Selecting Performance Measures for Your Quality Improvement Efforts

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Learning Objectives

1. Understand the definition of quality improvement (QI) and familiarize ourselves with QI guiding principles.
2. Explore the concept of an indicator as the foundation of a performance measure.
3. Gain a basic understanding of Percentage and rate calculations as they relate to Performance Measurement
4. Learn the process of selecting performance measures using Health Resources and Services Administration (HRSA) HIV/AIDS Bureau's (HAB) data.
5. Understand the Plan-Do-Study-Act (PDSA) cycle as a method of improvement in healthcare.
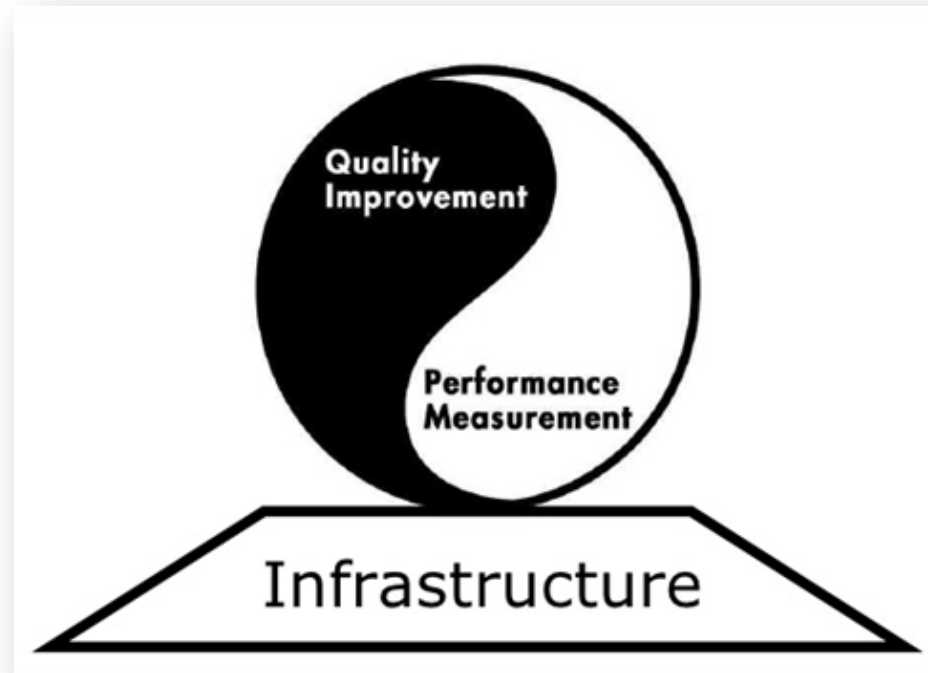
The Roads We've Taken

- How do we 'measure' HIV and how does that influence funding for HIV care?
- Do we use data to make decisions to select what is measured (a.k.a. performance measurement)?
- Do we use data results to make decisions about the care that is provided?

Quality Improvement

- Balance of performance measurement and improvement activities
- Quality management program supports improvement activities

Quality Improvement Guiding Principles

- Success is achieved through meeting the needs of those who are served

- Most problems are found in processes, not in people

- Do not reinvent the wheel; learn from best practices

- Achieve continuous improvement through small, incremental changes

- Actions are based upon accurate and measured data

- A step backward isn't a mistake

- Think big, start small, and grow

- Set priorities and communicate clearly

- Community first

https://targethiv.org/sites/default/files/media/documents/2022-08/CQII_QI_Implementation_Science_CQI_Webinar_Series_Aug_2022.pdf

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Introduction to Performance Measurement

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Reasons to Measure HIV Care

- Communicates priorities

- Drives improvement

- Separates what you think is happening from what really is happening

- Establishes a data baseline

- Ongoing /periodic monitoring helps identifies problems as they emerge

- Measurement allows for comparison across jurisdictions and networks

- Ryan White HIV/AIDS Program (RWHAP) legislation emphasizes quality management and requires performance measurement

Measures vs Standards of Care

- Measures = an indication of the organization's performance

- Standards of care/Service standards = outline of expectations of care

What is an Indicator?

What is a Quality Indicator?

Quality Indicators (QIs) are standardized, evidence-based measures of health care quality that can be used with readily available data to measure and track clinical performance and outcomes.

https://qualityindicators.ahrq.gov/measures/qi_resources

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Core HRSA/HAB HIV Measures

Aspect of HIV Care	Quality of Care Indicator
Anti-retroviral Therapy	**Viral Load Suppression** **ART Prescription**
Retention	**Medical Visit Frequency** **Gap in Medical Visits**
Opportunistic Infections	**PCP Prophylaxis**

https://ryanwhite.hrsa.gov/grants/performance-measure-portfolio/core-measures

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What Makes a Good Indicator?

- **Relevance**
  - Does the indicator affect a lot of people or programs?
  - Does the indicator have a great impact on the programs or clients in your jurisdictions (i.e., state, local health departments) or networks (i.e., clinic, service provider site)?

Measurability
  - Can the indicator realistically and efficiently be measured given finite resources?

What Makes a Good Indicator?

- **Accuracy**
  - Is the indicator based on accepted guidelines or developed through formal group-decision making methods?

- **Improvability**
  - Can the performance rate associated with the indicator realistically be improved given the limitations of services and population?

REVIEW: Percentage & Rate Formulas Approaching !

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Data Terms

Percent

One part in a hundred: an amount that is equal to one one-hundredth of something (1/100)

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Question:

What percentage of the patients reached viral load suppression?

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Data Set

Performance Measures	Total	
	Numerator	**Denominator**
Medical Visits	7,542	8,769
Viral Load Monitoring	6,122	7,653
Viral Load Suppression	5,681	6,634
PCP Prophylaxis	1,303	1,430
Syphilis Screening	6,695	8,974
Oral Exam	2,147	8,924

Percentage

Patients Who Were
Virally Suppressed

Patients Who
Should Have Been
Virally Suppressed

Step One:

The **Numerator** divided by the **Denominator** will give us a **NUMBER**.

Step Two:

Take that **NUMBER** and multiply by **100** to get the **PERCENT**.

Answer

- After dividing 5,681 by 6,634 and then multiply by 100 you get a percentage of 86
- 86% of the total patient population reached viral suppression in the measurement period

Rate

- **Step One:**
  - The PREVALENCE divided by the TOTAL POPULATION will give us a NUMBER.

- **Step Two:**
  - Take that NUMBER and multiply by 100,000 to get the RATE.

Rate Vs. Percentage

We have a problem . . .

I got . . .

- A lot of people with HIV
- A small rural city
- A higher percentage of the population with HIV
- A huge impact on my city
- A need to accurately compare my problem to yours

You got . . .

- A lot of people with HIV
- A metropolis
- More actual persons with HIV
- A huge impact on my city
- A need to accurately compare my problem to yours

Why 100,000?

- To Compare

Not all cities have the same population so we standardize the population so we can compare.

- To Simplify

Such small numbers comparatively that you would end up with .05 of a person . . . How do we plan for that?

Don't let the perfect be the enemy of the good...

Things to consider . . .

- If you want it, you must go get it
- By the time you got it, its old
- There is a lot of it
- It has to be interpreted and analyzed
  - Appears to be, May indicate, Could mean
- It can be manipulated (massaging data)
- It's always changing

HIV/AIDS Bureau Core Performance Measures

Updated June 2023

https://ryanwhite.hrsa.gov/grants/performance-measure-portfolio/core-measures

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Performance Measure: HIV Viral Load Suppression

National Quality Forum #: 2082 / 3210e

Description: Percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/ml at last viral load test during the measurement year

Numerator: Number of patients in the denominator with a HIV viral load less than 200 copies/ml at last HIV viral load test during the measurement year

Denominator: Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year

Patient Exclusions: None

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# HIV Viral Load Suppression

Denominator

Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year
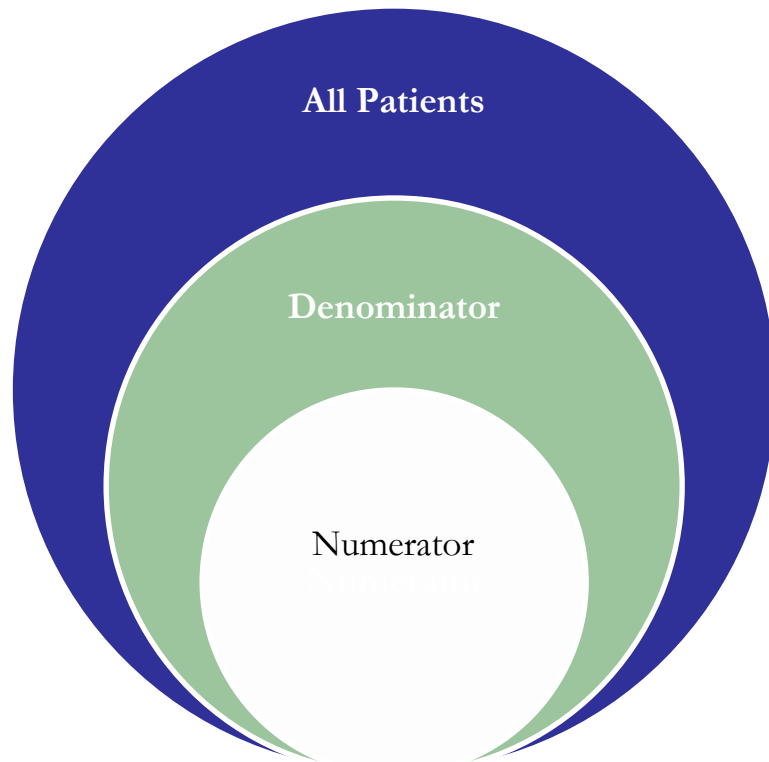
Numerator

Number of patients in the denominator with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year

Exclusions

None

All Patients

Patients with at least one medical visit

Patients with HIV Viral load less than 200 copies/mL
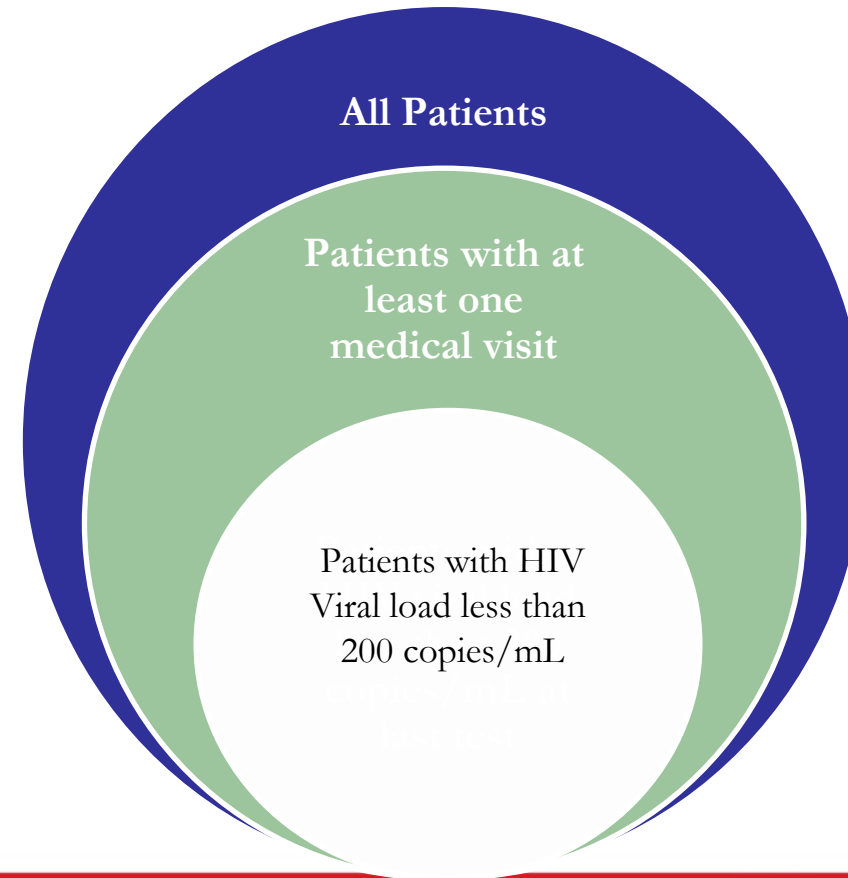
Performance Measure Definition

- Denominator: Specifically which patients *are eligible to receive* care?

- Numerator: Which patients *received* the care?

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PDSA Cycle

Plan

- What is the goal?
- Why do we think this is happening and what might be the needed action?
- Plan to carry out the cycle (who, what, where, when)

Do

- Carry out the plan **(on a small scale)**
- Document problems and unexpected observations
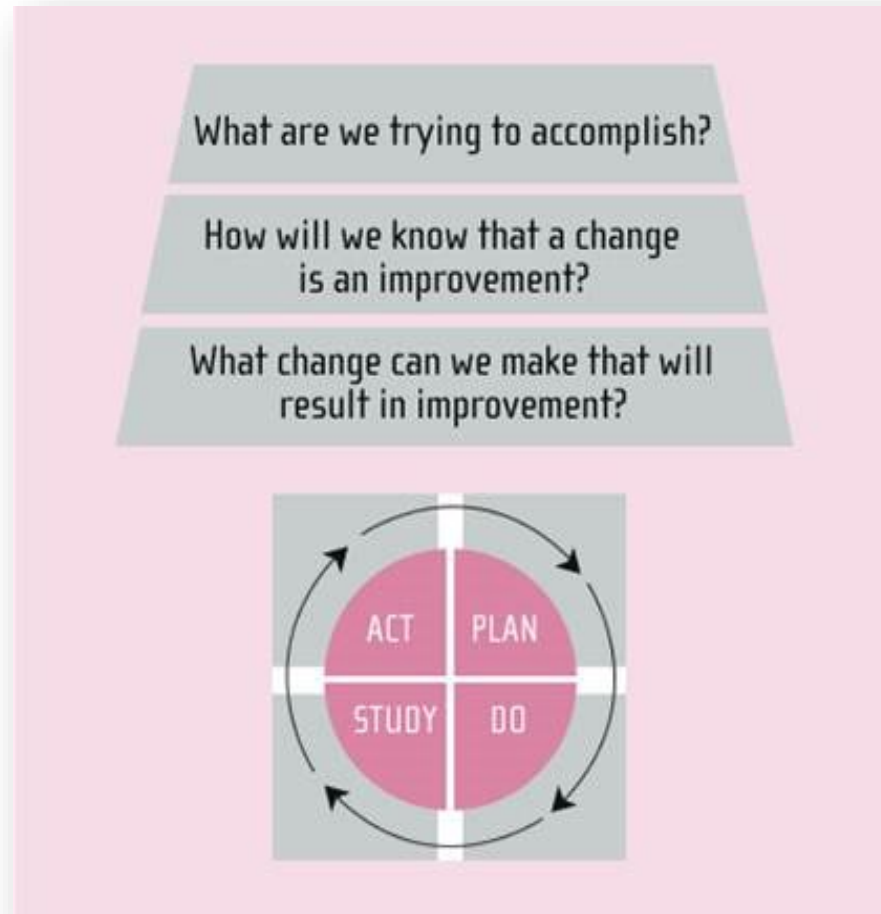- Begin looking at data from the experiment

Study

- Reach conclusions and form opinions
- Compare outcomes to hunches
- Summarize what was learned

Act

- Adapt?
- Adopt?
- Abandon?
- Next cycle?

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Model for Improvement

Three Questions

- What are we trying to accomplish?
- How will we know that change is an improvement?
- What change can we make that will result in improvement?

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Improvement usually requires change . . .

. . . but not every change is an improvement!

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Discussion

- Does our HIV community [clients, clinic, planning bodies, recipients] use performance measures appropriately and effectively? If so, how?

- How might the selection of performance measures change our activities as they relate to improving HIV care?

- Does our community have well established and productive partnerships to meet the needs of the epidemic today?

Things to Remember

When choosing a Performance Measure:

We always want to make sure a performance measure is relevant and inclusive to be most effective:

- Are we including all patients of all ages, or focus on a specific age group?
- Is the indicator gender inclusive for all patients?
- Do we need to exclude or include anyone because of disease progression?
- Does it matter if the patient made their last medical visits?

Performance Measure Checklist

- Do you understand the Performance Measure Definition definition(s) for those performance measures used in your data reporting?

- What are the key findings of the data reports – e.g., viral suppression rate?

- Do you understand them?

- Can you interpret the data?

- Does the data chart clearly state the number of records being used for each performance measure, particularly when percentages are used?

- Does the data report clearly state the timeframes for each performance measure so that you understand whether the review captures data from the last month versus the last year?

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What are the data telling us?

- Patient Level
  - Each patient is data point: how is that individual doing?
- Clinic Level
  - Patient data is aggregated: how is the clinic performing?
- Regional Level
  - Clinic Data is aggregated: how are the regions doing?
- National Level
  - Regional data is aggerated: how is the nation doing?

THANK YOU

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