

We will begin momentarily



Life of a Code for Digital Quality Measurement

Discover how clinical data travels from the point of care to its final impact in quality measurement



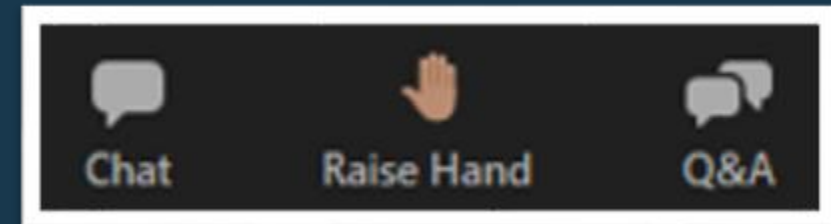


Housekeeping

Some tips to get started

- ▶ Slides & Recording will be sent after the session
- ▶ Please complete the survey at the end of the session
- ▶ Check out the [Digital Quality Hub](#) for additional information on the Digital Quality Transition

- 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 or in writing by one of the presenters.



Speakers



Anna Bentler, MSN, RN, CHCIO, CDH
Assistant VP of Quality Information,
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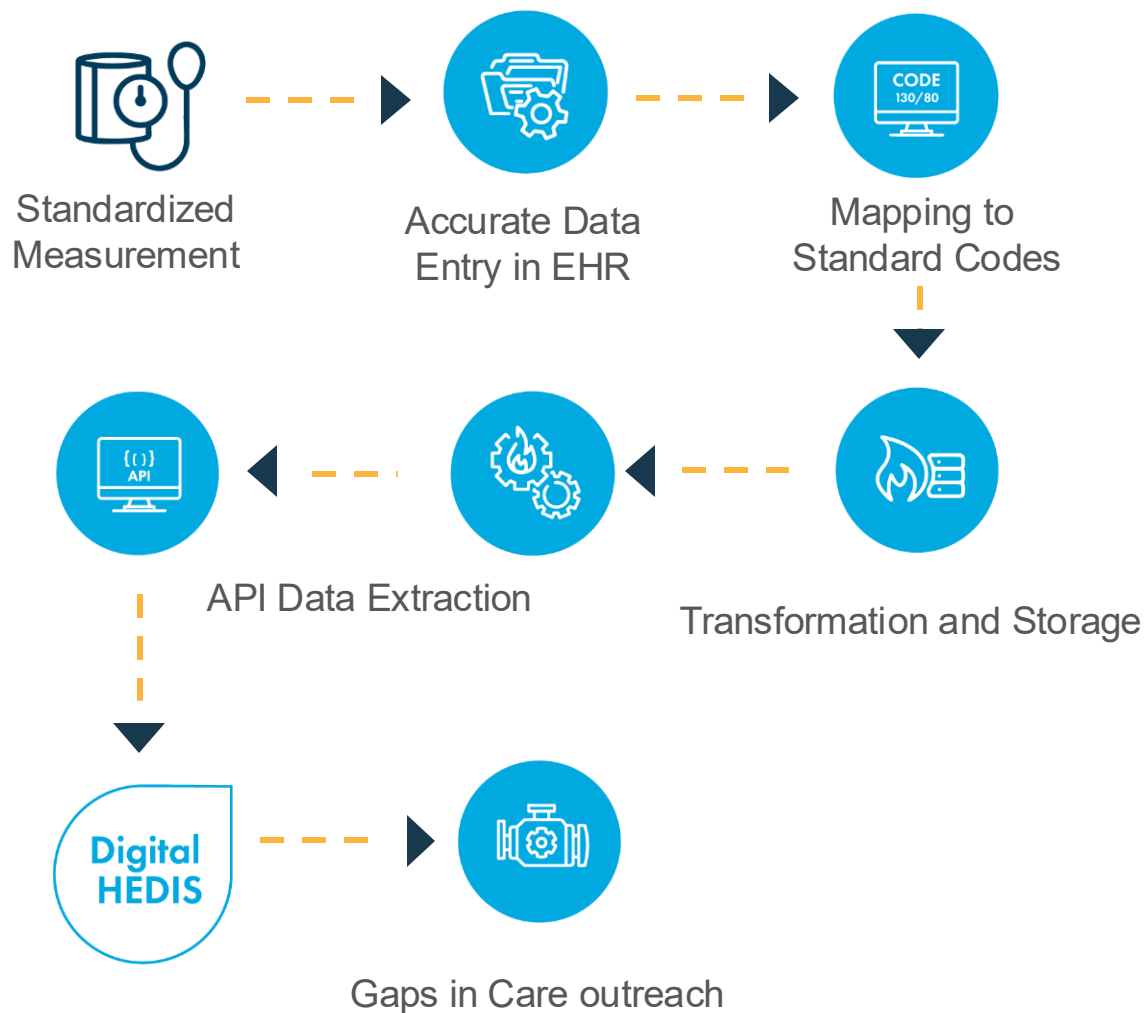


Allison Lance
Director, Digital Quality Community,
NCQA



Learn the process *a Blood Pressure result* follows from the **point of care**, being entered into the **EHR**, **mapping the Data** and being run in the **CQL engine** and ending with the **outcome reports**.

Tracking a Blood Pressure Result through the EHR



Path

- ▶ Capturing and Entering Blood Pressure in the Clinical Workflow
- ▶ Coding and Mapping Blood Pressure Results
- ▶ Data Extraction and Storage in Health Information Systems
- ▶ Quality Measure Assessment and Results Processing
- ▶ Outreach and Follow-Up Based on Blood Pressure Results

Entering the Blood Pressure Result into the Electronic Health Record (EHR)



Taking the Blood Pressure

Healthcare Professional takes the blood pressure from the patient



Taking the Blood Pressure

Healthcare Professional enters the result into the EHR.



It's important to be **timely** & **accurate** with the Data Entry. Accuracy is needed to support **clinical decisions** and **insight**, while accurate documentation is critical to ensure reliable patient clinical care.

Mapping BP Measurements to Standardized Codes

Mapping Observations to Standardized Terminologies



Measurement

The LOINC code specifies the type of observation (e.g., systolic blood pressure), and the associated value represents the measured result.

Why it matters

- Enables interoperability across systems
- Supports accurate quality measurement
- Ensures consistency in clinical documentation

Component	Description
Observation Type	Systolic Blood Pressure
Standard Code	LOINC: 8480-6
Measurement Value	189 mmHg
Mapped Data Element	Structured, machine-readable format for use in analytics & quality measures

The Mapping and API Exchange

FHIR Mapping

Data can be mapped/transformed to FHIR for interoperable exchange.

Systolic Blood Pressure
EHR Data

FHIR Mapping

Patient

Encounter

Observation

FHIR Server/ Data Repository

FHIR API

Quality Actions

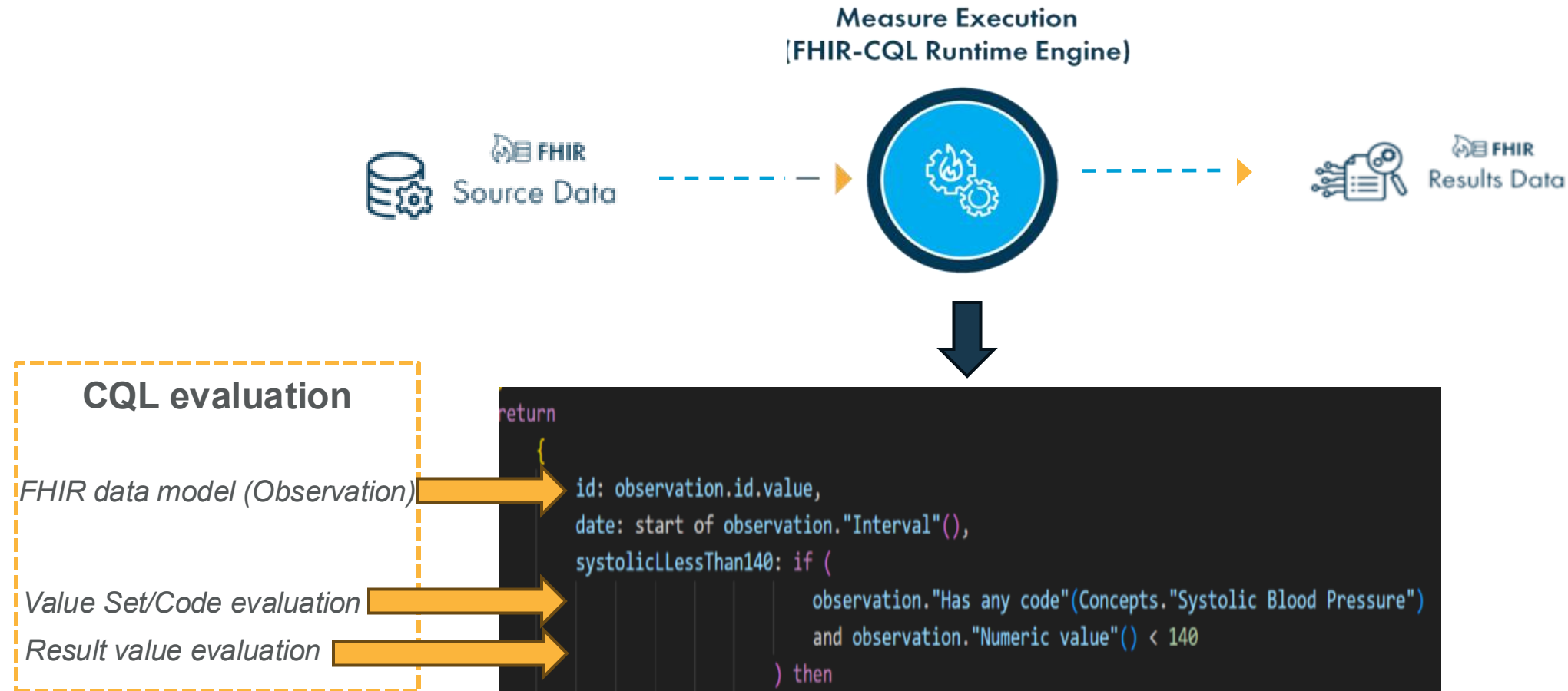
Seamless Data Transfer

Data is transferred seamlessly between EHR and external systems through API connections.



Engine runs measure

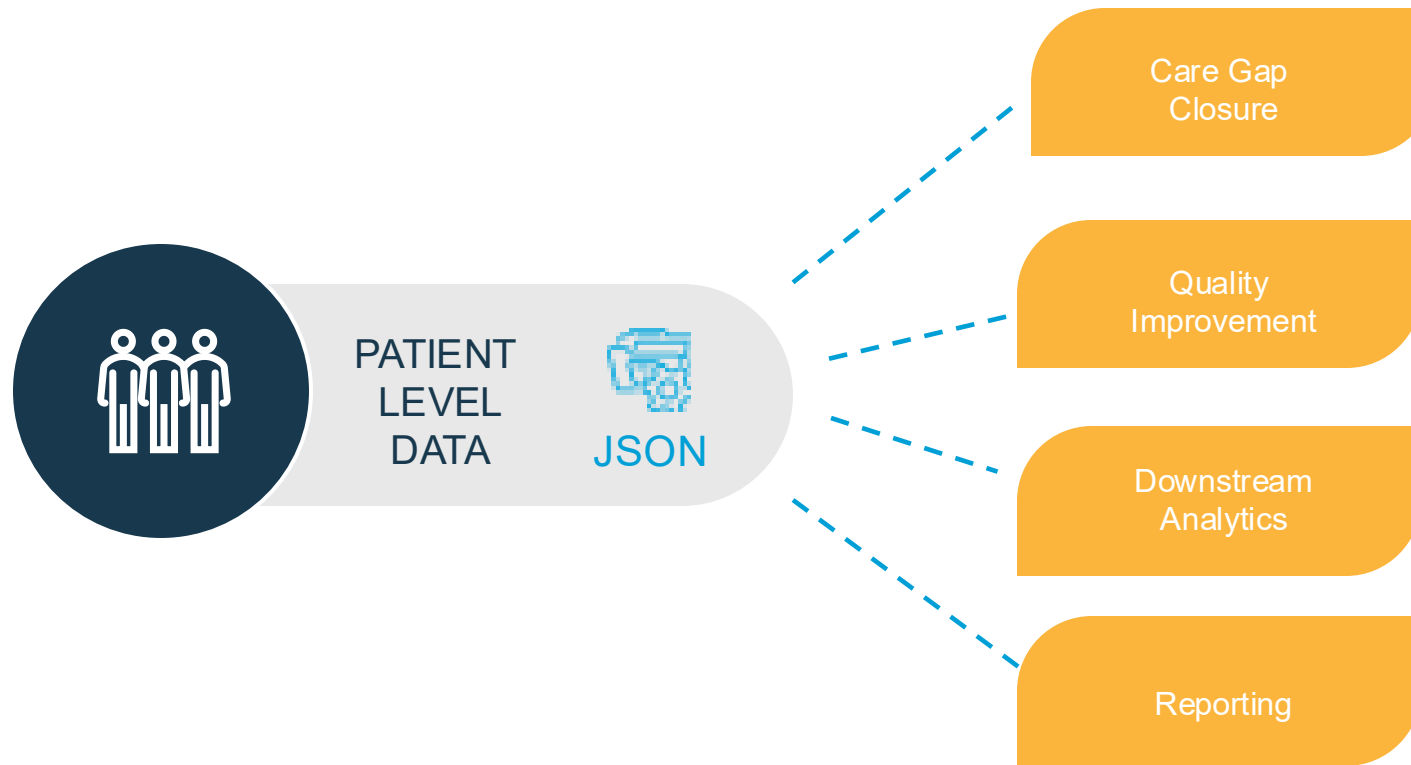
Logic is looking for relevant data to evaluate against measure criteria





Measure outcomes populate the pieces of the measure

After measures are executed, they produce outputs that form the components of the measure. These outputs are then used to calculate the familiar metrics and rates, which can be integrated into various workflows.



Defining the Output File Elements



```
"name": "Initial population",  
"valueBoolean": true
```

Initial Population	True
--------------------	------

```
"name": "Exclusion",  
"valueBoolean": false
```

Exclusion	False
-----------	-------

```
"name": "Numerator",  
"valueBoolean": false
```

Numerator	False
-----------	-------

```
"name": "Most recent systolic and diastolic blood pressure"  
"resource": {  
  "resourceType": "Observation",  
  "id": "observation.2024.bpd.0.95100.44",  
  "meta": {  
    "profile": [  
      "https://ncqa.org/fhir/StructureDefinition/hedis-core-observation"  
    ],  
  },  
  "status": "final",  
  "category": [  
    {  
      "coding": [  
        {  
          "system": "http://terminology.hl7.org/CodeSystem/observation-category",  
          "code": "vital-signs"  
        }  
      ]  
    }  
  ],  
  "code": {  
    "coding": [  
      {  
        "system": "http://loinc.org",  
        "code": "8480-6",  
        "display": "Systolic blood pressure"  
      }  
    ]  
  },  
  "subject": {  
    "reference": "Patient/patient.2024.bpd.0.95100"  
  },  
  "effectiveDateTime": "2024-06-27T00:00:00.000-05:00",  
  "valueQuantity": {  
    "value": 189, "system": "http://unitsofmeasure.org",  
    "unit": "mm Hg",  
  }  
}
```

Patient ID	123456
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Result	189
--------	-----



Measure Outcome Use for Quality Actions

- ▶ Supports clinical review and feedback
- ▶ Surfaces rationale for measure outcomes
- ▶ Guides care decisions and quality improvement actions

Data Analysis Support

Supports subsequent data analysis for insights and decision-making.

Quality Measurement

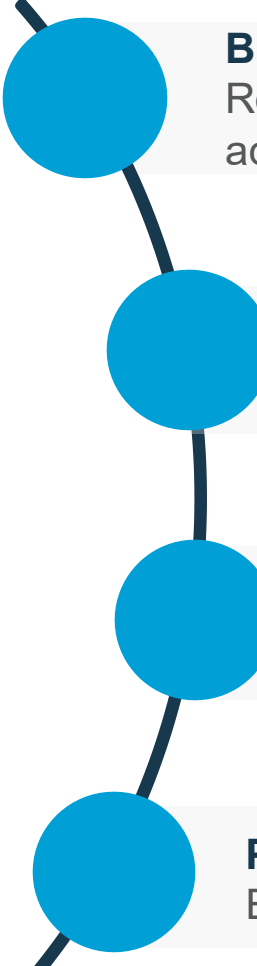
Enables quality measurement to improve health services and outcomes.

Population Health Management

Facilitates population health management initiatives to monitor and enhance community health.

Initiating patient outreach based on result and measure compliance

Utilizing the measure outcomes, the gap in care and population health work can start. Proper coding & tracking helps health care workers identify patient risk & care needs.



Blood Pressure Result Monitoring

Regular monitoring of blood pressure results helps identify patients needing follow up care and adjustments

Accurate Data Capture & coding

Effective BP tracking & ensures precise collection of reading in EHR records.

Measure Compliance Tracking

Tracking patients' compliance supports timeline interventions and improved health outcomes

Patient Outreach Process

Effective patient outreach ensures ongoing care management, though timely communication & follow up

Best Practice Tips



Mapping, importance of early collaboration across team for mapping codes



Metadata, make sure you have all the metadata (encounter or provider attribution, units, results, patient identifier)



Timing and Temporal gaps, check timestamps, alignment with measure period



Transport and format, HL7/FHIR messages, support of standard APIs or bulk data support,



Alignment with Quality

Measure Logic, data elements present and formatted, population logic applied correctly, support of value sets in measure



Privacy and Security, making sure data is secure and is shared across entities



Testing mappings before measure runs.



Validating outputs with clinical SMEs.

Questions?

