Measuring the Quality of Medical Care for People with HIV

Mathematica

Health Resources and Services Administration's HIV/AIDS Bureau

2022

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Welcome

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Disclosures

- Marlene Matosky has no relevant financial interests to disclose.
- Anna Christensen receives contractual support from Edwards Lifesciences (not relevant to content).
- Ethan Jacobs received contractual support from Edwards Lifesciences (not relevant to content).

Learning Objectives

- Identify the three eCQMs currently under development by HRSA HAB
- Discuss the benefits of eCQMs for improving quality of care while reducing burden on clinicians related to data submission
- Explain progress to date and interim findings related to developing and testing the three measures

Agenda

- HIV Electronic Clinical Quality Measures (eCQM) Modernization Project
- Overview of measures
- Measure context
- Measure conceptualization and testing
- Plans for additional testing
- Next steps
- Questions and answers (live)

HIV eCQM Modernization Project

Overview of project

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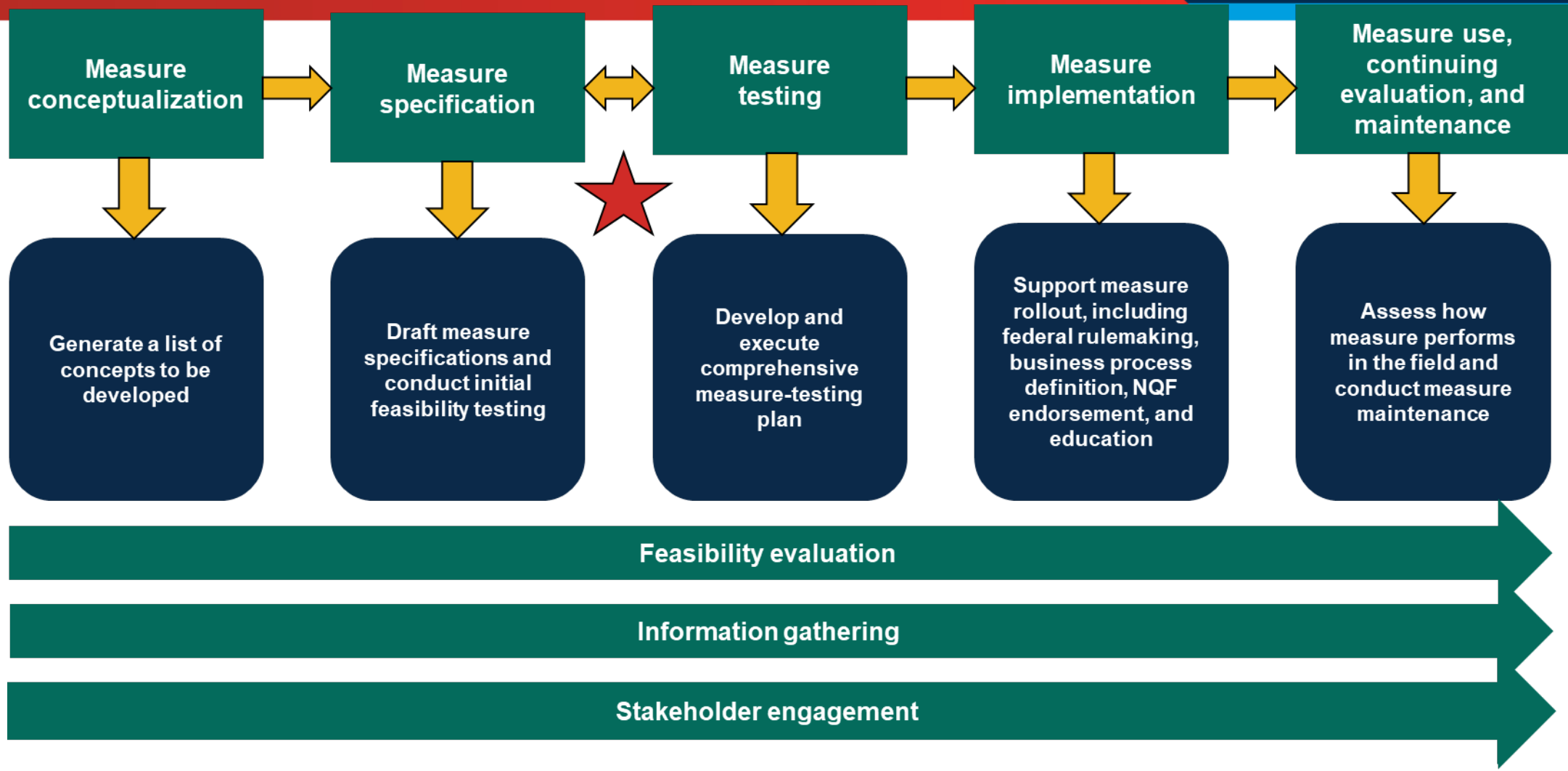
- Our team is helping HRSA HAB:
  - Specify three HIV measures as eCQMs
  - Test to ensure they meet the criteria for successful quality measures
  - Prepare materials to submit the measures for inclusion in the Merit-based Incentive Payment System (MIPS) and obtain endorsement by the National Quality Forum (NQF)
- Approach follows the Centers for Medicare & Medicaid Services (CMS) Measures Management System Blueprint, the guide for developers creating measures for CMS programs

Intent of measures

- Measures are designed to provide incentives for improved quality of care for people with HIV
- Two measures are adaptations of measures reported by Ryan White HIV/AIDS Program (RWHAP) recipients

CMS Measures Management System Blueprint: Measure life cycle



NQF

- NQF is an independent, consensus-based entity that reviews and potentially endorses measures considered for use in CMS programs
- NQF previously endorsed the HIV Viral Suppression eCQM in 2017
  - HAB will submit this measure to maintain endorsement and submit the other two eCQMs for initial endorsement
  - Endorsement shows that a measure was reviewed by an expert panel of stakeholders and is seen by payers as a high-quality measure

NQF endorsement criteria

- Importance to measure and report
- Scientific acceptability of measure properties
- Feasibility
- Usability and use
- Related and competing measures

Timeline for three phases of project

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Phase I. Conceptualization	Environmental scan Nov. 2021	TEP 1 Jan. 2022	Public comment March 2022	TEP 2 April 2022	TEP 3 Oct./Nov. 2022
Phase II. Specification	Narrative specifications Dec 2021	Technical specifications December 2021 to December 2022			
Phase III. Testing	Test-site recruitment Dec. 2021	Testing Jan./Sept. 2022			

TEP = technical expert panel.

Overview of Measures

Measures under development

- HIV Viral Suppression
- HIV Annual Retention in Care
- HIV: STI Testing

HIV Viral Suppression

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- Goal: To provide an incentive for clinicians working with patients with HIV to increase viral suppression, improve patient health, and reduce HIV transmission
- Assesses percentage of clinician's patients with HIV whose most recent viral load during the year is less than 200 copies/mL

HIV Viral Suppression: Specifications

Component	Description
Denominator	All patients meeting the following criteria: HIV diagnosis before the measurement year or in the first three months of the measurement year No age restrictions At least one eligible encounter (e.g., office or outpatient visit, telehealth visit) in the first eight months of the measurement year
Denominator exclusions	None
Numerator	Patients with an HIV viral load of less than 200 copies/mL at last viral load test during the measurement year
Numerator exclusions	None

HIV Annual Retention in Care

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- Goal: To provide an incentive for clinicians to ensure patients with HIV are retained in care, as poor retention in care is associated with:
  - Lower rates of antiretroviral use
  - Delayed viral suppression
  - Increased risk of mortality
- Assesses percentage of a clinician's patients with HIV who had at least two touch points (at least 90 days apart) during the year
  - Two encounters (e.g., outpatient or office visit, telehealth encounter) or
  - One encounter and one HIV viral load test

HIV Annual Retention in Care: Specifications

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Component	Description
Denominator	All patients meeting the following criteria: HIV diagnosis before the measurement year or in the first eight months of the measurement year No age restrictions At least one eligible encounter (e.g., office or outpatient visit, telehealth visit) in the first eight months of the measurement year
Denominator exclusions	None
Numerator	Patients who had at least two eligible encounters, or at least one eligible encounter and one HIV viral load test, at least 90 days apart during the measurement year
Numerator exclusions	None

HIV: STI Testing

- Goal: To address increases in sexually transmitted infections (STIs) by providing incentives for clinicians to test their patients annually
- Assesses percentage of a clinician's patients with HIV age 13+ who had tests for syphilis, chlamydia, and gonorrhea within the year

HIV: STI Testing: Specifications

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Component	Description
Denominator	All patients who meet the following criteria: HIV diagnosis before or during the measurement year 13 years old or older At least one eligible encounter (e.g., office or outpatient visit, telehealth visit) during the measurement year
Denominator exclusions	None
Numerator	Patients who had tests for syphilis, chlamydia, and gonorrhea at least once during the measurement year
Numerator exclusions	None

Measure Context

We want to hear from you!

- Please use the chat to answer the following question, which we'll discuss during the live Q&A
- How familiar are you with electronic clinical quality measures (eCQMs)?
  - A. I've never heard of them
  - B. I've heard the term but don't know much
  - C. I'm very familiar with them

What are eCQMs?

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- eCQMs are quality measures that rely on data from structured fields in electronic health records (EHRs)
- Benefits of eCQMs
  - Reporting can be automated and low burden because the data come from structured fields (rather than manual chart review)
  - EHRs are a rich source of data relative to claims, enabling measures to account for factors such as symptoms and lab results
- Limitations of eCQMs
  - All data required for the measure must be captured in a structured field in the EHR and collected under existing workflows
  - Data must be consistent with eCQM measure specifications

Capturing data in EHRs

- Data must be captured in structured fields
  - Examples:
    - HIV diagnosis should be captured in structured fields such as in problem list, rather than in free-text notes
    - Lab-test values from outside labs must be stored in structured fields, not scanned as PDFs
- Coding must be consistent with eCQM specifications
  - Example: An HIV viral load test must be identified in the EHR using one of the LOINC codes from the measure specification, or it will not factor into the measure score
- Certain data elements must have date/time stamps
  - Example: EHR must note the dates of syphilis tests to determine whether the tests met the measure criteria

Overview of CMS MIPS program

- MIPS offers incentive payments to clinicians serving Medicare beneficiaries to:
  - Improve quality of care
  - Reward cost-efficient care
  - Increase the use of health information technology
- Adding the HIV eCQMs to MIPS would:
  - Allow clinicians specializing in HIV care to have more specialty-relevant measures to report
  - Drive improvements in quality of care for patients with HIV

We want to hear from you!

- Please use the chat to answer the following question, which we'll discuss during the live Q&A
- Does your institution participate in the MIPS program?
  A. I don't know
  B. We do not participate in MIPS
  C. We participate in MIPS, but I don't know the details
  D. We participate in MIPS, and I'm familiar with the program

How does MIPS work?

- CMS evaluates participating clinicians on four criteria:
  - Quality (our measures would fall into this category)
  - Promoting interoperability
  - Improvement activities
  - Cost
- Based on clinician performance, CMS adjusts Part B payments
  - Payment adjustment can be negative, neutral, or positive
  - Adjustments are small due to statutory limits and budget-neutrality requirements
    - In 2021, the maximum negative adjustment was 7%, and the maximum positive adjustment was 1.8%

Quality measure reporting

- Clinicians report at least six quality measures under MIPS
- MIPS allows reporting of quality measures through six collection types
  1. eCQMs (including our measures)
  2. MIPS clinical quality measures
  3. Qualified Clinical Data Registry measures
  4. Medicare Part B claims measures
  5. CMS Web Interface measures
  6. Consumer Assessment of Healthcare Providers and Systems for MIPS survey

Measure Conceptualization and Testing

Measure conceptualization

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- Goal: Gather information from range of sources to inform measure specifications and provide an evidence base for the measures
- Literature review
  - Gathered evidence from peer-reviewed literature and clinical guidelines
- Technical expert panel
  - Convened experts in HIV care and quality measurement to provide input on measure development
  - Have held two of three meetings to date
- Public comment
  - Solicited comments on specifications via April 2022 posting on TargetHIV.org

Goals of feasibility testing

- Determine whether clinical practices collect the data elements needed for measure reporting
  - Do practices capture the needed data elements (e.g., eligible encounters, HIV diagnoses, HIV viral load results, and STI tests) in structured fields?
  - Do practices need to modify their clinical workflows to report these eCQMs?

We want to hear from you!

- Please use the chat to answer the following question, which we'll discuss during the live Q&A
- Do you think these eCQMs would be feasible to report at your site? Why or why not?

Recruited eight diverse clinical sites to participate in feasibility testing

Domain	Type
Region	Four Northeast, two Midwest, two South
Location	Five urban, one rural, two mixed (both urban and rural areas)
Provider type	Two hospital- or university-based clinics Four publicly funded community health centers One People Living with HIV coalition One other community-based service organization
EHR	Four eClinicalWorks Two EPIC One NextGen One Athena Health

Feasibility testing approach

- Interviewed staff from each site about clinical workflows and data capture in the EHR
- Populated an NQF “Feasibility Scorecard” template that assesses whether each data element needed for reporting the measure is:
  - Available in structured fields
  - Accurately recorded
  - Coded using nationally accepted terminology standards
  - Captured in existing workflows

Feasibility findings: Capture of measure data elements

- All eight sites reported that key data elements required for all three measures are captured in structured fields under existing workflows, including:
  - Encounter types and dates
  - HIV diagnoses
  - HIV viral load test dates and results
  - STI test dates
- Four of eight sites are missing the date of HIV diagnosis in a structured field for all or a subset of patients
  - All patients (two sites)
  - Non-RWHAP patients (one site)
  - Patients transferred from other providers (one site)
- HIV diagnosis dates used in HIV Viral Suppression and HIV Annual Retention in Care measures to exclude patients diagnosed too late in the year for inclusion in the denominator

Feasibility findings: Connections between EHRs and outside labs

- Many sites rely on outside labs for HIV viral load and STI testing
- Sites using outside labs set up bridges between site's own EHR and lab, enabling automatic transfer of lab data into structured fields in the EHR

We want to hear from you!

- Please use the chat to answer the following questions, which we'll discuss during the live Q&A
  - Does your clinic capture the date of HIV diagnosis in your EHR for patients who were diagnosed before starting care at your site?
  - Do you capture diagnosis dates for patients with HIV not covered by Ryan White?
  - If your clinic relies on outside labs, do you import lab results directly to your EHR?

Feasibility findings: STI testing

- Sites rely on bundled test orders (initial and confirmatory tests) for syphilis, suggesting that a single test order should be sufficient for the numerator
  - For example, sites might use a rapid plasma reagin (RPR) (diagnosis) with reflex to titer and confirmatory testing, or a syphilis antibody cascading reflex test

We want to hear from you!

- Please use the chat to answer the following question, which we'll discuss during the live Q&A:
  - When you order a syphilis test in your EHR, can you order a bundle/cascade of tests, or do you need to order each test separately (e.g., first a nontreponemal test and then a treponemal test to confirm that the first test is reactive)?

Plans for Additional Testing

Criteria for assessing measures

Criteria	Research questions
Importance	Is there a performance gap (i.e., do clinicians have room to improve)?
Reliability	Do the measures permit identification of statistically meaningful differences between clinicians' performance?
Validity	Do the measures assess what they are supposed to be assessing?
Usability	Can clinicians use the results of the measures to drive quality improvement?

Planned analyses

Criteria	Analysis
Importance	Calculate clinician-level performance scores to assess the distribution
Reliability	Run statistical analysis to show whether differences in measure scores represent meaningful differences in clinician performance
Validity	Examine whether clinicians with high or low scores on the measures have corresponding high or low rates on related measures (e.g., do clinicians who have high rates of retention in care also have high rates of viral suppression?)
Validity	Compare performance on the measures across different patient populations
Validity	Compare data from the EHR to a manual review of patient medical records
Validity and usability	Interview clinicians at test sites to ask: Do the measures capture what they are intended to measure? Can clinicians use them to drive quality improvement at their clinics?

Next Steps

Next steps

- Complete testing by this fall
- Discuss testing findings with HRSA HAB
- Draft materials for submission to NQF and CMS

Live Q&A

Contact us for more information

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