THE EFFI BARRY TRAINING INSTITUTE

Improving Data Literacy

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Our Day Together

- Welcome & Introductions
- Data Crash Course
  - Exploring Data Types and Their Uses
  - Quality Improvement Lifecycle and Tools
  - Data Collected by Providers, HAHSTA, and Others
  - Putting It Together
- Lunch
- Diving Into Our Data! An Interactive Applied Learning Experience
- Adjourn and Evaluation

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A review

EXPLORING DATA AND THEIR USES

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Learning Objectives

- List the major components of a performance measure
- Explain the difference between quantitative and qualitative data
- Distinguish between quality assurance and quality improvement
- Discuss how CQM programs are the vehicle for improvement

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Types of Data

- Demographic
- Clinical
- Survey
- Feedback/Comments

- Counts
- Percentages

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Basic Measurement Terms

- Numerator
- Denominator
- Exclusions
- Performance Measure
- Compound or Bundled Measu
- Measure Sets
  - Process Measure
  - Outcome Measure
  - Balance Measure

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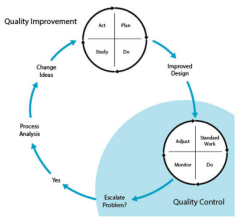
Performance Measures

- The basis of Quality Assurance
  - How is everything working?
  - Meets minimum standards?
  - Follows established policies/ procedures/protocols?
- Illuminates considerations for:
  - Further study
  - Quality improvement
  - Program planning



Scoville R, Little K, Rakover J, Luther K, Mate K. Sustaining Improvement. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016. (Available at [redacted]

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Quantitative vs Qualitative

- Quantitative data are reliably countable
  - Clinical data
  - Demographic data
  - Financial data
- Qualitative data are not readily countable, but can be coded in a way that can make them measurable in an objective way
  - Key Stakeholder Interview data
  - Focus group data
  - Comment cards
  - Survey data (because lends itself to interpretation)

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How and When to Use Quantitative vs Qualitative Data

- Quantitative data serve as the primary vehicles for quality assurance and quality improvement
- Qualitative data can serve as a red flag for further study
  - Can be either positive (helps with spread) or negative (QI possibility)
  - Create specific performance measures (quantifiable)
  - Deconstruct a process into step measures (more on that later)
- Performance measures are made of BOTH and both are accepted by HRSA-HAB to meet PCN 15-02 requirements

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Ball and Pedestal Model

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HRSA-HAB Policy Clarification Notice 15-02

- The HIV/AIDS Bureau's requirements regarding clinical quality management based on the Ryan White HIV/AIDS Program legislation
- Applies to recipients of all Parts funding and their subrecipients
- The focus is on improving HIV health outcomes

- Available at: https://hab.hrsa.gov/sites/default/files/hab/clinical-quality-management/clinicalqualitymanagementpcn.pdf

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Components of a CQM Program

- CQM programs coordinate activities aimed at improving patient care and patient satisfaction to drive health outcomes improvement
- CQM activities should be continuous and fit within and support the framework of grant administrative functions
- Components of a CQM program
  - Infrastructure
  - Performance measurement
  - Quality improvement

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Quality Assurance vs Quality Improvement

Quality Assurance:

- Refers to a broad spectrum of activities aimed at ensuring compliance with minimum quality standards.
- Includes retrospectively measuring compliance with standards.
- Part of the larger administrative function of a recipient's program or organization and informs the clinical quality management program.

Quality Assurance ≠ Quality Improvement

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Examples – QA vs. QI

- Quality Assurance
  - Measuring compliance with standards / Contract monitoring / Chart reviews
  - Focused on individual "bad apples"
  - Responsibility of a few to carryout
- Quality Improvement
  - Continuously improving performance beyond minimum service standards
  - Focuses on health systems and processes
  - Responsibility of all

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Grant Administration

- Grant administration refers to the activities associated with administering a RWHAP grant or cooperative agreement.
- The intent of grant administration is not to improve health outcomes. Therefore, they are not CQM activities.

Grant Administration ≠ Clinical Quality Management

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Examples – Grant Admin vs. CQM

- Grant Administration
  - Creating a performance measurement system to collect minimum data required by the RWHAP legislation and HAB
  - Creating care systems and service standards
  - Management of mandated reporting
  - Provider training geared toward compliance
- Clinical Quality Management
  - Creating a sophisticated performance measurement system to collect service data tied to HIV health outcomes
  - Tests of change to improve care, systems, or standards
  - Management of peer learning and collaboration programs
  - Provider training geared toward improving HIV health outcomes (evidence-based/evidence-informed)

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Infrastructure – QM Plan

- Living document that describes the CQM program
- Has a work plan to guide all QM staff/team activities
- QM Committee responsible for revising QM Plan and work plan
- QM Plan Components
  - QM Statement and associated Quality Goals
  - Describe the quality infrastructure (who is involved?)
  - Describe the quality process (how is it done?)
  - What is the capacity building plan for quality?
  - Describe performance measurement in a table

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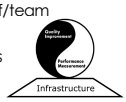
Infrastructure – QM Committee

- An important part of infrastructure recipients are required to have
  - Most recipients require their subrecipients to have these, too
- Members include a cross-section of stakeholders including:
  - Staff at all levels
  - Consumers (this is the ideal, but many struggle)
  - Providers (network-based programs like PBC Part A)
- Many responsibilities
  - Overseeing QM Plan implementation by quality staff/team
  - Ensuring broad stakeholder input in QM activities
  - Guidance to identify, implement, spread QI projects



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Performance Measurement

- Performance measures are selected by recipients
  - Quality measures in this region vary based on which funding you receive (Part A thru DC, Part B thru DC, MD, VA, or WV, Part C or D from HAB)
  - Qualitative data should be considered
- Subrecipients may follow additional measures
  - Consider inclusion of experience evaluation as part of performance measurement
  - Consider intersectional measures as appropriate

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Quality Improvement

- Cross-part collaborative QI projects
- Site-based QI projects
- Training and capacity building activities,
  - Only if they are attached to a specific QI initiative
  - Standard onboarding and other staff QM training is part of quality assurance, which is grant administration

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Discussion

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What they are and how to use them

QUALITY IMPROVEMENT LIFECYCLE AND TOOLS

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Learning Objectives

- Name the phases of a QI Project
- List several tools that can be used in each phase of a QI Project
- Explain how to triangulate data from different sources during the discovery phase of a QI project
- Describe how stakeholder engagement in this discussion enriches process for the entire region

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Discovery → Root Causes / Change Ideas → Implement

Assess → Diagnose → Intervene

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Tools for Discovery

- Data Dictionary or Inventory
- Dashboards
- Facilitated Stakeholder Engagement
- Priority Matrices
- Calculators

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Data Dictionary

- Simple lists of all data elements and performance measures you need to collect
- Include level of detail (e.g., is transgender T or is it MTF and FTM? What is the cut off for VS?)
- Put it in excel so you can sort and filter
- Double check for duplicates and NEGOTIATE!
- Update data collection to include the MOST granular level wherever you land

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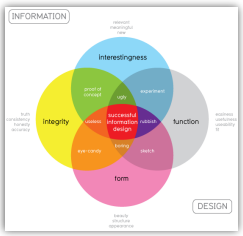
Know Your Purpose, Know Your Audience



1. Interestingness
   - Relevant, Meaningful, New
2. Integrity
   - Truth, Consistency, Honesty, Accuracy
3. Form
   - Beauty, Structure, Appearance
4. Function
   - Easiness, Usefulness, Usability, Fit

http://www.informationisbeautiful.net/2009/interesting-easy-beautiful-true/

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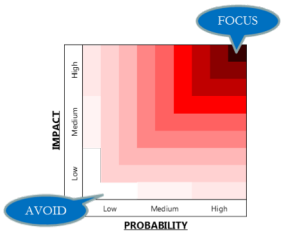
Probability vs Impact



Courtesy end+disparities Learning Exchange

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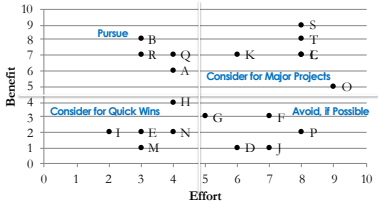
Benefit vs Effort



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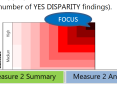
Calculators

Measure 1 Summary:	African American people	Hispanic people	Young MSM of Color (ages 16-24)	People aged 40-59
	Viral Suppression (HAB) Overall Performance Average: 65.6%			
Population Sample	2500	500	450	1000
Pop Performance	68.00%	53.40%	86.22%	75.00%
Absolute Disparity	NO DISPARITY	YES DISPARITY	NO DISPARITY	NO DISPARITY
Relative Risk	NO DISPARITY	YES DISPARITY	NO DISPARITY	NO DISPARITY
Comparative Disparity	NO DISPARITY	YES DISPARITY	NO DISPARITY	NO DISPARITY
Odds Ratio	NO DISPARITY	YES DISPARITY	NO DISPARITY	NO DISPARITY
Absolute Impact	271	72	108	136

Interpretation:

Refer to Stats Basics tab or to instructional guide on Qualifying Disparities for more detailed informaton on interpretation.
Refer to Analysis tab to view statistical calculations and their results with confidence intervals where appropriate.
Identify targets for QI Projects based on highest impact (number of lives) and highest probability (number of YES DISPARITY findings).
In the figure to the right, probability is represented above in rows 5-8 for each population.
In the figure to the right, impact is represented above in row 9.
This tool is for use in decision making on how to best utilize QI resources.
There are no "right" answers in how to best utilize your QI resources.
Review scientific literature and www.ngcsharelab for QI project intervention ideas.



Stats Basics | Data ENTRY | Measure 1 Summary | Measure 1 Analysis | Measure 2 Summary | Measure 2 Analysis

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Tools for Root Cause Analysis

- The 5 Whys
- Cause/Effect Diagram (Fishbone)
- Driver Diagram (root cause on its head)

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Root Cause Analysis is Important!

- Organizes and displays all causes and sub-causes that may influence a problem, outcome, or effect
- Helps push people to think beyond the obvious causes, (money, time) to find some causes that they can fix/improve
- Helps organize potential solutions and make clear who should be involved in solutions
- Encourages a balanced view
- Demonstrates complexity of the problem
- Provides a feeder for solutions/change ideas

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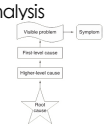
5 Whys Analysis

- The root cause is "the evil at the bottom" that sets in motion
  the entire cause-and-effect chain causing the problem(s)
- Some root cause analysis approaches are geared more toward identifying true root causes than others; some are more general problem-solving techniques, while others simply offer support for the core activity of root cause analysis
- By becoming acquainted with the root cause analysis toolbox, you'll be able to apply the appropriate technique
  or tool to address a specific problem



http://asq.org/learn-about-quality/root-cause-analysis/overview/overview.html

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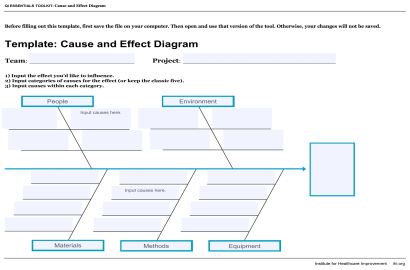
Cause and Effect Diagrams



Before filling out this template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

Template: Cause and Effect Diagram

Team: _____ Project: _____

1) Input the effect you'd like to influence.
2) Input categories of causes for the effect (or keep the classic five).
3) Input causes within each category.

People
Environment
Input causes here.
Input causes here.
Materials
Methods
Equipment

Institute for Healthcare Improvement – IHI.org

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Driver Diagrams

- Visual display of what "drives" achievement of a project aim
- Clear picture of a team's shared view on how to achieve the aim
- Driver Diagram uses
  - Stakeholder communication tool
  - Team roadmap for testing change ideas
- Relationships between primary, secondary drivers to generate specific change ideas
- Change ideas become the basis of different PDSA cycles (must be measurable)

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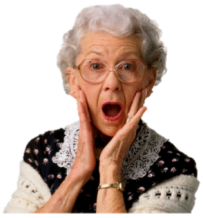
Tools for Implementation

- Step Measurement
- A3

- WRITE IT DOWN!!!!



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Measuring Tests of Change

- We base our standard performance measures on outcomes (in HIV, viral suppression)
  - Annualized, sequential cross-sections
- When testing changes, we are adjusting our process so we measure that too
  - Simple process measurement
  - These are still annualized, sequential cross-sections
- Process step measurements measure the PDSA cycle activities
  - Custom-made, just-in-time measurement schem

Leading outcome measurements

Process measurements

Process step measurements

PDSA CYCLES!!

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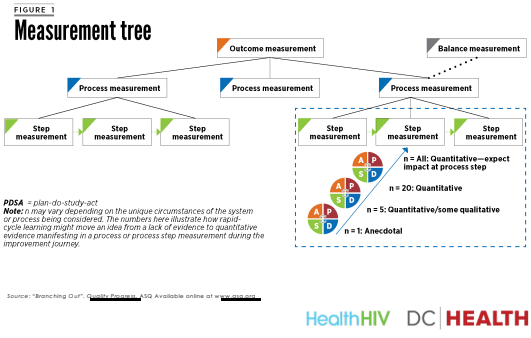
Measurement Tree



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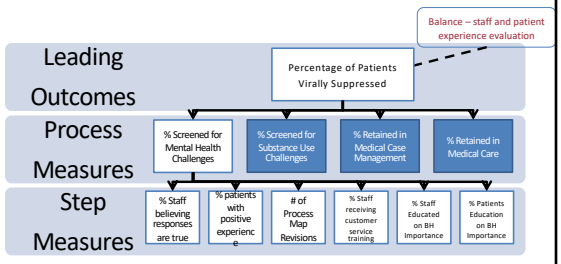
Example Measurement Tree Example



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Additional Resources

- PCN 15-02
- PCN 15-02 FAQs
- Center for Quality Improvement and Innovation
- Target Center Quality Academy
- American Society for Quality
- Institute for Healthcare Improvement
- HealthHIV

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Discussion

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Break

Be back by 11:00

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An overview

DATA COLLECTED BY PROVIDERS, HAHSTA, & OTHERS

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Learning Objectives

- List the major reporting systems in use in our region
- Associate the agencies that collect data with their function in the overall system of care
- Explain the different ways agencies collecting data use it
- Discuss how to organize a data dictionary

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Reporting Systems in DC Metro

- CAREWare
  - DC, MD, WV Part A and B
- e2 Virginia
  - VA Part B
- EHARS
  - Lab data

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HAHSTA

- Demographic data
- Clinical data

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HRSA-HAB

- RSR
- ADR
- Dental Report

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CDC

- Demographic data
- HIV testing data

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Providers

- Demographic data
- Clinical data
  - Testing data
- Billing data
- Experience data

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Providers Have Many Masters

- Quality Improvement
- Reporting
- Billing
- Advertising/Marketing

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Discussion

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What they are and how to use them

PUTTING IT ALL TOGETHER

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Learning Objectives

- Explain how demographic data can be used to focus improvement
- Describe how clinical data is used as a north star of improvement
- Discuss how experiential data is a southern cross of improvement

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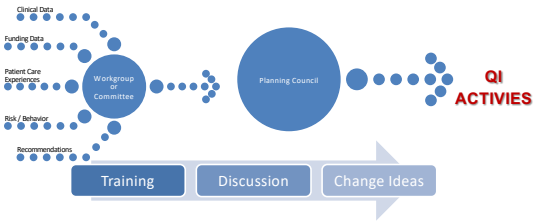
How to Leverage Stakeholders



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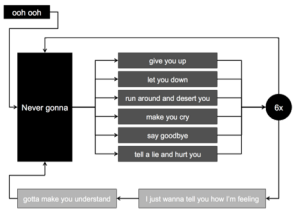
A Matter of Process

- It's all here
  - Passionate stakeholders
  - Tons of quantitative data
  - Ever-growing sources of qualitative data
- Connecting the dots
  - We're starting today
  - Ongoing engagement is coming!



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Discussion

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Lunch

Be back by 1:00

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A series of exercises

DIVING INTO OUR DATA

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Three Exercises

- Mock Discovery
  - Review of current data as a group
  - Table discussion
  - Naming of possible targets for a QI focus (process to improve)
- Mock Root Cause Analysis
  - Complete a Driver Diagram based on most popular QI focus
  - Tables mix up and develop secondary aims and change ideas
- Step Measurement Generation
  - Tables are assigned change ideas to create step measurements
  - Affinity exercise

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Let's Vote!

- We will base our driver diagram based on popularity
  - APPLAUSE!
  - MAKE SOME NOISE!

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Quick Aim and Primary Drivers

- Aims should be SMART
  - Specific
  - Measurable
  - Actionable
  - Replicable
  - Time-sensitive
- Primary drivers PRODUCE the aim
  - Opposite from root cause thinking, but based on same logic

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Divide The Room

- Let's mix it up and sit with someone else for a while!
- Based on your interest, sit at another table to flesh out secondary drivers and create change ideas
- We will come back together to report back on change ideas

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DRIVER DIAGRAM

- At your tables discuss:
  - What does the presented data mean to you as a stakeholder in the PBC HIV service system?
  - In what ways does case management (medical and non-medical) make a difference in the lives of people living with HIV in our region?
  - What successes and challenges have we noted in providing, receiving or otherwise observing case management services in our EMA?
    - Does the process work like it should?
    - What opportunities for improvement are apparent?
  - What other data would have been helpful to add context to your consideration and discussion of case management services in PBC?

We will come back together at 3:00 to report out

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Time to Break It Down

- Each table is assigned a change idea
- We will be developing step measures for our assigned change idea
- We will share how we would measure change as it occurs around our change idea

- HINT: step measures work best when we think about the process we are trying to affect in our AIM in addition to what the change idea is, what it entails, and what it might affect

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STEP MEASURES

- At your tables discuss your assigned change idea
- Using the post-it notes provided, write possible step measures that can be used to assess implementation of your assigned change idea

- ONE STEP MEASURE PER POST IT NOTE
- When you are ready, place your step measures on the wall in the area for your assigned change idea
- Try to cluster your change ideas with other similar change ideas
- Feel free to talk with others about what you are seeing at the wall

We will come back together at 3:45 for shareback

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Discussion

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Contact

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