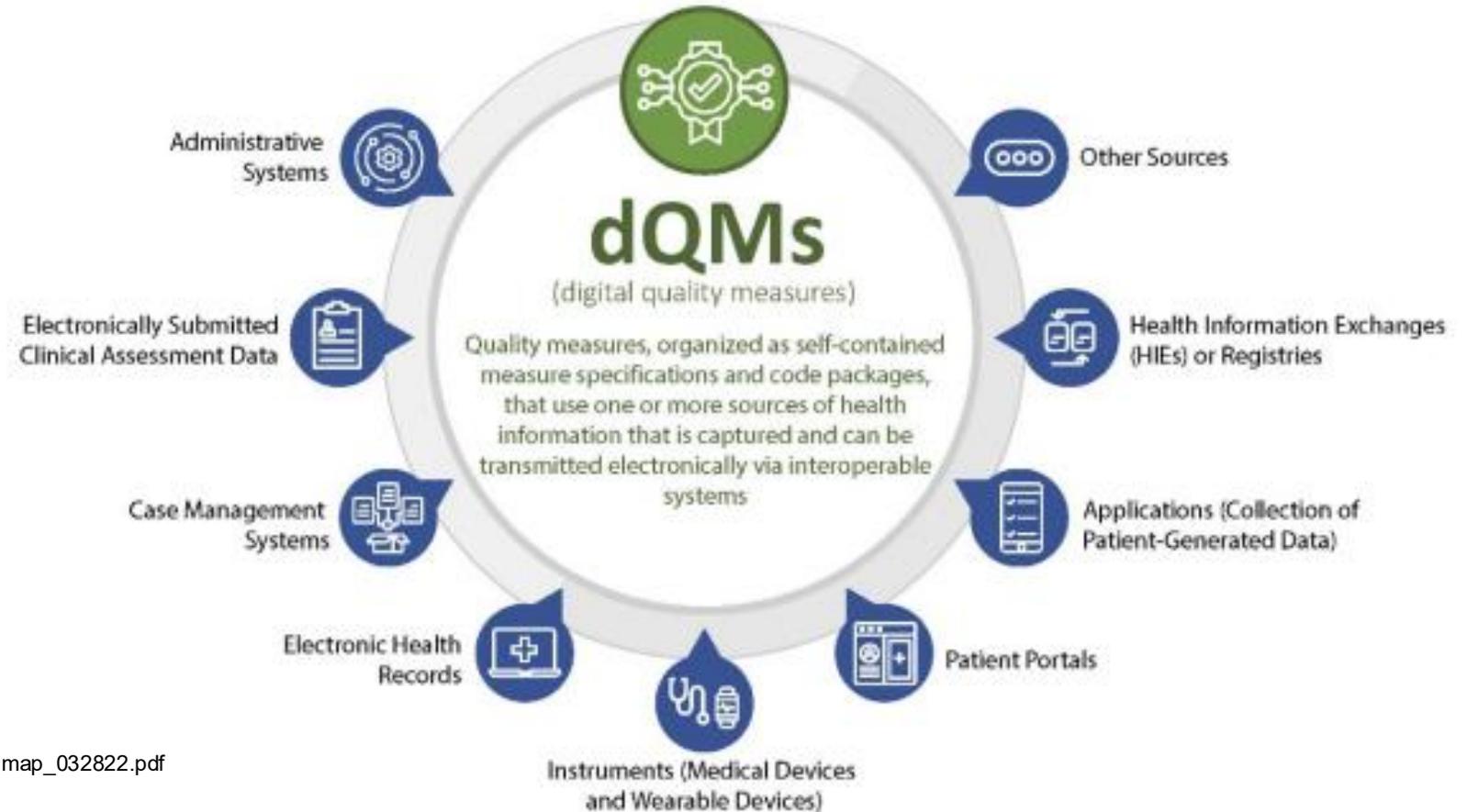
Aligned With CMS Universal Quality Measure Strategy Supporting Multiple Use Cases



“ACO” Measures, MIPS, STARS, intertwined and related to HEDIS

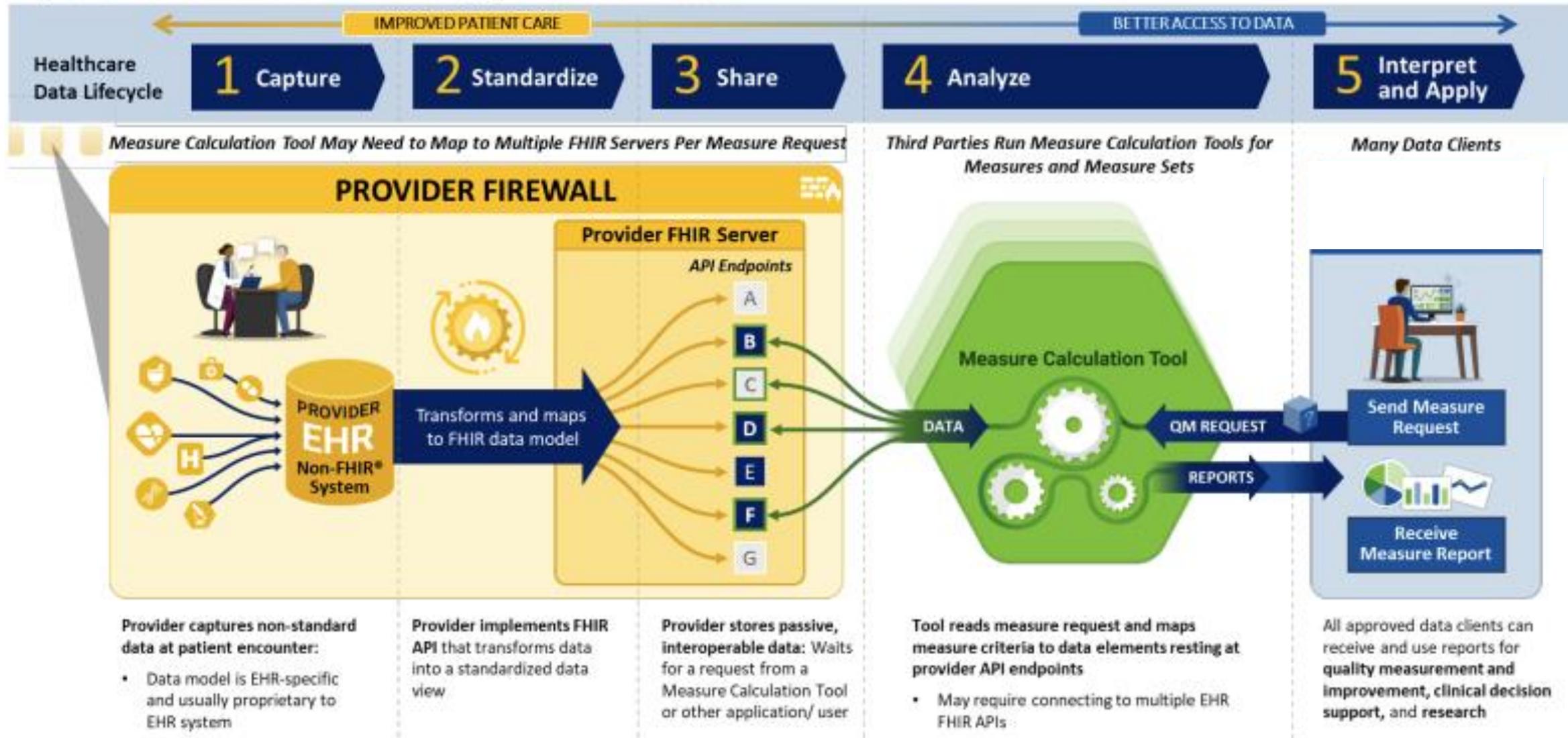


Digital Quality Measurement Strategic Roadmap



https://ecqi.healthit.gov/sites/default/files/CMSdQMStrategicRoadmap_032822.pdf

Overall Measure Ecosystem Architecture: CMS POV



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Myth 1: Most Source Data for Measures is available in FHIR



Reality: The authoritative inputs for quality measurement - claims and encounters - remain X12-based. Most data enters the ecosystem as X12, CCD, or non FHIR based HL7

Provider - Provider	CCDA or EHR Proprietary (Epic everywhere)
Provider - HIE	CCDA (TEFCA not yet FHIR enabled)
Provider - Payer	X12/NCPDP - 270/271, 276/277, 837,277CA/835
Payvider - CMS	Submission rails are still ASC X12. Source of truth submission is not FHIR. CMS is moving toward Bulk FHIR (NDJSON) for interoperable, population-level data exports, but traditional CCLF claims files are still extensively used and supported across legacy bulk reporting programs
Patient/Member - Payvider	Today: Provider Data - FHIR R4 USCDI Future: Payer data



Myth 2: Data generated in FHIR eliminates the need for normalization (i.e. it is well coded)

Reality: EHR generated FHIR still carries local codes, partial vocabularies, and inconsistent modeling choices (even for same version of Epic at two different sites); terminology normalization and semantic harmonization remain unavoidable prior to even attempting measure calculation

Myth 3: If consistently coded data is available via a FHIR API, it's fit for measures

Reality: Availability ≠ fitness. dQMs require **complete longitudinal coverage, consistent attribution, normalized codes, and measure-specific temporal logic**, none of which are guaranteed by source data FHIR availability

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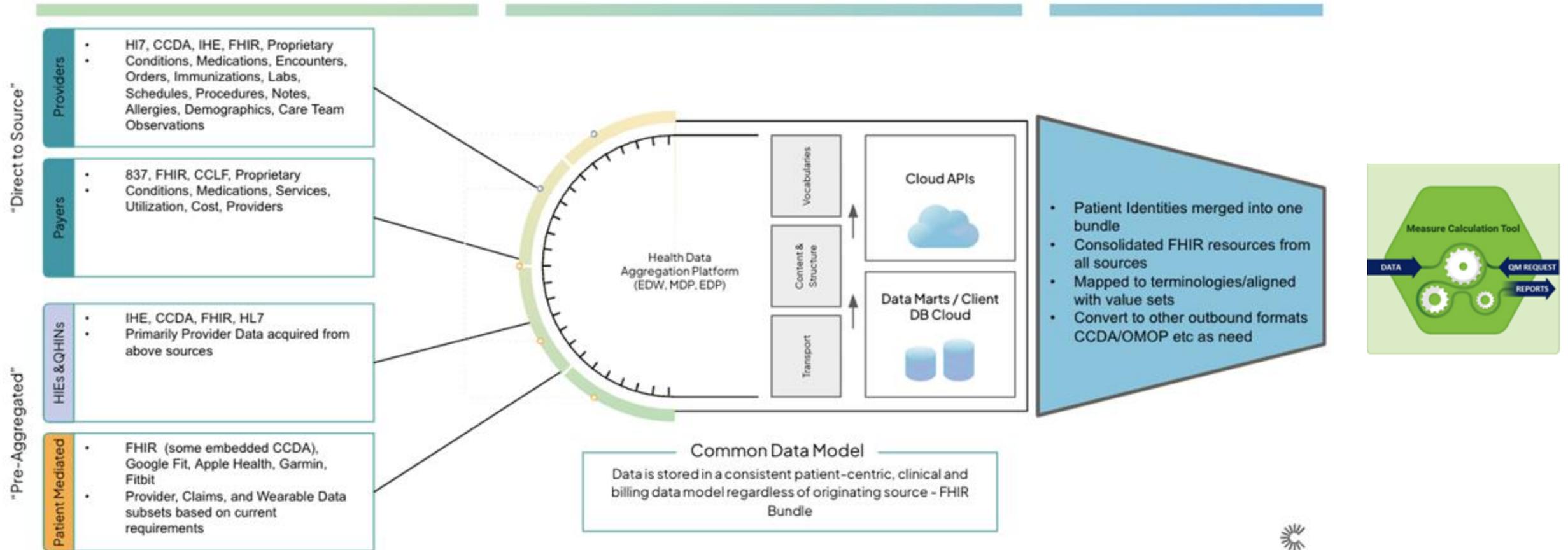
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The Reality of The Health Data Landscape

Precious little data is generated and made available in FHIR. What/how to feed the dQM Rocket Engine the only diet it eats – a HEDIS IG compliant FHIR Bundle?



The Need for Data Normalization In The Wild



Whether FHIR, CCDA, HL7, or ANSI transactions, a data refinery or normalization step is necessary.

Type	Raw clinical data	CE uplifted data	HEDIS value set name
Immunization	HEPATITIS B 0-19 YRS./ENGERIX B 08 (Free Text)	49610 (RXNORM) 43 (CVX)	Hepatitis B Immunization
Diagnosis	Final: Type 1 diabetes mellitus without complications (Free Text)	E10.9 (ICD-10-CM)	Diabetes Mellitus Without Complications
Procedure	CHLAMYDIA TRACHOMATIS IGM ABS 125306 (EPIC code)	134256004 (SNOMED)	Chlamydia Tests
Procedure	GI-COLONOSCOPY SCREENING (LVL4) (Free text)	73761001 (SNOMED)	Colonoscopy
Crosswalk	19515-808-52 (NDC)	150 (CVX)	Influenza Immunization
Crosswalk	2642200 (RxNorm)	150 (CVX)	Influenza Immunization
Crosswalk	CHLAMYDIA TRACHOMATIS IGM ABS 6920-3 (LOINC)	134256004 (SNOMED)	Chlamydia Tests

The Need for Data Normalization In The Wild



Hand to hand combat with each feed from each provider for each version of each source.

User: Source System: Author: Last 7 days EDT Refresh

User Distribution		Software Name Distribution	
attributes.CustomerID	count	attributes.SoftwareName	count
Orchestrate-MWAA-Projects-Prod	60,270	Epic - Version 11.2	56,197
		Epic - Version 11.1	2,452
		Epic - Version 10.9	727
		Epic - Version 10.8	464
		Epic - Version 11.3	124
Total	60,270	Total	60,270

Author Distribution (top 100)	
attributes.AuthorName	count
Hackensack Meridian Health	24,554
RWJBarnabas Health	22,174
Englewood Hospital and Medical Center	8,263
Virtua Health	3,186
Atlantic Health	879
Cooper University Health Care	248
Total	60,270

Normalization Pipelines Requires Deep Provenance And Validation for Sensitivity and Specificity



Not Just at go-live and validation but continuously to ensure there is no drift from expectations as source systems change and mapping evolve during the year

User: Enter value | Source System: athenahealth | Author: Enter value | Last 7 days | Refresh

Total Documents: **756768**

HEDIS Uplift

ValueSet	% Well Coded Src	% Uplift - XWalk	% Uplift - NLP	Total % Uplift	# Uplifted Concepts	# Concept:
Hedis2024 - Acute Condition	28.26%	65.03%	6.71%	71.74%	2693353	3754143
Hedis2024 - Mental and Behavioral Disorders	13.51%	70.64%	15.85%	86.49%	1042568	1205458
Hedis2024 - Cholesterol Lab Test	31.41%	1.91%	66.68%	68.59%	880944	1284334
Hedis2024 - Mental, Behavioral and Neurodevelopmental Di...	49.05%	33.24%	17.71%	50.95%	648275	1272262
Hedis2024 - Urine Creatinine Lab Test	12.07%	0.00%	87.93%	87.93%	474147	539203
Hedis2024 - Respiratory Conditions and Symptoms	66.54%	25.30%	8.16%	33.46%	463856	1386343
Hedis2024 - Depression or Other Behavioral Health Condition	58.02%	18.02%	23.95%	41.98%	384416	915804
Hedis2024 - Mental Health Diagnosis	59.23%	17.06%	23.71%	40.77%	383085	939631
Hedis2024 - Diagnostic Radiology	19.98%	63.37%	16.65%	80.02%	231621	289456
Hedis2024 - Generalized Anxiety Disorder	44.88%	31.89%	23.22%	55.12%	220759	400538
Hedis2024 - Mental illness and Intentional Self-Harm	56.42%	22.97%	20.61%	43.58%	196650	451217
Hedis2024 - Competing Diagnosis	58.30%	35.21%	6.49%	41.70%	186307	446754
Hedis2024 - Diabetes	70.32%	13.17%	16.51%	29.68%	108805	366655

Unlocked Data:

Total % Uplift by Measureset is significant and offers material improvement for Risk and Quality Programs and any other payer function

A Modern Data Fabric and Refinery Approach To Achieve Scale

The needs of the dQM for clean, coded, pre-processed structure, content, semantic meaning are shared with other use cases.



A Modern Data Fabric and Refinery Approach To Achieve Scale

Composable Reference Architecture of Best Fit Methods. A Rationalized FHIR R4/CARIN Bundle Repository Is a Distinct Step Prior to a HEDIS specific dQM IG Compliant Method

Strategic Payvider Data Competencies

No Data Left Behind (FHIR, HL7, X12, CCD, Files)

Capture and clean clinical, administrative, and other data sources
Data Source



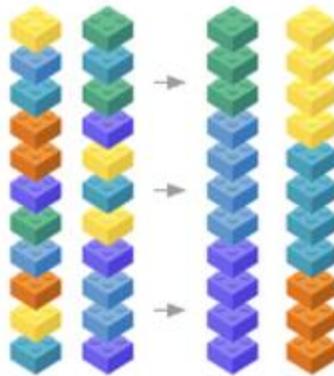
Data points are captured at the source, cleaned, and standardized in preparation for exchange across systems.

Raw data points are captured in their source systems regardless of transmission format, cleaned for usable data, and standardized to fit in the shared language across systems.

Standardization

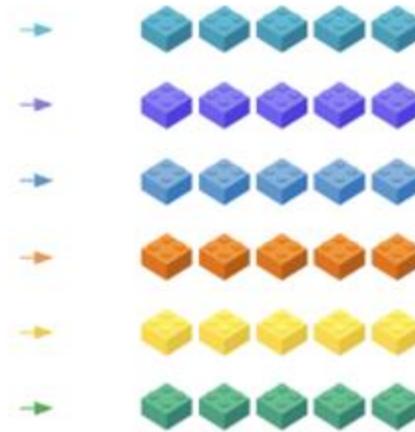
Apply semantic standards

Apply syntactic standards



Combined FHIR Bundle Rep

Combine data from multiple providers and data sources into a FHIR R4/EOB Bundle



Aggregated Clinical and Claims FHIR R4 Bundle Repository

Digital HEDIS

Digital Measure Computation

Apply measure logic to the data - HEDIS Core IG



dQM Container

Reporting, Analytics, and Edge Systems

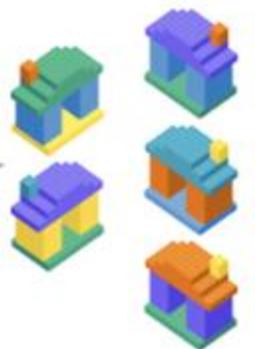
Reporting

Report measure logic to the data



Insights

Reveal insights from data across the continuum of care



Timely "continuous" calculation of digital quality measures helps provide insights into the health of a population, gauge the quality of care in the ecosystem, and inform the learning health system..

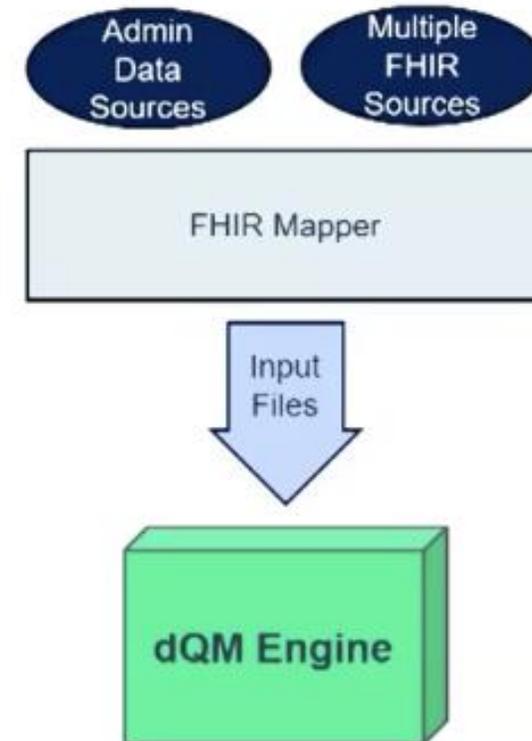
Reminder: We Heard It from Ingenia Health in Fall of 2025 And Every Other Expert in This Series



Your data mapping tools are a key piece of the architecture needed for the dQM transformation.

Your data mapper for the dQM engine input must:

- 1 Convert data to HEDIS Core Implementation Guide (IG)/Profile schema**
4 of 19 resources require extensions
Patient & Coverage resources are used for all measures
- 2 Handle edge cases and exceptions**
Accurate quality reporting and optimization of rates requires attention to detail
- 3 Maintain the tool according to latest specifications/IGs**
Will require ongoing effort to ensure the mapper and the targets are aligned
- 4 Create a single version of the truth from disparate sources**
Create clean patient bundles for each member
- 5 Apply DQ/DC best practices**
All translations must result in accurate & complete mapped data



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High Priority Questions To Ask NOW



- 1 Raw Data Inventory** How many places does raw source data live? Where does it land? Who moves it and how does it get to feed the current measure engine? How manual is the process? how long does it take to add a new source for supplemental data?
- 2 Transformation Pipeline and Processes** How is raw data massaged prior to feeding as a batch into the measures engine? How is traceability/auditability metadata generated of this transformation? How are changes to the data and processing recorded and tracked?
- 3 Technology Footprint** How many measures engines are currently in place? How are each plumbed from data? How are they different by LOB? Is there a single source of truth for the data fed to these engines? How far along is the organization in the use of composable “containers such as dQM? Is the technology team cloud native/savvy or largely using cloud as a virtual data center?
- 4 Team Structure** What are the roles / responsibilities of provider relations/collaboration team, interface IT team, EDW/EDP team, the measures business leader, reporting team, audit team?



Moderated Discussion Questions





I know we have a FHIR server? Is that enough?





I think I have a lot of digital provider data? How do I know if I have enough or the right kind for dQM?





How can I invest in this when I am already struggling with my current HEDIS program? Will any of this help me in 2026 and 2027?





Where do you recommend organizations start if they all of this sounds overwhelming?





Questions?

