PALM BEACH COUNTY RYAN WHITE HIV/AIDS PROGRAM Clinical Quality Management Plan 2021-2024

Community Services Department
Board of County Commissioners Palm Beach County



Helping People Build Better Communities!



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Clinical Quality Management Plan

West Palm Beach EMA

Prepared by:

Shoshana Ringer – Quality Management Coordinator Dr. Daisy Wiebe – Quality Management Clinician Internal Clinical Quality Management (CQM) Committee Reviewed by:

Quality Management & Evaluation Committee (QMEC) Members - HIV CARE Council Approved by:

Dr. Casey Messer – HIV Elimination Programs Manager

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Clinical Quality Management in Palm Beach County Overview

Palm Beach County Community Services Department (RWHAP Part A Recipient Office) has designed a Clinical Quality Management (CQM) Program for the West Palm Beach Eligible Metropolitan Area (EMA) to establish a systematic approach to performance measurement (PM) and quality improvement (QI) that involves its stakeholders. This CQM Plan is a core component of the Palm Beach County CQM collaborative infrastructure and lays out all aspects of the CQM Program, including performance measurement and QI methodology.

Quality Statement

The mission of the Palm Beach County CQM collaborative is to ensure the highest quality medical care and support services aimed at improving outcomes for people with HIV (PWH) who receive care through the EMA's subrecipient providers. Specifically, the EMA CQM Program aims to:

- Create a culture of quality within the EMA and within subrecipient providers by dedicating resources for capacity building and technical assistance;
- Ensure that EMA subrecipient providers adhere to established HIV treatment guidelines;
- Maximize involvement of stakeholders in the CQM Program;
- Streamline subrecipient collaboration and coordination of HIV services across the EMA;
- Ensure that available demographic, utilization, and outcome information is used to monitor progress and trends in the EMA HIV Care Continuum;
- Ensure high quality customer service; and
- Improve health equity among PWH in the EMA.

Clinical Quality Management Goals

Routine review of established performance measures leads to the identification of specific CQM goals for each QM Plan. Stakeholders who are internal and external to the Palm Beach County CQM collaborative review measures through formally established mechanisms using evidence-based quality improvement methods. For 2021-2024, the following quality goals have been identified and are also in line with the program's key performance indicator (KPI) stretch goals for the County:

- 1. Improving Viral Suppression for PWH drive maximum viral suppression for PWH in Ryan White. 90%+ of PWH in Ryan White to achieve viral suppression by 2024 (defined as the most recent viral load test results being less than 200 copies/mL). Source: Optimized Continuum of Care Report in Provide Enterprise (PE) (Baseline data not included because of the switch in reports now using Optimized version).
- 2. Maintaining Retention In Care for PWH to improve retention in care for PWH in Ryan White to 85%+ by 2024 to recover from and exceed pre-COVID pandemic levels of retention (defined as two medical care services spaced at least three months apart in the reporting period). Source: Optimized Continuum of Care Report in Provide Enterprise (PE) (Baseline data not included because of the switch in reports now using Optimized version).

- 3. *Improving In Care for PWH* to improve in care for PWH in Palm Beach County from 75% in 2020 to 80% in 2024 (defined as one medical care service in the reporting period). Source: Epidemiological Profile Tables by EMA, Florida Department of Health.
- 4. Addressing Disparities in HIV Health Outcomes ensure equitable access to RWHAP funded HIV services in the EMA for PWH and ensure equitable results in HIV health outcomes. Using evidence-informed calculators, identify and begin to close disparities for key populations of local priority by 2024. Source: Optimized Continuum of Care with CQII Disparities Calculator.

Quality Infrastructure

The EMA CQM Program includes all stakeholders in the local system of HIV care; the Planning Council (HIV CARE Council), Part A Recipient Office, Part A subrecipient providers, and local PWH. The following provides a description of CQM Program roles and responsibilities from program leadership to external stakeholder involvement

Clinical Quality Management Program Leadership

Clinical Quality Management in Palm County EMA is based on a collaboration within the Part A group at Palm Beach County Community Services Department. The HIV Elimination Programs Manager, who oversees Ryan White Part A, MAI, Ending the HIV Epidemic and Syringe Services Program provides overall leadership and guidance for the CQM Program. The Part A Quality Management Coordinator acts as a keystone in the collaboration to provide central coordination of activities, including monitoring for clinical quality management and quality assurance for service delivery standards. The Quality Management Coordinator works with the HIV Elimination Programs Manager and Quality Management Clinicians, as well as the other Recipient office HIV program staff, to provide leadership to the overall program.

Internal Clinical Quality Management (CQM) Committee

Purpose

The Internal CQM Committee is to review Ryan White Part A/MAI Quality Improvement infrastructure, track progress on our CQM work plan, review latest performance measures, and QI projects to identify areas for improvement and direction for CQM initiatives.

Membership

The Internal Clinical Quality Management Committee is made of representatives of the Part A Recipient Office and other HIV Programs designated quality management staff. The Systems-Level Quality Management Clinician facilitates the meetings.

The Part A representatives include the:

<u>HIV Elimination Programs Manager:</u> Provides leadership and guidance to the CQM Program <u>Quality Management Coordinator:</u> Coordinates CQM activities and monitors sub-recipient compliance for CQM

<u>System-Level Quality Management Clinicians:</u> Leads system-level quality improvement projects for Ryan Part A and EHE, facilitates Internal CQM Committee and QI Workgroup, and updates CQM Plan and Work Plan

<u>Agency-Level Quality Management Clinician:</u> Provides support and technical assistance for Ryan White Part A agency-level quality improvement projects and is staff support for Quality Management and Evaluation Committee (QMEC) for the HIV CARE Council (i.e. Planning Council)

<u>Health Planner:</u> Oversees implementation of the Integrated Prevention and Care Plan and Comprehensive Needs Assessment

<u>Health Equity Coordinator:</u> Develop innovations in care to reduce disparities in the minority community for MAI

The other HIV Programs representatives includes:

<u>EHE Program Evaluator:</u> Uses evaluation process to identify areas for quality improvement for EHE <u>EHE Program Coordinator</u>: Coordinates EHE initiatives and services and responds to needs identified for improvement

<u>EHE Casework Supervisor:</u> Supervises the implementation of quality improvement activities for EHE direct services

In addition, others tasked with implementing quality improvement projects and initiatives within their programs (e.g. EHE and Syringe Services Exchange) and as collaborative with the EMA CQM program. Special guests might include direct EHE service staff or partners of HRSA HAB, CQII or NMAC.

Areas of Focus

The focus of the Internal CQM Committee is to track progress and noting areas for improvement in our CQM Program, including infrastructure, progress on the CQM work plan, tracking performance measures and quality improvement outcomes, as is stated in PCN 15-02.

Meetings

Staff convenes weekly for face-to-face or virtual meetings. The team uses its meetings to review CQM activities. The team identifies key information to present to the Quality Management & Evaluation Committee (QMEC) and other key stakeholders as needed. Discussions regarding quality improvement projects are also included in these weekly meetings. In addition, the team ensures alignment with key policy initiatives, such as the Integrated Prevention and Care Plan and Ending the HIV Epidemic.

On a quarterly basis, the CQM Committee meets to focus on the development of the EMA CQM Program. This includes formally reviewing its committee membership, purpose, areas of focus and desired outcomes. During this meeting, the CQM meeting plans, coordinates, implements, monitors and evaluate the overall CQM program. The Systems-Level Quality Management Clinician facilitates the meeting and takes meeting minutes. CQM Committee Meeting minutes are shared with committee

members and the Quality Management and Evaluation Committee on the HIV CARE Council (i.e. Planning Council). The minutes are also maintained in the shared database that is accessible to all those on the CQM Committee.

Desired Outcomes

The desired outcomes of the Internal CQM Committee is to ensure the strengthening of the CQM Program, following the work plan, communicating progress and results, and ultimately improving client outcomes.

COM Plan and Work Plan

The CQM Plan is supported with the development and use of the CQM Work Plan (Appendix A). This Work Plan was refined with feedback from HRSA's Site Visit in July 2022, with work plan goals organized around Infrastructure, Performance Measurement, Quality Improvement Projects and Subrecipient Monitoring. The CQM Plan period is a three-year cycle with a comprehensive update annually. Toward the end of each three-year cycle, the Internal CQM Committee and QMEC undertake a systematic review of the CQM Program for the purpose of creating a new CQM Plan for the next three-year cycle. Throughout the course of the cycle there are multiple evaluation activities that play into the overall CQM Program evaluation.

Evaluation Methods

Evaluation of the CQM Plan is based on its work plan (Appendix A). The overall CQM Plan period is for a three-year cycle, but the CQM Plan is reviewed annually and the work plans are reviewed/revised quarterly to allow for greater flexibility in CQM Program activities to meet subrecipient and PWH training needs, QI project selection, and communicating with stakeholders.

The attached work plan includes the capacity building and technical assistance activities of the CQM Program beyond PM and QIP reporting. The work plan is based on the CQM Program quality goals and is aimed at efficiently achieving the EMA quality statement.

The Internal CQM Committee also meets weekly to continue working on CQM activities collaboratively and to evaluate progress on projects. The CQM program as a whole is evaluated on whether performance metrics improve, which is reported and evaluated on a quarterly basis. Projects are then chosen based on performance metrics that are falling behind goals; for example, in 2021, the retention in care of individuals in Ryan White had decreased, prompting the Internal CQM Committee to direct a Retention-in-Care project among subrecipient providers as tailored, agency-level projects.

Updating the Clinical Quality Management Plan

The Systems-Level Quality Management Clinician takes the lead in updating the CQM Plan and is then reviewed Internal CQM Committee. First, a systematic review of the evaluation of the prior plan is considered to identify potential changes to the structure of the CQM Program infrastructure. This also includes consideration of QI methodology, capacity building methods, and data collection plans for potential changes. Second, performance measures for each service category are reviewed for relevance and importance in linking subrecipient services to optimal HIV outcomes for PWH. Third, the overall quality goals for the EMA CQM Program are reviewed and updated.

Potential changes to the CQM Plan are presented to the CQM Committee and QMEC for their review and feedback. Once all changes are made to the CQM Plan based on stakeholder input, the new version is signed off by the HIV Elimination Programs Manager.

Quality Improvement (QI) Workgroup

The QI Workgroup is made of representatives of the Part A Recipient Office and the funded subrecipient provider designated quality management staff. The Part A representatives include the Program Manager, Quality Management Coordinator, Quality Management Clinicians, and Health Planner. The subrecipient representatives include designated staff tasked with implementing quality improvement projects and initiatives within their organizations and as collaborative with the EMA CQM program. The team convenes monthly for 60-minute face-to-face or virtual meetings. The team uses its meetings to review PM data and intensively review each service category by triangulating demographic, utilization, and outcome data quarterly. The team identifies key information to present to the Quality Management & Evaluation Committee (QMEC) and other key stakeholders as needed. Discussions regarding quality improvement projects are also included in these monthly meetings. In addition, the team ensures alignment with key policy initiatives, such as the Integrated Plan and Ending the HIV Epidemic. The overall work plan for this CQM Plan is what drives the work for the QI Workgroup.

HIV CARE Council Quality Management & Evaluation (QMEC) Committee

The Quality Management & Evaluation Committee is central to the work of the EMA's CQM Program. Bringing together a core group of stakeholders based on the HIV CARE Council (Palm Beach County EMA's Part A Planning Council), the QMEC reviews and approves Service Delivery Standards, follows key performance measures, sets EMA-quality goals, and advises on EMA-wide QI projects.

Membership

QMEC members are drawn from the broader HIV CARE Council and additional individuals beyond the CARE Council. Representatives from subrecipient organizations, Community Prevention Partnerships (CPP), Housing Opportunities for Persons with AIDS (HOPWA), PWH, and affiliated individuals who are not PWH are included as a part of the QMEC. The committee's work is shepherded by an appointed chair with guidance and support from the Palm Beach County EMA Internal CQM Committee.

Roles and Responsibilities

The QMEC determines performance measure (PM) priorities and methods on an ongoing basis. Additionally, the Committee will facilitate cross-Part coordination by collaborating with consumers, representatives from Part A&B, and the state Florida Comprehensive Planning Network (FCPN). This Committee is also responsible for:

- Providing input and direction on the EMA CQM Program
- Reviewing the Clinical Quality Management Plan annually
- Developing Service Delivery Standards and Outcome Measures utilizing other HIV CARE Council Committees, in cooperation with the Recipient staff
- Recommending to the Part A Recipient Office for appropriate education relating to quality improvement concepts and techniques

• The Internal CQM Committee will report cumulative service outcome results to QMEC, as well as be presented to the full HIV CARE Council

Meetings

The QMEC meets every other month and sometimes monthly for a scheduled two-hour face-to-face meeting as stipulated by HIV CARE Council by-laws. Additional meetings are convened as needed. Meetings may take place in rotating settings across Palm Beach County and/or virtually.

Work Plan

The QMEC work plan is established in collaboration with the Internal CQM Committee and drives QMEC processes. The work plan is reviewed on an annual cycle, at a minimum, but will start being reviewed on a quarterly cycle. The Committee work plan is based on the HRSA PCN #15-02 and the Quality Goals named above. In the last year of the CQM Plan period, CQM Plan Evaluation is included in the QMEC work plan (Appendix A).

Capacity Building

For CQM Program activities and corresponding QI efforts to be successful in the EMA, capacity building at several levels is needed.

Recipient Staff

The following capacity building opportunities are leveraged for staff of the Palm Beach County CQM collaborative. Onboarding basic training orients staff to the importance of CQM and its focus on HIV health outcomes. Staff also have the opportunity to be trained in a number of quality improvement methodologies including Lean Six Sigma, which focuses on using data to improve processes for better outcomes, and ROMA for results oriented management and accountability and leans heavily into S.M.A.R.T. goals and logic models. We have requested training through the Centers for Quality Improvement and Innovation for staff who are newer to quality improvement methodologies, and have had boot camp training, one-on-one technical assistance, and completed the Quality Academy. The Internal CQM Committee also has participated in CQII's Learning Collaborative and has contributed to the group's training in CQM.

Center for Quality Improvement and Innovation (CQII) Trainings

HRSA's Ryan White HIV/AIDS Program (RWHAP) Center for Quality Improvement and Innovation (CQII) also provides training on quality improvement to Ryan White HIV/AIDS Program recipients.

The Systems-Level Quality Management Clinician applied to and received an invitation to attend the Training for Quality Leaders (TQL) in Atlanta, GA May 17-19, 2023. The Training of Quality Leaders (TQL) Program aims to build the expertise and facilitation skills of quality managers and those who direct quality management programs to effectively lead and facilitate quality improvement activities. This training will be very useful in advancing CQM work as RWHAP agencies face challenges in leading quality management activities programs, including unfamiliarity with quality improvement concepts, staff resistance to engage them in quality improvement projects, and a lack of team facilitation skills.

The Agency-Level Quality Management Clinician was accepted to the Training of Trainers (TOT) in Dallas, Texas March 22-24, 2023. As CQII, puts it, simply knowing quality management well is not sufficient for being able to teach others in the field. The Center for Quality Improvement and Innovation (CQII) has recognized the need to expand the pool of trainers available to train grantees of all Parts to meet the Ryan White Program requirements. In response to this need, CQII implemented a national Training-of-Trainers (TOT) Program to build capacity for quality improvement among quality managers. As the Agency-Level contact for quality improvement, the Agency-Level Quality Management Clinician learned how to train staff in the agencies on QI work.

Both the Systems-Level Quality Management Clinician and Agency-Level Quality Management Clinician will apply to the Training on Coaching Basics (TCB). This program offers training to quality management leaders to build their capacity to coach other HIV providers to better their quality improvement programs. The aim of TCB is to increase the pool of competent quality improvement managers across all Parts of the Ryan White HIV/AIDS Program (RWHAP) and build regional and grantee-wide capacity for quality improvement. A requirement of this training is completion of either the TQL or TOT training.

National Minority AIDS Council (NMAC) ESCALATE Learning Collaborative

The Palm Beach County EMA has been accepted into the ESCALATE Learning Collaborative (Ending Stigma through Collaboration And Lifting All to Empowerment). This Learning Collaborative is led by NMAC (National Minority AIDS Council). ESCALATE trains and empowers participants to recognize and address HIV stigma within every level of the Ryan White HIV AIDS Program. ESCALATE will engage Stigma Reducing Teams within the 57 jurisdictions identified in Ending the HIV Epidemic: A Plan for America (EHE) with a particular focus on reducing stigma towards transgender/gender nonconforming individuals, men who have sex with men, the Black/African-American community, Latinx experience, and Indian Country and Native Alaska. The Palm Beach County EMA will be focusing on the HIV stigma experienced by the Haitian community. The Health Equity Coordinator (MAI) is the lead of the stigma reduction team, which also includes the Health Planner (RW Part A), Agency-Level Quality Management Clinician (RW Part A), Tele-adherence Counselor (EHE), CORE Case Manager (EHE), and a client with lived experience.

Subrecipient Providers

Quality Management Clinicians focus on supporting subrecipient providers in their quality improvement programs. This includes bringing training into the Quality Improvement Workgroup, which meets monthly, and has included topics such as The Model for Improvement, Root Cause Analysis, Flow Chart Mapping, and Barriers and Aids Analysis. The Quality Management Clinicians also bring in training as needed from CQII during QI Workgroup meetings. The Agency-Level Quality Management Clinician also developed a toolkit to help guide sub-recipients along in Quality Improvement Projects (QIPs) (see Quality Improvement Toolkit in Quality Improvement Projects section). In addition, the Agency-Level Quality Management Clinician attends the subrecipient providers' internal quality improvement meetings to provide any support and guidance needed for projects, and brings in resources/materials that are helpful for the progress of the quality improvement projects. The Agency-Level Quality Management Clinician has attended CQII's Training-of-the-Trainers (TOTS) Program and is now more fully equipped to provide training on quality improvement methods and tools. It is also planned that the

lead Quality Improvement staff person at subrecipient providers will be able to receive Lean Six Sigma training through Palm Beach County contracted services with Electronic Training Solutions, Inc. (ets).

CARE Council Quality Management & Evaluation Committee Members

The CARE Council holds a New Member Orientation quarterly and covers topics such as data literacy and quality improvement. The Internal CQM Committee attends the QMEC meetings to provide updates and guidance on CQM activities, as well as education on performance metrics and service standards. Many members of the QMEC also attend the Quality Improvement Workgroup as subrecipient providers.

Stakeholder Involvement

Beyond the QMEC, there are opportunities for all Part A collaboration stakeholders to be involved in the EMA CQM Program.

Palm Beach County HIV Planning Council

The Palm Beach County HIV Planning Council was created through an ordinance of the Palm Beach County Board of County Commissioners in November 1993. In August of 1997, the Planning Council and the Palm Beach County AIDS Consortium officially merged and became the Palm Beach County HIV CARE Council. Responsibilities of the Palm Beach County CARE Council include:

- Review and utilize service outcome and quality assurance data of services, as well as needs
 assessment and epidemiological data, in the prioritization and allocation of RWHAP Part A/MAI
 grant funding for the EMA;
- Receive training on CQM, including QI, to enhance their understanding of CQM Program activities in the EMA;
- Review and comment on the CQM Plan; and
- Receive intensive reviews of funded service categories based on EMA CQM Program activities.
 Reviews of service categories are on a rotating basis and are facilitated by CQM staff from the Part A program.

Palm Beach County Community Services Department (Part A Recipient Office)

The Part A Recipient Office oversees and facilitates all CQM Program activities at Part A/MAI subrecipients in the EMA. All Part A Recipient Office staff participate in CQM Program activities at some level, however the positions primarily responsible for the quality activities outlined in this plan are the QM Coordinator and QM Clinicians. Other responsibilities of the CQM Team include:

- Implementation of the CQM Program;
- Leading evaluation of the CQM Program;
- Facilitating CQM Program participation by subrecipient providers;
- Directing technical assistance to subrecipient providers aimed at improving PWH outcomes;
- Providing updates to the Part A Recipient Office and HIV CARE Council on CQM Program activities within the EMA; and
- Reporting performance metrics and special data reports to the QMEC.

Subrecipient Providers

The Part A Recipient's Office funds a number of community-based health and social service organizations as subrecipient providers within the EMA. As an integrated CQM program, prevention and STI subrecipient providers are included, as are HOPWA subrecipients. All subrecipient providers are required to participate in the collaborative EMA CQM Program by:

- Developing CQM Plans and CQM activities of their own;
- Tracking client demographics, service utilization, and outcome data in Provide Enterprise;
- Promoting the needs assessment activities;
- Submitting annual reporting requirements, such as the Ryan White Services Report (RSR) among other Recipient requested outcome and performance measure reporting;
- Contributing to EMA-wide QI projects; and
- Collaborating with one another through the monthly provider meetings.

People with HIV (PWH)

PWH in the EMA participate in the planning process through the HIV CARE Council. In addition, PWH are elected to the QMEC to provide input on EMA service delivery standards, developing PMs for all service categories, and updating the CQM Plan. PWH are also encouraged to:

- Participate through various feedback mechanisms in place, both system-wide and with subrecipient providers; and
- Attend CQM training as offered by the Part A Recipient Office, or their consultants.

Community Services Department (CSD) Strategic Planning, Research and Evaluation (SPRE)

SPRE's role in CSD is to assist with strategic planning, research new and innovative ways to provide services, and evaluates all programs within the department. For PBC RWHAP, involvement with SPRE has mostly consisted of providing data and reports at various time points for review and publication. A current project with SPRE in 2023 is creating and uploading data to dashboards on the various HIV Elimination Programs, including PBC RWHAP.

Center for Quality Improvement and Innovation create+equity Collaborative (CQII)

The Palm Beach County CQM Collaborative has completed its participation in the Center for Quality Improvement and Innovations create+equity Collaborative in 2021 and 2022. Palm Beach County is one of about 100 entities participating nationwide in this collaborative and participates in the Mental Health Affinity Group. In this group, the goals are to increase screening for mental health conditions among Ryan White clients and to improve viral load suppression among clients receiving mental health services. Participation in the collaborative is on several levels, including target population affinity groups (mental health, substance abuse, housing and age), regional groups, and based on other affinities/activities, as well. Collaborations with other participants enhances our local EMA CQM program.

Florida International University (FIU) Collaborative

The Part A Recipient Office has engaged Florida International University in a novel multi-year collaborative around the cost-effectiveness of providing health insurance in 2020 to 2022. The goal is to evaluate outcomes in a more detailed manner from a health economics standpoint to efficiently

maximize patient HIV health outcomes and understand when it is more cost-effective to provide insurance coverage to clients rather than pay for services directly.

The next 3-year contract with FIU will examine our cost-reimbursement model and investigate if a different model would yield better client outcomes.

Florida Comprehensive Planning Network (FCPN) Statewide QM Advisory Committee

The state of Florida created a QM advisory group to include all state Part B area representatives, in a collaboration of QM activities and initiatives. Along the way, this advisory group included the Part A programs across the state. In collaboration with all Part A & B programs in the state of Florida, this advisory committee meets to discuss collaborative and individual QM activities (e.g. CQM Plans, training needs, performance measurement). Monthly calls are scheduled, as well as bi-annual face-to-face/virtual meetings during the statewide FCPN meetings. This collaborative group ensures the entire state is working together on quality needs to continue a positive care continuum for the HIV population.

Performance Measurement

Performance measurement is a critical aspect to CQM, because "if it cannot be measured, it cannot be improved." Per HRSA Policy Clarification Notice 15-02 (updated on 11/30/2018), at least two performance measures must be identified for funded service categories where greater than or equal to 50% of the eligible clients receive at least one unit of service. At least one performance measure must be identified for funded service categories where greater than 15% and less than 50% of eligible clients receive at least one unit of service. It is not required to identify a performance measure for funded service categories where less than or equal to 15% of eligible clients receive at least one unit of service.

Performance Measures

The Palm Beach County CQM program includes performance measures that are collected through the QMEC, in conjunction with the Part A Recipient Office, for clinical quality management purposes (Appendix B). The performance measures chosen reflect the highest priorities for the jurisdiction along the HIV Care Continuum. The performance measures chosen for each service category is in line to improve the percent of PWH who are in care in Palm Beach County through Early Intervention Services (EIS), to improve the percent of PWH who are retained in care in Ryan White through relevant service categories (i.e. non-medical case management, mental health services, health insurance premium & cost-sharing assistance, etc.), and to improve the percent of PWH in Ryan White who are virally suppressed through appropriate service categories (i.e. medical case management, AIDS pharmaceutical assistance, laboratory diagnostic testing, etc.).

HIV Care Continuum

The HIV Care Continuum is the dominant framework in reviewing and analyzing HIV outcomes since 2011. New reports available in Provide Enterprise (PE) client level database allow for the Internal CQM Committee to identify trends and opportunities for improvement along the HIV care continuum, especially related to retention in care and HIV viral suppression. Service category, subpopulation, and linkage to care analyses allow for comprehensive review of available data aimed at achieving the Palm Beach County CQM collaborative quality goals in alignment with its quality statement. Two new reports

have been created to optimize this data which allows us to look deeper into subpopulations and to compare more closely with the Florida Department of Health Epidemiological Profile.

Disparity Analysis

Advancing health equity is core to the EMA quality statement and efforts to achieve a better tomorrow for all PWH. New reports in PE are established to filter and analyze results along the HIV care continuum that allow identification of possible gaps and disparities in HIV outcomes. Epidemiological Profiles reported by the Florida Department of Health for all PWH in Palm Beach County, including individuals who are not in Ryan White programs, are also analyzed for gaps and disparities.

Furthermore, a new position was created in 2022 specifically to address health disparities among sub-populations. The new Health Equity Coordinator will not only review data on disparities and contribute to quality improvement projects, but also work to address the broader systemic issues that drive inequities among individuals with HIV.

Quality Improvement

QI is the goal of the CQM Program. QI activities include capacity building, EMA-wide QI projects, and ultimately improvement in HIV outcomes for PWH in the EMA. QI activities are aimed at improving patient care, health outcomes, and patient satisfaction. This section outlines the methods and activities included in EMA QI efforts.

Quality Improvement Methods

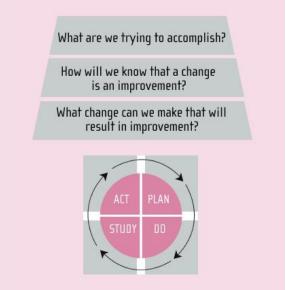
Quality Improvement Methods in Palm Beach County are rooted in HRSA Policy Clarification Notice 15-02 and brought to life by the Model for Improvement PDSA process (Figure 1). Quality Improvement in the EMA CQM collaborative is governed by this CQM Plan and the dedicated staff and resources that are outlined throughout the description. Performance measures are regularly reviewed by the HIV CARE Council QMEC for discussion around what data are most important to drill down further. (Appendix C)

Performance measure and HIV Care Continuum data are analyzed to determine which system-level quality improvement projects (QIPs) to implement. As an example, due to the large out of care population in Palm Beach County that spurred an increase in funding for EIS, the Recipient coordinated and facilitated an inactive client/out of care system-level project. Similarly, as performance measures were analyzed there was an identified gap in retention in medical care among Ryan White served clients. The Quality Management Clinician facilitated retention in care projects among the funded Subrecipients.

In addition to utilizing health outcomes to identify QIPs, patient health care and patient satisfaction also play a role in the method to identify projects to improve the quality of our system of care. Needs assessments, surveys, and community conversations are all inclusive of methods to identify projects.

Included in our quality improvement methods are supporting tools used during our QIPs. Some of the supporting tools utilized include Driver Diagrams, Priority Matrices, Fishbone Diagrams, and PDSA Cycles, which are included in the Quality Improvement Toolkit described below.

Figure 1: The Model for Improvement - Courtesy of the TARGET Center's Center for Quality Improvement & Innovation



Quality Improvement Toolkit

The Quality Improvement Toolkit is a comprehensive resource guide for Palm Beach County Ryan White Part A Providers. The toolkit details an overview of quality management, HRSA requirements of Clinical Quality Management (CQM), quality improvement (QI) methodologies, and how to complete a quality improvement project from start to finish. The toolkit also includes detailed instructions, examples, and templates needed to launch and complete a successful quality improvement project, as well as how to manage performance measurement and improvement within each sub-recipient organization. In addition to this, the toolkit provides a basic timeline for when a quality improvement project is meant to be started and completed each year, and will be updated accordingly each year to reflect new dates. Sub-recipients should use this as a guide for their quality improvement efforts, and are also welcomed to request further assistance and technical assistance throughout each step, as needed.

Systems-Level Quality Improvement Projects

Quality Improvement Projects (QIPs) are tied to the quality statement and goals. There is at least one Systems-Level Quality Improvement Project at any given time, in which relevant sub-recipients of Ryan White Part A, MAI and EHE participate in. Systems-Level QIPs are selected by the Internal CQM Committee and brought to the subrecipient providers and PWH for their input, feedback and buy-in. The following are the Systems-Level Quality Improvement Projects from the CQM Plan Period 2021-2024 (in reverse chronological order):

 Improving Equity in Outcomes (i.e. Disparities Project) along the HIV Care Continuum (2023-2024)

The CQM Committee is reviewing the health outcomes of all clients receiving services in our program, to identify any specific population lacking positive health outcomes. To this end, the CQM Committee will be addressing the largest disparities in the HIV Care Continuum. This includes viral load suppression for Ryan White clients and out-of-care persons in Palm Beach County living with HIV. The focus of the project will be on Black/African-Americans as experiencing the largest disparities in care and are the largest population affected. Through this review, specific interventions will be determine to improve outcome equity among these populations. This will also allow the Part A/MAI program to ensure funding is being utilized in necessary service categories to result in better health outcomes for the Minority AIDS Initiatives. The newly created Health Equity Coordinator position will focus on this work.

• ESCALATE (2024-2024)

ESCALATE (Ending Stigma through Collaboration and Lifting All To Empowerment) is an innovative training and capacity-building initiative specifically designed to address HIV-related stigma that creates barriers at multiple levels of the HIV care continuum among a special population of focus. A Stigma Reduction Team from PBC RWHAP, led by the Health Equity Coordinator and joined by our Health Planner, Agency-Level Quality Management Clinician and direct service staff from EHE, applied and was accepted into ESCALATE's Learning Collaborative with Haitian individuals as the focus population. This collaborative will run from May 2023 to July 2024 with up to 16 RWHAP recipients/sub-recipients who are seeking to address HIV stigma experienced by their staff and/or clients. Organizations will participate in a multi-step process of developing, planning, implementing, evaluating, and refining a Stigma Reduction Initiative for a specific population of focus. We will receive coaching, opportunities for peer-to-peer learning, and support from stigma-reduction subject matter experts. In addition, we will engage in collaborative tracking of progress and practice continuous quality improvement techniques intended to enhance their initiative over time

• 100 Day Challenge: Housing is Healthcare (2022-2023)

In collaboration with our Housing Continuum of Care under the Palm Beach County Human and Veterans Services Division and local service providers, the homeless PWH population was the focus of a 100 Day Challenge to improve housing and health outcomes. This effort was postponed during the COVID-19 pandemic, but resumed in the Fall of 2022. This challenge ran from October 1, 2022 to January 27, 2023. Through weekly case conferencing, the team was able to stably house and link to care 28 people in in the 100 days, which is more than double than the previous 100 days. EHE Community Outreach, Response and Engagement (CORE) was involved in assisting individuals in getting into care as part of this challenge. Moving forward there will be monthly case conferencing for clients with HIV who are unsheltered/at risk and an effort to cross-train individuals in the fields of HIV and housing.

- Active Linkage and Referral to Tele-adherence Counseling (TAC) to Improve Viral Load Suppression (2022-2023)
 According to the Ryan White HIV/AIDS Programs in Palm Beach County (RWHAP PBC) Provide Enterprise database, there were 210 persons with HIV who were not virally suppressed as evidenced by elevated lab results (>200 copies/mL) from June 1, 2021 to March 10, 2022. There is an available Ending the HIV Epidemic program in Palm Beach County that is designed for improving viral load suppression among clients through a smartphone app called PL Cares® and has relied on passive referrals from agencies for clients who are not virally suppressed. Pulling clients who are not virally suppressed from the Provide Enterprise database will focus efforts on a client-level rather than relying on passive messages to refer any non-virally suppressed clients to the PL Cares® Program. The formation of a Quality Improvement Project will lead to better communication and cooperation on actively referring clients to the program. This system-level QIP is in Phase II, with viral load data from March 10, 2022 October 31, 2022, and will begin flow chart mapping and adoption into routine practices upon final review in May 2023.
- Improving Identification of Mental Health Barriers Among Ryan White Clients (2021-2022)
 We are participating in the create+equity Collaborative led by the Centers for Quality
 Improvement and Innovation (CQII). The goal of the collaboration is to create equity among HIV subpopulations in the following categories: mental health, substance use, housing and age. The 18-month collaborative aims to increase viral suppression in these key subpopulations and, in some cases, improve detection or screening. Based on the prevalence of self-reported mental health issues and concerns among clients, we were placed in the mental health affinity group.

In this work, we utilized process flow mapping with funded agencies as well as 5 whys for root cause analysis. Interventions to begin screening case managed clients during their case management assessment every 6 months was identified as the intervention. As we continue to implement this intervention, we will utilize PDSA cycles to improve the process further.

We also identified clients in mental health services funded under Ryan White Part A who are not virally suppressed and enrolling them into PL Cares, a smartphone app for individuals with HIV, being provided under the County's Ending the HIV Epidemic Initiatives.

• Improving Access to Health Care by Analyzing Cost Effectiveness (2020-2022)
We are working with Florida International University (FIU) for a third year and focusing on health insurance services. This is a three-year collaborative with a research-based university entity to include a Heath Economist expertise in assessment, analysis, and quality initiatives.
During this period of collaboration, FIU assessed and analyzed cost-effectiveness of providing health insurance premium and cost-sharing assistance to clients vs. paying directly for services that health insurance would cover (i.e. outpatient ambulatory, laboratory, prescriptions, mental health, specialty medical care, etc.). FIU has presented results to the HIV Care Council as part of our annual Status of HIV in Palm Beach County data presentations. In addition, FIU created a further detailed report on how it is cost effective to provide health insurance to clients that have

2+ outpatient ambulatory visits or 6+ labs in a year. We have asked FIU to look at the same question, but separate the guidance by 2019, 2020 and 2021 calendar year data.

We are beginning a new contract with FIU to analyze our cost reimbursement model, and explore all possibilities including salary-based, fee-for-service or performance-based models.

Systems-Level Enhancements for Quality Improvement

• Provide Enterprise Client Level Database (PE)

We are continuing to work with Groupware Technologies, Inc. (GTI) for a number of enhancements for our PE Database, including optimizing the Continuum of Care Report, Client Profile changes, and creating a web portal for Ryan White Programs access.

We have started working with GTI as a Lighthouse Site to create a cloud-based solution to PE. We are providing input for the way it will work as a cloud-based solution, and adding our own needs/ideas such as creating a dashboard for EIS/EHE clients entering care and the programming of our iCARE (Individualized Comprehensive Assessment Referral and Evaluation) tool as it was presented at a previous National Ryan White Conference.

• Data2Care

We participated in the Georgetown University Community of Practice for data sharing with the Florida Department of Health (FDOH), which has included being the pilot Ryan White Part A site for Data2Care for FDOH. Data2Care is using FDOH data (such as mandatorily reported labs for viral load) to identify individuals who are out of care and to use that data to locate and reengage individuals into care.

The data sharing agreement was signed and executed at both the state and county-level and includes a quarterly data sharing of clients who have an active consent with us and are out of care according to FDOH. We have already piloted this concept as mentioned, with the only difference being that clients were sent back to the local DOH instead of to us directly at Ryan White Part A/MAI. The quarterly data extract and link between Provide Enterprise and FDOH has been completed, with expected quarterly matching results beginning in Summer 2023 and individuals added to the Linkage Module to be worked by the EHE Community Outreach, Response, and Engagement (CORE) Teams for rapid entry to care.

Agency-Level Quality Improvement Projects

Subrecipient providers conduct their own quality improvement projects based on the need identified in their quarterly agency snapshots, which reports the performance metrics of each service category they provide, and through their own internal data/processes. Ongoing projects include but are not limited to:

Improving Uber Health Policy and Procedure for Better Client Care – Compass

Improving Retention after Linkage to Care through Follow-ups – Florida Department of Health

Improving Viral Load Suppression through a Pilot Incentive Program – FoundCare

TBD - Health Council of Southeast Florida

Improving the Average Time to Care for Rapid Entry to Care Clients – Midway

TBD – AIDS Healthcare Foundation

Improving Access to Medical Care through CORE Team Referrals – Monarch

Improving Data Entry/Software Systems for Clients with Medical Care/Lab Work - Poverello

TBD – Legal Aid Society

Communication and Community Sharing

An important aspect of a culture of quality is transparency and routine communication of effort and results. This section outlines the methods the EMA will use to communicate about the CQM Program and the results of its activities.

Dissemination Audiences

The following groups are targeted to receive periodic data and continuum of care updates from the Palm Beach County collaborative. This list constitutes the *who* of dissemination.

- Palm Beach County HIV CARE Council, including Quality Management and Evaluation Committee as well as the Planning Committee
- Part A Recipient Office
- Part B Lead Agency
- HRSA-HAB
- Subrecipient Providers
- HIV System of Care Collaborative (HIV SOCC) Workgroup (direct service staff of HIV related services)
- Quality Improvement Workgroup
- PWH, through invited symposiums and meetings
- Community Services Department Strategic Planning, Research and Evaluation (SPRE)
- Community Prevention Partnerships

Dissemination Reports

The following reports will be distributed to audiences that are listed above. This list constitutes the *what* of dissemination.

- Service Utilization and Outcomes Report
- HAB Performance Metrics
- Quality Improvement Project updates
- Optimized HIV Care Continuum Report
 - o In Care
 - o Retention in Care

Viral Load Suppression

Dissemination Activities

The following activities represent the specific dissemination opportunities to distribute the HIV continuum of care data to the audiences above. This list constitutes the *how* of dissemination.

- Publicly-accessible websites
 - o https://www.flhealthcharts.gov/EHE/rdPage.aspx?rdReport=Overview
- Data presentations for the HIV CARE Council and other collaborative groups
 - o https://discover.pbcgov.org/carecouncil/Pages/data-reports.aspx
- Data updates at the standing meetings, including but not limited to the Part A-B Collaborative Meetings, QMEC, HIV SOCC, and QI Workgroup
- Florida Department of Health Dissemination of Epidemiological Profile to Part A and B Leads via email each August/September for prior year's surveillance data

Internal CQM Work Plan 2022

Goal 1: Infrastructure - Continue to develop a comprehensive and functional quality infrastructure

Objective #	Objectives	Key Actions	Timeline	Responsible for Tasks	Outcomes/Impact
1	Update CQM Plan and Work Plan Progress Measure: Approved CQM Plan by May 2023	Incorporate HRSA Improvement Options and changes to program/QIPs	March 2023	Systems-Level Quality Management Clinician	Completed
		Review with CQM Committee	April 2023	Internal CQM Committee	Completed
		Final edits/changes and signature from HIV Elimination Programs Manager	May 2023	Systems-Level Quality Management Clinician and HIV Elimination Programs Manager	In progress
2	Begin meeting quarterly with all Internal CQM Committee Progress Measure: Internal CQM Committee meets quarterly for formal review work	Send invitation and agenda Take meeting minutes	January 2023 April 2023 July 2023 October 2023	Systems-Level Quality Management Clinician	Completed Completed Not yet started Not yet started
3	Continue meeting weekly with Internal CQM Committee staff for activities updates and coordination Progress Measure: Internal CQM Committee meets weekly for activities coordination	Schedule meetings and reschedule as needed	Ongoing	Internal CQM Committee	In progress
4	Subrecipients to update CQM Plans and Work Plans Progress Measure: Subrecipients send CQM Plans and Work Plans to Agency-Level Quality Management Clinician	Send reminders to subrecipients	April 2023	Subrecipient CQM Agency-Level Quality Management Clinician	In progress
5	Provide feedback to subrecipient CQM Plans and Work Plans Progress Measure:	Review CQM plans, provide feedback using HRSA tool	May 2023	Agency-Level Quality Management Clinician	Not yet started

	Feedback is sent to subrecipients about their CQM Plans and Work Plans				
6	Attend Training-of-Trainers (TOT), Training of Quality Leaders (TQL) and Training of Coaching Basics (TCB) Programs from CQII	Apply for programs Arrange for travel Complete pre-work	March 2023 (TOT) May 2023 (TQL) June 2023 (TCB)	Systems-Level Quality Management Clinician Agency-Level Quality Management Clinician	In progress
	Progress Measure: Successful completion of CQII Training Programs	Attend trainings Complete post-work	June 2023 (TCB)	Management Cimician	
7	Provide TA and trainings to subrecipients	Arrange for TA and trainings with sub-recipients	Ongoing	Agency-Level Quality Management Clinician	In progress
	Progress Measure: Successful completion of technical assistance requests and trainings	Conduct TA and trainings with subrecipients			
Goal 2: Pe	rformance Measurement - Strengthe		integrity, and data utiliz	ation	
Objective #	Objectives	Key Actions	Timeline	Responsible for Tasks	Outcomes/Impact
1	Identify measurable quality performance measure indicators for	Review current reports and data issues	January-April 2023	Quality Management Clinicians	Completed
	all funded services (PCN 15-02)				
	all funded services (PCN 15-02) Progress Measure: Quality performance measure indicators are selected	Work with GTI to complete work on Optimized HIV Continuum of Care Report	April 2023	Systems-Level Quality Management Clinician	In progress
	Progress Measure: Quality performance measure	complete work on Optimized HIV Continuum of Care	April 2023 April 2023		In progress In progress
2	Progress Measure: Quality performance measure	complete work on Optimized HIV Continuum of Care Report Review performance measures with Internal	·	Management Clinician	

Progress Measure:Performance measure data is reviewed at QMEC quarterly

3	Analyzing and reporting on grant year performance data (Evaluation of Services, Performances, Outcomes, and Cost Effectiveness)	Assign different measures/reports to CQM Committee members to report on	June 2023	HIV Elimination Programs Manager	Not yet started
	Progress Measure: Grant year performance data is presented	Committee members to run reports, analyze data, create presentations	August 2023	Internal CQM Committee Members	
		Committee members to present at during the HIV Prevention & Care Summit in Palm Beach County in August	September 2023	Internal CQM Committee Members	

Goal 3: Quality Improvement - Work on systems-level and agency-level projects to improve outcomes

Objective #	Objectives	Key Actions	Timeline	Responsible for Tasks	Outcomes/Impact	
1	Facilitate Quality Improvement Workgroup Progress Measure: Quality Improvement Workgroup meets monthly	Send agendas, invitations and prepare for meetings Take meeting summary notes and share with QI Workgroup	vitations and prepare r meetings		In progress	
2	Participate in Quality Improvement Workgroup Progress Measure: Quality Improvement Workgroup attendance includes a representative from each subrecipient	Come prepared to discuss progress on systems-level and agency-level QIPs	Monthly	Subrecipient CQM	In progress	

3	Conduct systems-level quality improvement project (QIP) aimed at improving patient care, health outcomes, and patient satisfaction (PCN#15-02, QIP in at least 1 service category at any given time)	MHSAS Completed CQII's create+equity Collaborative Mental Health & Substance Abuse Screening	January 2022 – March 2023	System-Level Quality Management Clinician w/ Subrecipient CQM Teams	Completed: Mental Health & Substance Abuse Screening (MHSAS)
	Progress Measure: At least one quality improvement project at the systems-level is occurring at any given time	Referral to TAC Project Receiving updates from subrecipients on Phase II of TAC Project	June 2022 – June 2023		In progress: Phase II in Active Linkage & Referral to Tele-adherence Counseling (TAC) to
		Analyze data and come prepared to discuss Cycle II of PDSA	May 2023		Improve Viral Load Suppression
		Flowcharting and adoption for TAC Project	June 2023		
		Housing & HIV Prepare summary slides on 100 Day Challenge	June 2023		Not yet started: Will prepare debrief from 100 Day Challenge: Housing is Healthcare
		Disparity Project Lead weekly meetings regarding data analysis to understand disparities	April 2023		In progress: Will receive updates on Disparity Project (Improving Equity in Outcomes)
		Select populations and evidence-based interventions to try	June 2023		
		Create Project Charter	June 2023		
		Begin PDSA Cycles	July 2023		
4	Conduct at least one agency-level quality improvement project (QIP) at any given time aimed at improving patient care, health outcomes, and patient satisfaction	Review subrecipient CQM Plans for their proposed agency-level projects	March 2023 –February 2024	Subrecipient CQM w/ support and guidance from Agency-Level Quality Management Clinician	In progress: Each subrecipient is at various stages in their projects
	Progress Measure: At least one agency-level quality improvement project is occurring	Provide guidance and support for agency-level projects			

	for each subrecipient at any given time				
5	Attend regular agency-level CQM meetings Progress Measure: Agency-level CQM meetings are being held by each subrecipient	Subrecipient to hold regular agency-level CQM meetings Agency-Level Quality Management Clinician attends	March 2023 –February 2024	Subrecipient CQM w/ attendance from Agency- Level Quality Management Clinician	In progress
6	Additional CQM Projects		March 2023 –February 2024	Florida International University & Internal CQM Committee	Not yet started: Analyzing Cost Reimbursement Models for Effectiveness on Outcomes
Goal 4: Su	brecipient Monitoring - Ensuring ag	encies are actively partic	pating in CQM work		
Objective				Barrana Hartan Tari	
#	Objectives	Key Actions	Timeline	Responsible for Tasks	Outcomes/Impact
1	Conduct subrecipient monitoring in regards to adherence to service delivery standards and CQM	Monitor service categories in accordance to service delivery standards	June 2023 – February 2024	Quality Management Coordinator	Not yet started
	Conduct subrecipient monitoring in regards to adherence to service delivery standards	Monitor service categories in accordance to service	June 2023 – February	Quality Management	•
	Conduct subrecipient monitoring in regards to adherence to service delivery standards and CQM Progress Measure: Subrecipient monitoring is completed for each agency for adherence to service delivery	Monitor service categories in accordance to service delivery standards Quality Management Coordinator to review CQM Plan was submitted and feedback	June 2023 – February	Quality Management Coordinator Agency-Level Quality	•

	in systems-level projects/meetings		

		Calendar Year 2023					3				
	Base	eline	Q	1	C	Q2	C	Q3	C	Q 4	
PBC Ryan White Program,	Thru Date 1	Thru Date 12/31/2022 T		2022 Thru Date 3/31/2023 Th		Thru Date 6/30/2023		9/30/2023	Thru Date 12/31/2023		
PM Quartely Metrics											
Š. A	N/D	Metric	N/D	Metric	N/D	Metric	N/D	Metric	N/D	Metric	
In Care	3167/3274	97%	2747/2775	99%							
Early Intervention Services	995/1111	90%	547/582	94%							
Early Intervention Services - MAI	162/166	98%	198/207	96%							
Retention in Medical Care	1890/2148	88%	1801/2096	86%							
Emergency Financial Assistance	17/17	100%	19/21	90%							
Food Bank - Nutritional Supplements	6/8	75%	7/7*	100%							
Food Bank/Home Delivered Meals	602/629	96%	652/684	95%							
Health Insurance Premium & Cost-Sharing Assistance	435/463	94%	466/493	95%							
Housing	23/25	92%	21/23	91%							
Legal Services	209/222	94%	217/243	89%							
Medical Case Management	973/1054	92%	970/1081	90%							
Medical Case Management - MAI	241/261	92%	275/289	95%							
Medical Transportation	233/241	97%	256/274	93%							
Medical Transportation Mental Health Services	70/72	97%	54/56	96%							
	1537/1712	90%	1473/1688	87%							
Non-Medical Case Management Non-Medical Case Management - MAI	240/263	91%	269/297	91%							
Oral Health Care	452/471	96%	424/453	94%							
Psychosocial Support Services - MAI	609/661	92%	542/598	91%							
Viral Load Suppression	2708/3274	83%	2431/2775	88%							
AIDS Pharmaceutical Assistance	53/57	93%	45/48	94%							
Emergency Financial Assistance - Emergency Medication	23/24	96%	28/32	88%							
Laboratory Diagnostic Testing	454/497	91%	440/484	91%							
Medical Case Management	1128/1223	92%	1147/1253	92%							
Medical Case Management - MAI	254/298	85%	290/329	88%							
Non-Medical Case Management	1945/2113	92%	1917/2112	91%							
Non-Medical Case Management - MAI	266/315	84%	307/353	87%							
Specialty Outpatient Medical Care	145/166	87%	133/157	85%							
Outpatient/Ambulatory Health Services	641/694	92%	682/739	92%							



PALM BEACH COUNTY RYAN WHITE HIV/AIDS PROGRAM



Plan Do Study Act (PDSA) Form

Cycle #:	Start Date:	End Date:			
Project Title:					
Agency Name:		Project Lead:			
 Aim Statement (What you as Specific - targeted populate Measurable - what to measurable - brief plan to Relevant - why is it imported in the specific - anticipated 	ion sure and clearly stated accomplish it tant to do now	,			
PLAN Act Plan Study Do					
Test/Implementation Plan (7	Think about what char	nges you can make that will result in an improvement):			
What change are you testing with the PDSA cycle(s)? Who will be involved in this PDSA? How long will the change take to implement? What resources will you need? List your action steps along with person(s) responsible and timeline.					
Prediction:					
Data Collection Plan (Think	about how you will ki	now the change is an improvement):			
		ollect the data? When will the collection of data take ns) be collected and displayed? What decisions will be			

DO



Activities/Observations:

Carry out the test on a small scale. Document observations, including any problems and unexpected findings. Collect data you identified as needed during the "plan" stage. Describe what actually happened when you ran the test.

STUDY



Study and analyze the data. Determine if the change resulted in the expected outcome. Were there implementation lessons? Summarize what was learned. Look for unintended consequences, surprises, successes, and failures. Describe the measured results and how they compared to the predictions.

ACT



Adapt – Modify the changes and repeat the PDSA cycle.

Adopt – Consider expanding the changes in your organization to additional clients, staff, and units.

Abandon – Change your approach and repeat PDSA cycle.

If Adapt or Abandon, describe what modifications to the plan will be made for the next cycle from what you have learned.

Please submit completed form to Jasmine Rohoman: jrohoman@pbcgov.org

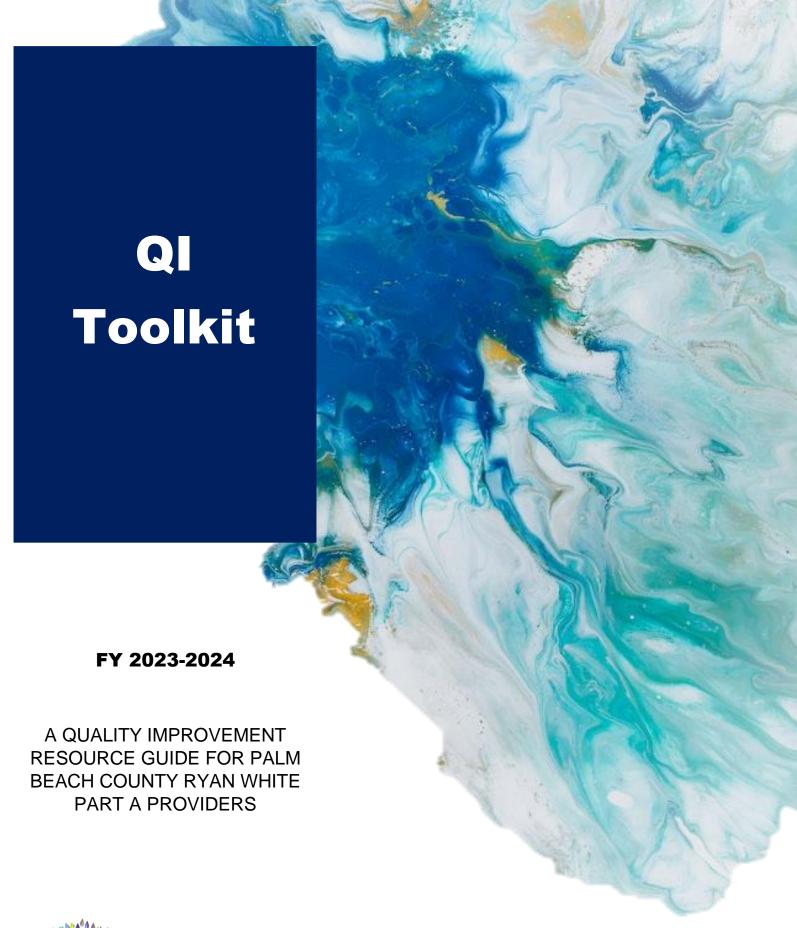




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Checkpoints

☐ Checkpoint 1: Identify Focus Areas for Quality Improvement Projects (Step 1)
□ Checkpoint 2: Driver Diagram (Step 2)
☐ Checkpoint 3: AIM Statement (Step 3)
☐ Checkpoint 4: Drivers/ Contributing Factors (Step 3)
☐ Checkpoint 5: PDSA Cycle Planning Form (Step 4)
☐ Checkpoint 6: Preliminary Data Review and Evaluation (Step 5)
□ Checkpoint 7: OIP Poster (Step 6)

QIP PLANNER 2023 -2024

This planner is a <u>recommended</u> timeline for deliverables related to the QIP process. It is meant to guide you and help you stay on track with conducting at least one (1) agency level QIP a year. It can be adjusted as needed, especially for agencies wanting to conduct more than one QIP a year.

All agencies should have at least one agency level QIP planned with an AIM statement by May 2023.

QIP Phase	Starting	Ending
STEP 1: Gearing Up For QIPS	3/1/23	4/14/23
STEP 2: Identifying the Problem	4/17/23	4/28/23
STEP 3: Aim Statements	5/1/23	5/19/23
STEP 4: PDSA Cycles	5/22/23	12/1/23
STEP 5: Preliminary Data Review & Evaluation	12/4/23	1/26/24
STEP 6: QIP Poster	1/29/24	2/29/24

Checkpoint Check-Ins	Dates		
Identify Focus Areas for QIPs	March-April		
Driver Diagram	April-May		
AIM Statement	May		
Drivers/Contributing Factors	May		
PDSA Cycle Forms	May-December		
Data Review and Evaluation	December-January		
QIP Poster	February		

Check-ins will be conducted monthly and can be virtual or in-person. Technical assistance and QI training is available year round, Monday-Friday, and availability varies.

Please email all questions, updates, and completed forms pertaining to agency level projects to Quality Management Clinician, Jasmine Rohoman at jrohoman@pbcgov.org.

Quality Management - An Overview

The Institute of Medicine defines quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

Quality Assurance vs. Quality Improvement

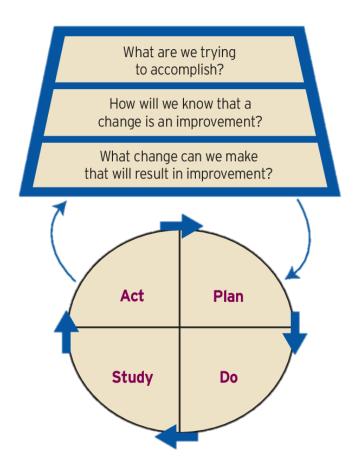
	Quality Assurance	Quality Improvement
Motivation	Measuring compliance with standards	Continuously improving process and health outcomes
Attitude	Required, reactive	Chosen, proactive
Focus	Outliers: "bad apples," individuals	Processes, Systems
Responsibility	Designated Staff	All Staff
Examples	Chart review, peer review, audits	PDSA Cycles, Pilot Testing

Models of Quality Improvement

There are numerous models for quality improvement used in healthcare. A common model that can be utilized is the Model for Improvement as the framework to guide quality improvement work.

The Model for Improvement was developed by Associates in Process Improvement and is utilized by the Institute for Healthcare Improvement (IHI).

The Model for Improvement



What are we trying to accomplish? This is where you would identify your AIM. Determine which specific outcomes you are trying to change.

How will we know that a change is an improvement? This is where you would identify appropriate measures to track your success.

What change can we make that will result in an improvement? Here you will identify key changes that you will actually test.

Multiple PDSA Cycles: Hunches, theories, and ideas for changes that result in improvement.

A vital component of this model is the creation of an aim statement to guide the improvement process. The Model for Improvement utilizes PDSA (Plan-Do-Study-Act) cycles to implement and test changes on a small scale.

What is Quality Management?

Under the Ryan White HIV/AIDS Program, quality management is a series of activities that focus on enhancing the quality of HIV care provided and increasing access to services. These efforts concentrate on how health and social services meet established professional standards and user expectations.

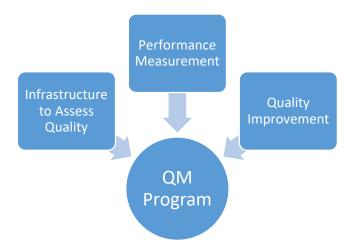
HRSA Requirements

All Ryan White HIV/AIDS Programs (RWHAP) are required to have a clinical quality management (COM) program to:

- Assess the extent to which HIV health services provided to patients, under the grant, are consistent with the most recent Public Health Service guidelines, (otherwise known as the HHS Guidelines) for the treatment of HIV disease and related opportunistic infections; and
- Develop strategies for ensure that such services are consistent with the guidelines for improvement in the access to and quality of HIV services.

Components of a Quality Management Program

Within the Palm Beach County EMA, all Part A-funded sub-recipients are expected to have a written quality management program structured to include three major components:



QM Program infrastructure must demonstrate:

- Leadership involvement and support
- Dedicated staffing and resources
- Stakeholder and consumer involvement
- Quality Management Plan
- Evaluation Plan

The Quality Management Program should be guided by the Quality Management Plan. Resources to assist with the development and evaluation of a Quality Management Plan are presented in the next sections of this tool kit.

Performance Measurement

Performance measurement is the process of collecting, analyzing, and reporting data pertaining to patient care, health outcomes, and patient satisfaction. Sub-recipient agencies should select measures that best assess the services provided. Sub-recipients are strongly encouraged to include HRSA HIV/AIDS Bureau measures and NHAS indicators that align with the national goals to end the HIV epidemic.

Percent of RWHAP eligible clients receiving at least	Minimum number of
one unit of service for a RWHAP-funded service	performance measures
category	
>=50%	2
>15% to <50%	1
<=15%	0

Performance Measures can include:

- HAB Indicators
- HIV Care Continuum
- HHS Outcomes and Indicators

It is also essential for sub-recipients to collect and analyze performance measure data that allows for inspection and improvement of health disparities across different target populations. According to the National HIV/AIDS Strategy, the priority populations for 2022-2025 are:

- Gay, bisexual, and other men who have sex with men, in particular Black, Latino, and American Indian/Alaska Native men.
- Black women
- Transgender women
- Youth aged 13-24 years
- People who inject drugs

To optimally support quality improvement activities, data collection for the QM performance measures should occur quarterly, at a minimum.

Quality Improvement

Quality improvement, including but not limited to patient services, entails the development and implementation of activities to make changes to the program in response to quarterly performance data results.

Within the Palm Beach County EMA, all Part A-funded sub-recipients are required to implement a minimum of one agency level and one system level quality improvement activity that is aimed at enhancing patient care.

Quality improvement activities should be implemented in an organized, systematic fashion. As a result, the sub-recipient is able to understand if specific changes or improvements had a positive impact on patient health outcomes or were indicative of further necessary changes in RWHAP funded services. All quality improvement activities should be documented. Recipients should conduct quality improvement activities within at least one funded service category at any given time.

The Quality Management Plan

The QM Program should be driven by the Quality Management Plan.

The basic elements of a QM plan are:

- Quality Statement
- Quality Improvement Infrastructure
- Performance Measurement
- Annual Quality Goals
- Stakeholder participation
- Evaluation

Quality Statement

What do we want to be?

A quality statement describes the purpose of the HIV quality program. It is the end to which all other program activities are directed. Some programs may refer to this as their quality mission statement, others, as their guiding purpose for quality activities. To write a quality statement for the quality management plan, quality teams must assume an ideal world and ask themselves, "What do we want to be for our patients and our community?"

Quality Management Infrastructure

How are we organized?

The quality management infrastructure describes how the program is structured and staffed to get work done:

- **Leadership**: Who is ultimately responsible for the HIV program's quality initiatives?
- Quality committee/ workgroup structure: Who chairs the HIV quality committee/workgroup? Which staff serves on the quality committee/workgroup?
- Quality committee/workgroup meeting frequency: When will the quality committee/workgroup meet to assess progress and plan future activities?
- Quality committee/workgroup reporting: What is the relationship of the quality committee/workgroup to the facility at large? How will the quality committee/workgroup communicate its progress to staff and consumers?

Remember that while there is an "I" in quality, it works best when done as a team.

Performance Measurement

How can we measure how we are doing?

Performance measurement is a method for identifying and quantifying the critical aspects of care within your facility. This is essential to assembling baseline performance data and measuring the effectiveness of improvement efforts over time.

Most HIV quality programs assess progress using quality of care indicators. A quality-of care indicator is a measured aspect of patient care used to evaluate the extent to which a facility provides HIV treatment and care services. Generally, indicators are based on specific standards of care derived from guidelines issued by a professional society and/or government agency. For example, the frequency of viral load tests is an indicator of how well a facility conducts HIV monitoring. Based on current guidelines, a viral load test should be conducted at entry to care, four to eight weeks following antiretroviral treatment (ART) initiation and every three to six months, thereafter (Plasma HIV-1 RNA (Viral Load) and CD4 Count Monitoring | NIH).

To identify aspects of care for performance measurement, quality teams should consider four main criteria:

- **Relevance:** Does the indicator relate to a condition that occurs frequently or has a great impact on the patients at the facility?
- **Measurability:** Can the indicator realistically and efficiently be measured given the facility's resources? Is the indicator reportable from PE?
- **Improvability**: Can the performance rate associated with the indicator realistically be improved given the limitations of available clinical services and the patient population?
- **Accuracy:** Is the indicator based on accepted guidelines or developed through formal group decision-making methods?

If a quality team answers "no" to any of the above questions, the indicator— while still relevant to patient care—is probably either too difficult to measure or less than critical to patient care. On the other hand, if all the questions are answered, "yes," the team has most likely detected a viable indicator that is a useful measurement resource.

Annual Quality Goals

What are the priorities for the quality program?

Quality goals are endpoints or conditions toward which the facility will direct its efforts and resources during project work. Quality goals help staff focus on improving aspects of care. While an HIV program can measure several key performance indicators, the available resources for quality improvement work might limit the HIV program to conduct one to three quality improvement projects per year. One function of the quality committee is to work with staff and stakeholders to develop annual goals so that they are understood and embraced by everyone in the organization. Prioritization helps the organization direct resources toward high priority patient needs and outcomes. The following three criteria can be helpful to a quality committee in prioritizing annual HIV-specific improvement goals:

- **Frequency:** How many patients received and how many did not receive the standard of care?
- **Impact**: What is the effect on health outcomes if patients do not receive the standard of care?
- **Feasibility:** Can something be done about the identified inconsistency with available resources?

Participation of Stakeholders

How will the organization engage staff members and consumers in the process of quality improvement?

If HIV quality improvement activities are to become incorporated into the structure of an organization, provisions need to be outlined in the quality management plan for actively engaging staff and consumers, consistently communicating information about quality improvement activities, and regularly providing opportunities for learning about quality. More specifically, the quality committee and organizational leadership will need to:

- Engage staff and consumers: Gaining staff and consumer support for quality improvement requires capturing and integrating their voices. The needs and expectations should be understood, and their feedback must be reflected in the quality improvement management plan. To accomplish this, the quality committee should seek staff and consumer input to the extent feasible. Staff meetings and other informal one-on-one discussions are both appropriate methods. A short questionnaire might be developed and circulated.
- Communicate information about quality improvement activities: Staff and consumers must know about the facility's quality initiatives on an ongoing basis. A quality management plan should document how the organization will share information about its quality activities and disseminate results.
- Provide opportunities for learning about quality: Because staff members ultimately bring the quality management plan to life, staff will likely require training and education on quality concepts and skills. The quality management plan should describe how the facility intends to provide staff training and learning opportunities. Options include self-study of quality manuals and quality posters or attendance at formal training sessions about quality. These learning interventions can also be shared with consumers. Organizations should also consider inviting consumers, trained in quality, to participate as quality trainers.

Evaluation

How will the organization evaluate its overall performance as a quality program?

Performance measurement provides hard data about improvements to care delivery over time, but it is also essential to assess how efficiently and effectively the program is operating. There are two areas to consider in program evaluation:

- Quality improvement projects conducted during the year: The projects should be a "value-driven" investment in the facility's quality of care and result in improvements that are sustainable over time.
- Effectiveness of the quality management plan: The quality plan should provide the vision and organizational process required to evaluate the effectiveness of the entire quality program.

Quality Management Review Tool

Domain in QM Plan	Description	Program's Self Rating
Quality Statement	Provide brief purpose describing the end goal of the HIV quality program and a shared vision to which all other activities are directed; assume an ideal world and ask, "What do we want to be for our patients and our community?"	□ Satisfactory □ Needs Improvement □ Missing
Quality Infrastructure	The quality infrastructure includes the following elements: 1. Leadership: Identifies who is responsible for the quality management initiatives 2. Quality committee/workgroup(s) structure: Documents who serves on the quality committee/workgroup, who chairs the committee/workgroup, and who coordinates the QM activities 3. Roles and Responsibilities: Defines all key persons, organizations, and significant stakeholders and clarifies their expectations for the quality management program 4. Resources: Identifies the resources for the QM program	□ Satisfactory □ Needs Improvement □ Missing
Annual Quality Goals	 Quality goals are endpoints or conditions toward which the quality program will direct its efforts and resources Select a few measurable and realistic goals annually 	□ Satisfactory □ Needs Improvement □ Missing

	 (not more than 5); use a broad range of goals • Identify the annual goals as established priorities for the QM program • Establish thresholds at the beginning of the year for each goal 	
Participation of Stakeholder	 List internal and external stakeholders and specify their engagement in the QM program Provide learning opportunities for staff and consumers to learn about quality improvement Include community representation in the QI process, as appropriate Identify and quantify how feedback is gathered from key stakeholders 	□ Satisfactory □ Needs Improvement □ Missing
Performance Measurement	 Identify and quantify the critical aspects of care and services provided in the organization; ensure integration with other titles or accrediting bodies; utilize the Program Assessment Rating Tool (PART) to: Measure and identify unmet patient needs Identify indicators to determine the progress of the QM program Identify staff who will conduct planning and develop tools to collect and analyze data Identify staff accountable for collecting, analyzing, and reviewing performance 	□ Satisfactory □ Needs Improvement □ Missing

	data results and for communicating findings • Develop strategies on how to report and disseminate results and findings and communicate information about quality improvement activities • Design and maintain a process to use data to develop new QI activities to address identified gaps in care and service delivery along the HIV care continuum and HIV disease management pathway	
Capacity Building	 Engage providers and staff in QI capacity building activities including performance measurement systems and QI activities Identify methods for QI training opportunities Provide technical assistance and support to providers and staff on QI and all QI initiatives Document how data are shared and discussed with providers and key stakeholders 	□ Satisfactory □ Needs Improvement □ Missing
Evaluation	 Evaluate the effectiveness of the QM/QI infrastructure to decide whether to improve how quality improvement work gets done. Evaluate QI activities to determine whether the annual quality goals for QI activities are met 	□ Satisfactory □ Needs Improvement □ Missing

	• Daviory portomones		
	Review performance massyras to do symant		
	measures to document		
	whether the measures are		
	appropriate to assess the		
	clinical and non-clinical		
	HIV care		
	Specify timelines for		
QM Plan Implementation	implementation to		
	accomplish those goals –	□ Satisfactory	
	work plan	□ Needs Improvement	
	 Specify accountability 	□ Missing	
	for implementation steps	_	
	 Provide milestones and 		
	associated measurable		
	implementation objectives		
	Identify routine schedule		
Process to update QM Plan	to update QM plan at least		
	annually		
	• Specify accountability –	□ Satisfactory	
	list staff who will initiate	□ Needs Improvement	
	process to update/revise plan	□ Missing	
	• Develop a sign-off process	Z Wissing	
	to finalize plan; potentially		
	include internal/external		
	stakeholders; include		
	signatures of key		
	stakeholders		
	Outline process to share		
Communication	information with all		
	stakeholders at appropriate	□ Satisfactory	
	intervals	□ Needs Improvement	
	Identify format of	□ Missing	
	communication	L Wissing	
	Identify communication		
	intervals		
	Create a concise and easy-	□ Satisfactory	
Formatting	to-follow layout; include	□ Needs Improvement	
	page numbers and a table of	□ Missing	
	contents	L Missing	
	• Document all updates		
	made to the plan that is		
	easily viewed with		
	corresponding dates		

Materials Adapted From:

- Source: Langley GL, Nolan KM, Nolan TW, et al. The improvement guide: a practical approach to enhancing organizational performance. San Francisco: Jossey-Bass; 1996
- HIVQUAL Workbook: Guide for Quality Improvement in HIV Care (2006, September). Developed by the New York Department of Health AIDS Institute for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau.Accessible at https://targethiv.org/library/hivqual-workbook-0

Additional Resources for Quality, and Quality Management:

- HIVQUAL Workbook: Guide for Quality Improvement in HIV Care (2006, September). Developed by the New York Department of Health AIDS Institute for the U.S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://targethiv.org/library/hivqual-workbook-0
- Measuring Clinical Performance: A Guide for HIV Health Care Providers (2006, January). Developed by the New York Department of Health AIDS Institute for the U. S. Department of Health Resources and Services Administration HIV/AIDSBureau. Accessible at https://www.targethiv.org/library/measuringclinical-performance-guide-hiv-health-care-providers

Closing the Gap between Linkage to Care and Retention in Care

The Palm Beach County EMA Ryan White Part A Program quality improvement focus for FY 2022- 2023 is closing the gap between linkage to care and retention in care, specifically among subpopulations including: Black-African American Non-Hispanic/Latinx Cis-Gender Adolescent/Adult Male and Female who acquired HIV infection due to heterosexual contact, Hispanic/Latinx Adolescent/Adult MMSC, and White Non-Hispanic/Latinx Adolescent/Adult MMSC. Quality Improvement Projects (QIPs) should be developed with a focus on addressing this gap. The CDC defines linkage to care as having one or more documented CD4 or viral load tests within 30 days (1 month) of HIV diagnosis. The CDC also defines retention in care as persons with diagnosed HIV who had two or more CD4 or viral load tests, performed at least three months apart.

Linkage to care and retention in HIV care remain common issues. Research has shown that mortality risk is 71% higher among patients with one or more missed visits in their first year of HIV care. Insufficient linkage, retention, and engagement in HIV care in the U.S. is a product of multilevel barriers. Identifying these barriers is a primary step towards closing the gap between linkage and retention in care. Interventions at the patient and system level can help reduce the multilevel barriers to linkage and retention to care. The following are examples of interventions:

Patient-level Interventions	System-level Interventions
Patient navigation services	Technical Assistance
Behavioral therapy	Infrastructure development
Peer navigation or case management	Developing new or strengthening external
	partnerships

Additional Resources:

• American Psychological Association. (2020, March). Interventions to enhance linkage and retention in HIV care services. Psychology and AIDS Exchange Newsletter. Accessible at

http://www.apa.org/pi/aids/resources/exchange/2020/03/interventions

• *Understanding the HIV Care Continuum.* (2019, July). Developed by the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Division of HIV/AIDS Prevention. Accessible at

https://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-care-continuum.pdf

STEP 1: GEARING UP FOR QIPs

Learning Objectives:

- Examine agency performance measurement data
- Identify areas for improvement

Data-Informed Quality Improvement

Quality improvement should be informed and guided by data.

Look at the data at least quarterly

- Doing well, or not?
- Performance stable, or a trend?
- Compared to other grantees?

Decide how to act on the data

- Which areas need improvement?
- What are our priorities for improvement?

Begin improvement work

- Idenitfy project team
- Define improvement goal

Data Sources

The Palm Beach County RWHAP program utilizes Provide Enterprise (PE) as the HIV management information system. PE has many features that enable providers to review performance data at the agency level, including the Continuum of Care Report, HAB Measures Report, and HHS Outcomes. Instructions for utilizing PE to generate reports can be found in *Appendix A: PE Reporting Guide*.

Continuum of Care

The Continuum of Care Report shows the number of clients achieving a specific Continuum of Care step. The steps are calculated as follows:

1. **Total Clients:** Clients that have received at least one service from the selected service category(s) in the reporting period. This number can be greater than People with HIV as it includes some clients who have had a provisional HIV diagnosis at the time of service but were not people with HIV.

- 2. **HIV+ Clients:** People with HIV who have received at least one service from The selected service category(s) in the reporting period.
- 3. **Ever in Care:** People with HIV who have ever had medical care service* documented.
- 4. **In Care:** People with HIV who had medical care within the reporting period.
- 5. **Retention in Care:** People with HIV who had two or more medical care services* at least three months apart in the reporting period.
- 6. **On ARV:** People with HIV who have documented ARV Therapy at any time during the reporting period.
- 7. **Virally Suppressed:** People with HIV who have less than 200 copies/mL in their most recent viral load assessment, as of the end of the reporting period.

Continuum of Care data can be compared to system wide Continuum of Care Data, previous year's agency Continuum of Care data, or National HIV/AIDS Strategy (NHAS) goals.

HAB Measures

The HAB Measures Report shows the portion of clients achieving the specified HAB measure in the measurement period. HAB measures are developed by HRSA HAB. The Palm Beach County EMA utilizes a selection of HAB measures to serve as process and outcome measures. A full listing of HAB measures can be found at https://hab.hrsa.gov/clinicalquality-management/performance-measure-portfolio.

HAB measures data can be compared to EMA-wide HAB measures, previous year's agency data, or internal agency goals.

Other Data Sources

PE provides a variety of *quantitative data* (numeric data). There is a multitude of other quantitative data sources that can inform quality improvement activities, including EMR/EHR data, scheduling data; chart reviews; client surveys.

Qualitative, *or descriptive*, *data* can also be useful in quality improvement. Qualitative data sources can include focus groups, staff, or client feedback.

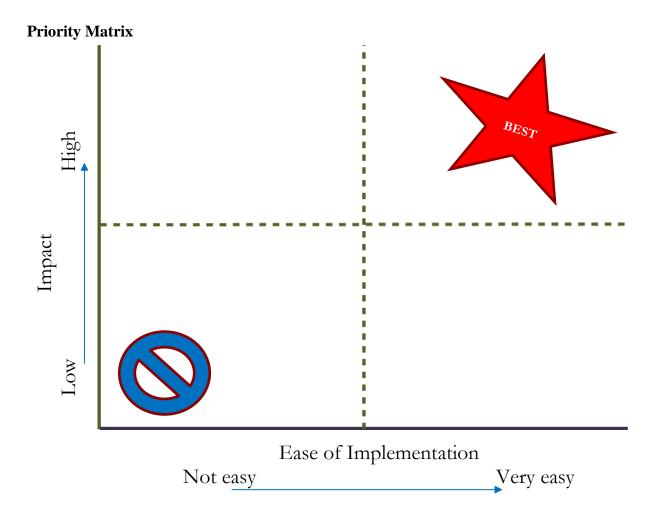




Elements that Influence Project Selection

- External Factors
 - ➤ National goals or collaborative
 - HIV Continuum of Care
 - Ending the HIV Epidemic (EHE)
 - end+disparities ECHO collaborative
 - Patient-Centered Medical Home
 - ➤ Regional or statewide activities
 - ➤ Local or citywide activities
- Internal Factors
 - ➤ Mission/Vision of your agency
 - ➤ Leadership's priorities and commitment
 - ➤ Staff availability and involvement
 - ➤ The voice of the consumer
- Resources
 - ➤ Staff Who needs to participate? How many?
 - ➤ Time How much time each day? How much time overall?
 - ➤ Dollars Will the project cost anything? Are funds available?
 - ➤ Training Is training needed? Who will provide?
- *Impact Will the project impact a few clients or many?*
- Ease of implementation Do you have the resources to accomplish the project?
- ➤ Technical feasibility
- ➤ Economic feasibility
- ➤ Regulatory feasibility
- ➤ Schedule feasibility
- ➤ Operational feasibility

A Brainstorm, Priority Matrix or Force Field Analysis may be helpful in selecting a project and generating consensus among stakeholders.



The Priority Matrix helps you to:

- Evaluate the impact and ease of implementation
- Gain additional clarity on moving forward with improvements
- Take into account available resources
- Remember: It's a guide and does not take into account organizational or legislative imperatives

Checkpoint 1: Identify Focus Areas for Quality Improvement Projects

Quality Improvement Projects (QIPs) aim to improve the quality of care provided to consumers within the EMA. The goal for all consumers within the EMA is sustained retention in care and viral suppression. There are many issues faced by consumers that impact their ability to achieve this.

Please identify one to three areas that could be targeted with a QIP.

Issue:	
Prevalence/Frequency/Incidence:	
Population(s) Affected:	
Seriousness/Urgency:	
Available Data Sources:	
Possible Interventions:	
Current Interventions:	

Materials Adapted From:

• Schlueter, J., Washington, E., & Moore, J. (2019, November 21). *Choosing an Improvement Project*. Retrieved from Target HIV: https://targethiv.org/library/choosing-improvement-project

Step 2: Identifying the Problem: Fishbone/Driver Diagrams

Learning Objectives:

- Construct a driver diagram
- Identify modifiable and non-modifiable factors

Modifiable vs. Non-Modifiable Factors

Quality improvement and PDSA cycles involve making a change to improve the quality of care; however, due to various constraints, not all changes are possible. We can consider the things we want to change as modifiable or non-modifiable factors.

A *modifiable factor* is something possible to change. Examples of modifiable factors could include:

- The organization of chairs in the agency waiting room
- How staff greet clients
- Intake forms to using inclusive language for transgender individuals

Some factors are modifiable but would be difficult to change due to organizational, financial, or other constraints. For example, a clinic may wish to have a separate waiting room for adolescent clients; however, this is not feasible due to space constraints.

A *non-modifiable* factor is something that is not possible to change. Many non-modifiable factors are at the client level. Examples of a non-modifiable factor include:

- Client gender, race, ethnicity, socioeconomic status
- Where a client lives
- Procedures and processes that are mandated by funders, local, state, or federal authorities

It is useful to consider modifiable and non-modifiable factors when developing a driver diagram.

Checkpoint 2: Driver Diagram

A driver diagram is a visual display of a team's theory of what "drives" or contributes to the achievement of a project aim. This clear picture of a team's shared view is a useful tool for communicating with a range of stakeholders where a team is testing and working.

A driver diagram shows the relationship between the overall **aim** of the project, the **primary drivers** (sometimes called "key drivers") that contribute directly to achieving the aim, the **secondary drivers** that are components of the primary drivers, and **specific change ideas to test** for each secondary driver.

Primary drivers are the most important influencers on the aim, and you will have only a few (we recommend 2 to 5). Secondary drivers are influencers on (or natural subsections of) the primary drivers, and you may have many. As you identify each driver, establish a way to measure it.

Remember: It is unlikely that a single individual has a clear view of an entire complex system. When developing a driver diagram, enlist the help of team members who are familiar with different aspects of the system under review.

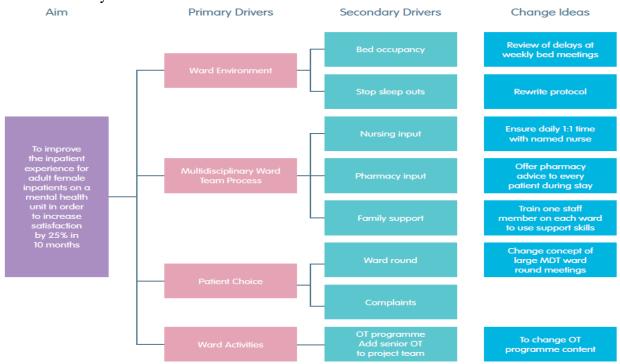
Adapted from: QI Essentials Toolkit: Driver Diagram, Institute for Healthcare Improvement

Instructions

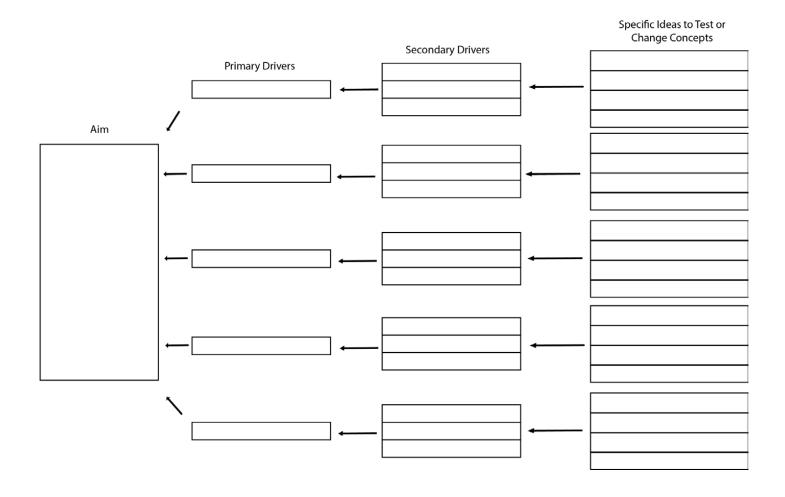
- 1) On the left, list the project aim (keep it general for this activity, such as "increase appointment attendance") and draw a box around it.
- 2) To the right of the aim, list a few "primary drivers" the most significant high-level influencers on the aim you have identified. Draw a box around each of the primary drivers and draw lines to connect the primary drivers to the aim.
- 3) To the right of each primary driver, list as many "secondary drivers" as you can think of that influence the primary driver. Draw a box around each secondary driver and draw lines to connect the secondary drivers to the primary drivers. Note: Secondary drivers can connect to more than one primary driver.

*Tip: To show strong relationships, use solid lines, to show weaker relationships, use dotted lines.

- 4) To the right of each secondary driver, list specific change ideas you will test to influence the secondary driver. *Note*: Change ideas can connect to more than one secondary driver.
- 5) Use different colored highlighters to identify modifiable and non-modifiable primary and secondary drivers.



Example: QI toolkit: driver diagrams - West of England Academic Health Science Network (weahsn.net)



Materials Adapted From:

• *QI Essentials Toolkit: Driver Diagram*, West of England Academic Heath Science Network. Accessible at: <u>QI toolkit: driver diagrams - West of England Academic Health Science Network</u> (weahsn.net)

Additional Resources:

• *Don Goldmann: How do you use a driver diagram?* Institute for Healthcare Improvement. Accessible at: https://youtu.be/yfcE_Q-IRFg

Step 3: Aim Statements; Strategies and Quality Indicators

Learning Objectives:

- Construct an aim statement
- Determine quality measures for upcoming QI project
- Analyze strategies to address the identified problem being studied in the QI project.

Tips for Setting Aims

1. Clearly define your aim. This is not always as easy as it sounds. Just improving is not a clear enough objective to engage and motivate your team to improve. Having a "How much" and "by when" aim may seem ambitious; however, it is much better to not quite fulfill your aim than to not have any significant measurable improvement because of an ambiguous aim.

2. Include numerical goals that require a fundamental change to the system.

Teams are more successful when they have clearly, focused aims. Setting numerical goals clarifies the aim, helps to create tension for change, directs measurement, and focuses on initial changes. For example, the aim "Reduce waiting room time" is not as effective as "Reduce patient appointment wait time for a provider by 50% within 12 months." Including numerical goals not only clarifies the aim, but also helps team members begin to think about what their measures of improvement will be, what initial changes they might make, and what level of support they will need.

- 3. Set stretch goals. A "stretch" goal is one to reach within a specific time. Setting stretch goals such as "Reduce patient appointment wait time for a provider by 50% within 12 months" communicates immediately and clearly that maintaining the status quo is not an option. Effective leaders make it clear that the goal cannot be met by tweaking the existing system. Once this is clear, people begin to look for ways to overcome barriers and achieve stretch goals.
- **4. Avoid aim drift.** Once the aim has been set, the team needs to be careful not to back away from it deliberately or "drift" away from it unconsciously. The initial stretch goal "Reduce patient appointment wait time for a provider by 50% within 12 months" can slip almost imperceptibly to "Reduce patient appointment wait time for a provider by 40%" or "by 20%." To avoid drifting away from the aim, repeat the aim continually. Start each team meeting with an explicit statement of aim, for example, "Remember, we're here to reduce patient appointment time for a provider by 50% within 12 months," and then review progress quantitatively over time.
- 5. Be prepared to refocus the aim. Every team needs to recognize when to refocus its aim. If the team's overall aim is at a system level (for example, "Increase chlamydia and gonorrhea screening by 30% within 12 months"), team members may find that focusing for a time on a smaller part of the system (for example, "Increase chlamydia and gonorrhea screening for patients new to care by 30% within 12 months") will help them achieve the desired system-

level goal. *Note*: Do not confuse aim drift or backing away from a stretch goal (which usually is not a good tactic), with consciously deciding to work on a smaller part of the system (which often is a good tactic).

Quality Measurement

A quality measure is a tool to assess specific aspects of care and services that are linked to better health outcomes while being consistent with current professional knowledge and meeting client needs.

Process Measures evaluate the actions taken to produce the outcome and the procedures for achieving the best outcomes.

Outcome Measures measure the result. Outcome indicators are used to evaluate if you met your goal.

Balancing Measures are used by improvement teams to see whether the improvement work is having an unintended consequence in the system.

Process Measure

-How do you measure what you are doing?

-Example: Number of clients getting intervention

Balancing Measure

-Are there any unintended consequences?

-Example: Number of clients receiving a mental health screening vs appointment length

Outcome Measure

-What tells you if you reached your goal?-Example: Percentage of clients

 Example: Percentage of client who are virally suppressed

What makes a good measure?

- Relevance
 - Does the indicator affect many clients?
 - Does the indicator have a significant impact on the programs or clients?
- Measurability
 - Can the indicator realistically and efficiently be measured given finite resources?

- Accuracy
- Is the indicator based on acceptable guidelines or developed through formal group-decision making methods?
- Improvability
- Can the performance rate associated with the indicator realistically be improved given limitations of your services and populations?

Checkpoint 3: AIM Statement

What are you trying to accomplish?

• What do you hope to accomplish with this project? Aims should be SMART, specific, clear, well defined, and at a **minimum**, describe the target population, the desired improvement, and the targeted time frame.

Use the following table to put together your aim statement.

To increase/decrease	(process/outcome)
from	(baseline %, rate, #, etc.)
to	(goal, target %, rate, #, etc.)
by	(date)
in	(group, population)

Full AIM Statement:		

Checkpoint 4: Drivers/ Contributing Factors

Driver/Contributing	Change idea:	Process Measure:	Outcome Measure:
Factors: List the main	What do you also to	Harri con vicu	Harri aan man
drivers/factors that	What do you plan to do to address the	How can you measure that your	How can you measure if your
contribute to the	driver/contributing	change idea is taking	change idea worked?
outcome you want to	factor?	place?	change idea worked:
change.	ractor.	piace:	
change.			

Materials Adapted From:

• Science of Improvement: Tips for Setting Aims, Institute for Healthcare Improvement, accessible at www.ihi.org

Additional Resources:

Process and Outcome Measures

- *Types of Health Care Quality Measures*, Agency for Healthcare Research and Quality, accessible at https://www.ahrq.gov/talkingquality/measures/types.html
- Science of Improvement: Establishing Measures, Institute for Healthcare Improvement, accessible at http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementEstablishingMeasures.aspx

Aim Statements

• *QI Tips: A Formula for Developing a Great Aim Statement*, National Institute for Children's Health Quality, accessible at https://www.nichq.org/about/mission

Step 4: Measurement and PDSA Cycles

Learning Objectives:

- Explain the five parts of a Measurement Tree
- Describe a step measure
- Explain the difference between quantitative and qualitative data
- Discuss PDSA Cycles
- Design PDSA cycles to implement the QIP

Measurement Tree

The Measurement Tree is a visual display of the logical links between the outcome that motivated the improvement journey to the original change ideas being tested to alter the status quo and improve patient treatment and care. When partnered with statistical tools such as run and control charts, measurements observed more frequently in the improvement project or journey, such as those in process steps and process levels, can reveal early improvement or the opposite, no improvement. These findings help to boost or redirect the quality improvement team in its work to effect change. When a step measure shows no change, the responsive team can change its course and update its knowledge to make modifications during the project.

The Five Components of a Measurement Tree are:

- 1. Outcome measurement
- 2. Process measurement
- 3. Process step measurement
- 4. Balance measurement
- 5. Plan-do-study-act (PDSA)

Each part presents an area of the system that is useful to measure during a quality improvement project. The overall purpose of these measurements is to help a team understand whether the changes it is making are having the beneficial effect(s) it hypothesized. Please see the following excerpt from *Branching Out*, written by Brandon Bennett. The full article can be found in Appendix D.

Branching Out

Use measurement trees to determine whether your improvement efforts are paying off by Brandon Bennett

"Just the Facts:

- A measurement tree is used to break down broad categories into finer and finer levels of detail. The tree is comprised of five parts: outcome measurements, process measurements, process step measurements, balance measurements and plan-do-study-act measurements.
- These measurements represent areas of the system that are useful to measure during an improvement project and help teams understand whether the changes they're making are beneficial.

When embarking on any improvement project, there are three critical questions teams must ask to guide improvement efforts:

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

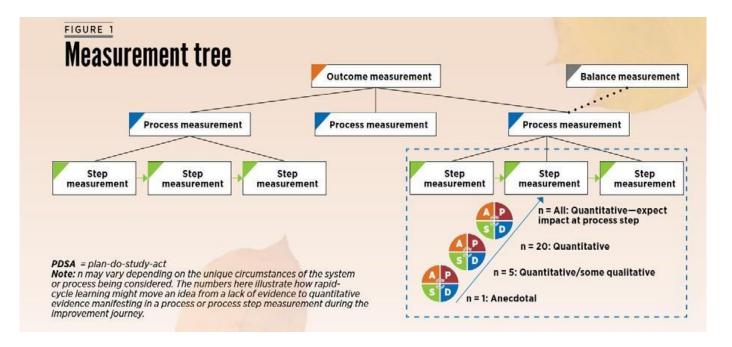
Improvement teams across many sectors, such as healthcare, community health, education and social welfare, can usually answer the first two questions with relative ease. Leaders task teams with an aim or goal: seek better performance from a process or the system; improve profitability, safety, access, equity or some other outcome meaningful to the system.

Often, improvement teams are comprised of middle managers and frontline workers who, given their experience, theorize what must change to achieve better performance. Ask any frontline worker, "What would you change about your work and how would you change it to make it easier, more effective, faster, safer and more equitable?" The worker will have an answer waiting.

However, improvement teams often struggle with connecting the ideas they have, which often are specific to tasks at hand, back to the outcome of interest. A question remains: What is the logical link that would allow a team to make a change in the process where it works and see a measurable impact to the process' or systems' desired outcome?

The measurement tree is a diagram that can help make those connections:

- It displays the logical links of measurement related to the desired improvement.
- It breaks down the complexity of a single outcome into the measurable component parts of the system that are theorized to play a role in creating the outcome.
- It serves as a bridge between the unproven change ideas workers and leaders have for "fixing" the day-to-day work problems and the improved outcome they desire to see in the system.



Component parts

A measurement tree has five parts:

- 1. Outcome measurement.
- 2. Process measurement.
- 3. Process step measurement.
- 4. Balance measurement.
- 5. Plan-do-study-act (PDSA) measurement.

Each part represents an area of the system that is useful to measure during an improvement journey. The purpose of these measurements is to help a team understand whether the changes it's making are having the beneficial effect it theorizes.

The tree is constructed through a process that brings together subject matter expertise used to inform the team's theory of improvement with possible measurements pulled from information the system already collects. A driver diagram can serve as a good starting point for informing and inspiring what data might be useful to understanding whether improvement is occurring in the system.

Part one: Outcome measurement. The outcome measurement represents the primary focus of the measurement tree. It measures the purpose of the improvement work that has been undertaken and serves as the improvement team's motivating force.

This is the measurement a team uses to understand whether it has achieved its outcome. It measures the quality of the service, product or result that is meaningful to the team's community, student body, client base or workforce.

In some industries, such as education, healthcare, and social welfare, it's useful to distinguish between lagging outcome measurements, which can only be collected infrequently, and leading

outcome measurements, which are highly correlated to the lagging measurements and available for collection more frequently.

An example from the education field helps illustrate this phenomenon:

- Lagging outcome measurement: The percentage of new teachers retained each year. This measurement can be collected only once per year (at the end of a school year when retention rates are calculated and reported at the school and district levels).
- Leading outcome measurement: The percentage of new teachers reporting a feeling of burnout. This measurement could be ascertained by surveying new teachers in a school or across a district every six weeks during the academic year.

This measurement might be chosen because measurements of burnout are highly correlated with retention. A leading outcome measurement indicating high levels of burnout early in the year can serve as motivation for leaders to intervene before teachers choose to exit the workforce.

Part two: Process measurement. "All work is a process." This adage, often attributed to W. Edwards Deming, captures the heart of managing systems. It implies that a system's outcomes are the direct result of the work done to produce those outcomes.

Processes can be defined as the step-by-step actions taken to accomplish work. They are influenced by the structural and cultural elements of the system. However, it is in how well, how often and with what fidelity they are accomplished that ultimately determines a system's outcomes. To achieve the outcome, processes must be continually improved.

The process measurements, then, represent the data a team can collect to understand the performance of a system's day-to-day work. While outcome measurements often lag in time, process measurements are more readily available because they are directly connected to concrete work processes happening regularly. The availability of data for process performance can vary from daily to weekly to monthly.

Process measurements in the measurement tree are deeply influenced by subject matter expertise and the theory crafted by the team aiming to achieve a new outcome. Teams readily identify them through connections to their theory of improvement. In cases in which a driver diagram is used to depict theory, these measurements often are connected to the primary and secondary drivers (structures, processes, or operating norms) identified as key leverage points in the system.

Part three: Process step measurement. The outcome of a system is the result of multiple processes working together. But processes themselves can be complicated. They are made of many steps—small actions taken in sequence—that lead, little by little, to the production or completion of a service or product. These steps are where process step measurements are identified for inclusion on a measurement tree.

Process steps happen every day in systems. They represent the work of individuals and teams: from teaching a class to administering a budget to intervening on behalf of a client or family. These steps are the places in the system where applying a change idea can result in improved performance.

Frequently, teams have not articulated or don't know what the process steps are in a system, or don't measure them. Identifying these steps and collecting measurements about their performance, even if temporarily, can be a huge boost for teams seeking to answer the question, "How will we know a change is an improvement?" Process steps are where performance improvements can be detected or realized first.

Part four: Balance measurement. Balance measurements are used by improvement teams to see whether the improvement work is having an unintended consequence in the system.⁷ Leaders and managers often are asked to make tradeoffs in the performance of their systems. Reducing the cost of providing healthcare, for example, might mean a healthcare provider decreases the size of its workforce, thus limiting its ability to maintain the quality of care provided.

Finding a balance is crucial, but from the perspective of improving a whole system, teams rarely want to experience significant gains in one area at the expense of another area. A team focused on dramatically improving teacher satisfaction, and thus retention, for example, would not want to achieve its goal at the expense of student achievement.

Part five: PDSA measurement. Measurements developed for PDSA cycles, or rapid learning cycles, comprise the final component of the measurement tree.

These measurements are used to answer specific learning questions proposed by teams when testing a change idea in practice. They often are used as part of a single cycle of learning at a small level—with one client, in one huddle, in one school for a month, or across several locations for a week.

They exist to build an improvement team's knowledge and confidence about what might work to improve the system.

PDSA measurements are harder to describe conceptually because often they exist for just a single cycle. They provide the information necessary to propel a team forward in its learning and help it know when and whether to move the trialing of change ideas to a more diverse set of conditions or a larger scale.

These measurements are crafted uniquely for the cycle at hand and can be operationally defined qualitatively or quantitatively, depending on the learning needs of the cycle. Though teams may collect data on these measurements for only a short time or in an ad-hoc way (not incorporate them into the permanent data collection microsystem of the organization), they are incredibly important to the improvement journey.

Data collection tools, such as check sheets, recording forms, surveys and empathy maps, frequently serve the function of data collection for single PDSA cycles. Often, the data from these cycles build sequentially, helping the team tasked with improvement learn what ideas improve the process or system in practice.

Some of these data collection tools and the data they collect are used for several cycles, while the degree of belief a team has in the utility of an idea increases. Some become important enough to

be elevated to process step measurements (and thus formalized into the system). Some are used just long enough to confirm the utility of an idea before being discarded.

A ramp of sequential cycles is included in the conceptual view of the measurement tree to highlight their contribution. Early on, learning may be anecdotal or purely qualitative, but as cycles progress and a change idea is trialed on a larger segment of the process, quantitative impact is noted."

PDSA Cycle- The Model for Improvement

The Model for Improvement requires the team doing the work to consider widely:



- The nature of the system in which the work is done
- The variation in the current performance of the system
- The psychologies and behaviors that support the system
- Theories as to what could improve the aforementioned factors over time.

Ideas need testing, piloting, learning, and eventually spreading. This uses the Plan, Do,Study, Act (PDSA) approach.

What is the PDSA Cycle?

It is a rapid test of improvement. When a change idea is generated, the PDSA cycle allows for a structured approach to rapid testing of the idea of a small scale. Commonly stated, a journey of a mile begins with little steps. The PDSA cycle is continuous, and the trend should be an uphill one if the approach is correct.



The PDSA Cycle

An Example:

Plan: a new adherence screening tool

- *Objective:* How can we screen HIV patients for issues that might affect their ability to adhere to their medication regimen in a way that will not disrupt patient flow?
- *Prediction:* Adding a screening tool will add time to the patient visit, but we can keep this to a minimum
- *Steps:* Jessica and Susan researched and identified possible tools that were reviewed by Susan and Dr. Drew. They selected one tool for Dr. Drew to use with at least three patients in the clinic on Thursday.
- Necessary tasks:
- 1. Identify tool
- 2. Copy tool and place in patients' charts
- 3. Dr. Drew reviews instructions for using the tool
- 4. Explain tool to patient
- 5. Use tool

Do: What happened?

- The tool was used on one patient
- Administration took five pages
- Added 35 minutes to documentation

Study: Our Results vs. Our Predictions

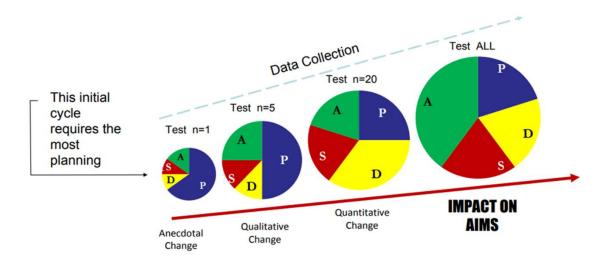
- Theory still holds
- Need to test more tools

Act: What will we do based on what we learned?

• We will test two different tools, each with three patients, by next Wednesday

Ramping Up your PDSA Cycles:

Complete multiple rounds of PDSA cycles. After several cycles, your team should have a good idea of which ideas have the most significant impact, and which to discard. As each cycle finds, successes and limitations are accounted for, testing at grander scales become feasible.



PDSA cycles are practical and useful tools, but one difficulty is keeping the momentum. It is essential to understand that it is okay if it does not work, but rather than restarting, modifying the process is often a better alternative towards implementation at a larger scale.

Tips for Effective PDSA Cycles

In the Beginning, Test on a Small Scale

Keep the first test small. A common question to those starting their first PDSA Cycle is: what change can you implement by next Tuesday? This question forces you to think small by reducing the sample size, such as "just a few records." Then, decreasing the implementation timetable, "within a few days," to a minimum.

One way to help you and your colleagues "keep it small" is to remember the <u>Rule of 1.</u> Design the first test for one facility, one office, one provider, or one patient. See what happens, act on that knowledge, and then scale-up the test.

Scale Down the Time Frame

Force yourself to scale down the time frame. Most people, until they really "get" PDSA, will want to run a pilot test for a long time. "We won't get representative data!" they will say.

Your first PDSA Cycles aim to give you information.

Here is a tip: When working with your team to design a test, listen to what people suggest as the time frame. Then, move down two levels.

Use volunteers to test your early PDSA cycles

Do not try to convince the skeptics until you have proof. To get proof, use volunteers, preferably people who are interested in doing things differently.

Do not treat QI as scientific research

This is not a randomized clinical trial. It is a test. You do not need double-blind data; you need information about how to make things work. Whether Dr. Drew's test took 34.3 minutes or 36.72 minutes does not matter. The point is that it took about 35 minutes, and that was way too long.

Meet regularly with your QI team

Scheduling a formal meeting will take at least a week, which is pretty silly to do to discuss the results of a one-day test. Grab people when you can, share information as it comes up. Dr. Drew could find Susan after the patient visit on Thursday morning and say, "Susan, that tool took 35 minutes, this will never work." Susan might say, "Wow, you're right. Jessica and I found other tools, let me get her and we'll come up with some others that might be better to try next."

Checkpoint 5: PDSA Cycle Planning Form

Please utilize the PDSA form to document your process found in Appendix C: PDSA Cycle Planning Form. Additional notes, materials, and data can be attached to each PDSA Cycle Tracker form.

Materials Adapted From:

• Bennett, B. (2018). Branching Out: Use measurement trees to determine whether your improvement efforts are paying off. *CONTINUOUS IMPROVEMENT*, (September). Retrieved from OP Branching-Out Measurement-Tree 20180901.pdf (elft.nhs.uk)

Additional Resources:

• HIVQUAL Workbook: Guide for Quality Improvement in HIV Care (2006, September).

Developed by the New York Department of Health AIDS Institute for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://targethiv.org/library/hivqual-workbook-0

- *PDSA Cycles (Part 1)*, Institute for Healthcare Improvement, accessible at http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard5.aspx
- Provost. P. & Murray, S. (2011) The Health Care Data Guide: Learning from Data for Improvement, Jossey-Bass.
- *The ABCs of PDCA*, Grace Gorenflo and John W. Moran, accessible at http://www.phf.org/resourcestools/Documents/ABCs_of_PDCA.pdf

Note: PDCA and PDSA are synonymous

Step 5: Preliminary Data Review & Evaluation

Learning Objectives:

- Analyze preliminary QIP data
- Present preliminary QIP data
- Summarize QIP progress
- Demonstrate PDSA cycles completed and/or planned
- Evaluate the QIP process and progress to date

Analyzing and Presenting Data

Adapted from A guide to using data for health care quality improvement

Several basic methods help to organize, analyze, and present the data that supports your quality improvement activities. These methods help quality teams:

- describe what is happening in the study population
- identify relationships between variables
- identify whether improvements have occurred
- monitor improvements over time
- determine the significance of the results
- communicate all conclusions effectively

Resources related to specific data analysis and presentation techniques can be found in the resources section of this toolkit.

Numerical Data

Raw numerical data can be challenging to absorb. Thus, basic statistics are used to organize and summarize information about a dataset. This helps describe what is happening in the sample population and can help guide the need for further analysis. The basic summarizing statistics and techniques that are helpful to use when first looking at HIV Care Continuum data are described below. Also described are techniques for comparing data, which is one of the basic requirements for quality improvement.

Counts and Sums

Counts are simply a count of how many items or observations present in the sample, for example, the number of people receiving a particular treatment or the number of people responding to a survey. In statistics, they are sometimes referred to as 'n,' indicated by a small letter n.

Sums involve adding up the numbers in each set of observations. For example, 20 people responding to the survey feel that current processes for check-in are inadequate.

Sums are usually expressed in relation to 'n,' that is, 20 of the 100 people surveyed feel that current processes for check-in are inadequate.

Ratios, rates, and percentages

Simple counts and sums are just the beginning. Statistics such as rates, ratios, and percentages help to standardize data so they can be expressed in a meaningful way and readily compared with additional data.

A *ratio* is a fraction, expressed in its simplest terms, that describes two groups relative to one another. For example, the ratio of females to males in a clinic may be 3 to 2, meaning that for every three females, there are two males.

A *rate* is a ratio that describes one quantity in relation to a specific unit. For example, the rate of no-shows may be expressed as four per 100 appointments scheduled.

Ratios and rates may also be expressed as percentages, such as 4% no-shows in relation to the above example.

Using ratios, rates, and percentages to make comparisons

Ratios, rates, and percentages are also useful when it comes to comparing data. For example, these data might be helpful when making comparisons before and after a quality improvement initiative.

Example: Counts, Ratio, Rate, and Percentage

	Females vs. Males
Counts	228 females, 152 males
Ratio	3 to 2
Rate	60 females per 100 population
Percentage	60% females

Example: Using Ratios, Rates, and Percentages to Make Comparisons, No-Show Visits by Appointment Time

	Morning Appointment	Afternoon Appointment	Percent Difference
Percentage of No- Show Visits	13% (n=2)	25% (n=5)	+12%
Total Visits Scheduled	15	20	

Presenting data

There are various techniques for organizing and presenting data. These help to guide analysis and are also valuable for communicating project findings. Several commonly used techniques are described in this section.

Data Tables

Data tables can be a handy way of coming to grips with the dataset. A table simply presents the data in row and column format and can provide a useful overview to guide further analysis or further tabulations. Tables can also be used to make comparisons between datasets and lead to some initial conclusions

Creating good tables takes a bit of practice, but the following tips might prove useful:

- Keep it simple
 - Do not try to include too much information in one table
- Watch the units
 - Make sure they are consistent throughout
- Do not get carried away with decimal points
 - Round off to one decimal point or whole numbers as appropriate to make tables easier to read and be consistent throughout
- Include both raw numbers and percentages: n (%)
- Always include 'n,' being the number in your total population
- Identify where there are missing data
- If grouping data, be sure that the groups do not overlap and that the groupings are evenly spaced

Example: Tables, Client satisfaction survey response rates

Provider	Dr. M	Nurse J	Dr. D	Total
# of Surveys Sent	140	76	47	263
# of Responses by Provider (%)	75 (54%)	50 (41%)	35 (74%)	160 (61%)

Graphing and charting data

Graphs and charts are like visual tables and are a useful way of presenting data to identify patterns or trends. They are also useful for communicating data findings to other datasets.

Graphs usually plot two types of data using a grid in which one set of data is plotted along the horizontal or X-axis, and the other are plotted along the vertical or Y-axis. The following table may help choose the type of graph or chart to use.

What do you want to show?	Type of graph/chart to use
Basic population characteristics such as age,	Pie chart, bar chart
ethnicity, etc.	
Measures of magnitude including	Bar chart, box plot
comparisons	
How often something occurs (frequency) such	Pie chart, bar chart, Pareto chart, box plot
as a no-show visit, including comparisons	
Trends over time	Line graph, control chart
Distribution of data	Histogram, scatter plot
Whether there is a relationship or association	Scatter plot, box plot
between two things (cause)	

When creating graphs and charts, similar rules apply to those mentioned above in relation to tables. In particular, you should:

- Keep it simple. Don't try to include too much information use a series of graphs or charts rather than trying to communicate too much in one figure.
- Avoid complex color schemes and three-dimensional graphs these are difficult to read.
- Choose a clear heading that describes the purpose of the graph and the population.
- Mark the names of the variables and the units clearly.
- Choose scales carefully so as not to underrepresent or over represent differences in the data.
- Include both raw numbers and percentages: n (%).
- Always include 'n,' being the number in your total population.
- If grouping data, be sure that the groups do not overlap and that the groupings are evenly spaced.

How to use pie charts

The pie chart is a popular and simple way of presenting data as it is easy to read and can quickly make a point. Pie charts are used to present categorical data and show how the percentage of individuals falls into various categories so that they may be compared.

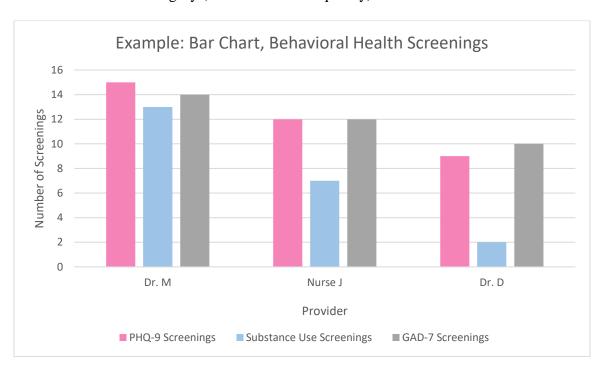
Pie charts can only be used, however, when each individual in the group falls into one category, and only one category, as the sum of all the slices must be 100%. Thus, pie charts are suitable for presenting data such as age ranges, cultural background, expenditure, types of service, and are of limited value in quality improvement activities.

When presenting a pie chart, always be sure to include the number in the total population, not just the percentages of the groupings. Also, be sure that the percentages do not add up to more than 100%.

How to use bar graphs

Simple bar graphs are also used to present categorical data, where the groupings are discrete categories.

Bar graphs consist of a series of labeled horizontal or vertical bars with the bars representing the particular grouping or category. The height or length of the bar represents the number of units or observations in that category (also called the frequency).



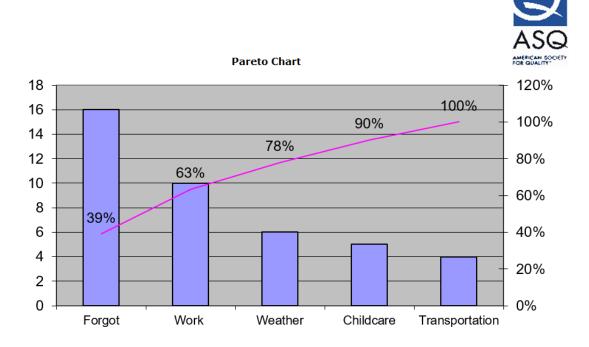
How to use a Pareto chart

In a Pareto chart, the purpose is to highlight the most important among a set of factors, thus:

- The values being plotted are arranged in descending order
- Frequency of occurrence is presented on the left vertical axis (it can also represent cost or another unit of measure)
- The cumulative percentage of the total number of occurrences, total cost, or a total of the particular unit of measure is shown in the right vertical axis

In quality improvement, the Pareto chart is often used to show the most common sources or causes of quality problems. A Pareto chart may also be used to identify and prioritize risk factors that need to be addressed throughout the intervention phase of the project.

Example: Pareto Chart, Reason for Missed Appointment



How to use bar charts to make comparisons

Bar charts can also be used to present comparative data, that is, to show changes that have occurred following a quality improvement intervention. One series of bars presents the situation before the intervention (baseline data), and the other, usually shown in a different color, shows the situation after the intervention. The difference in the heights of the bars reflects the change that has (or has not) occurred.

How to use box plots

The box plot, also known as a box and whisker diagram, is a useful way of summarizing and visualizing data to show:

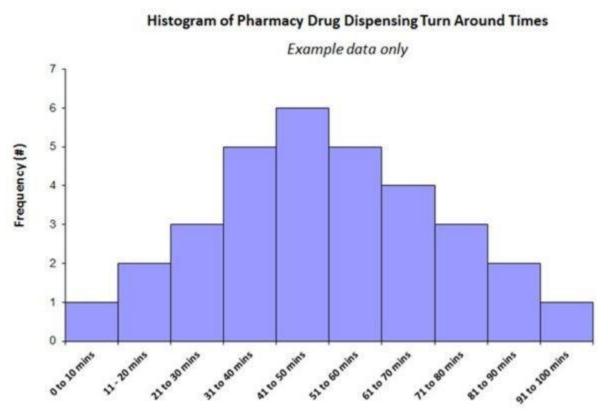
- the median or 50th percentile (depicted by a line in the middle of the box)
- the lower quartile (that is, the value within which a quarter of values lie at the lower end of the scale)
- the upper quartile (that is, the value within which three-quarters of values lie)
- the range of the data (minimum and maximum) depicted by the vertical lines extending from the box (the 'whiskers').

The box plot is particularly useful for comparing distributions between several groups of data.

How to use histograms

A histogram is a bar graph that is used to display numerical data as distinct from categorical data.

Example: Histogram, Pharmacy Drug Dispensing Turn-Around Times



https://www.latestquality.com/wp-content/uploads/2018/05/how-to-draw-a-histogram-600x424.jpg

You can use histograms to display three main features of numerical data:

- how the data are distributed
- the amount of variability in the data
- where the approximate center of the data is located. Producing meaningful histograms takes a bit of practice. Be sure to:
- use an appropriate scale so that differences in frequencies are not played down or exaggerated,
- Clarify the use of numbers or percentages to quantify frequency on the Y axis, and
- choose appropriate ranges for groupings along the X-axis, so as not to inappropriately represent the variability of the data.

How to use a scatter diagram

In cases where both variables are numerical (quantitative), the data can be organized in a scatter diagram or scatter plot. This simple graph plots two characteristics of each observation.

How to use line graphs

A line graph is a visual depiction of how two variables are related to each other. It shows this information by drawing a continuous line between all the points on a grid. Line graphs compare two variables: one is plotted along the horizontal X-axis and the other along the vertical Y-axis.

The Y-axis in a line graph usually indicates quantity or percentage, while the horizontal X-axis often measures units of time. As a result, the line graph is often viewed as a time series graph or time chart. At each time period, the quantity or percentage is represented as a dot, and the dots are connected to form the chart.

Bar graphs and line graphs share a similar purpose. The bar graph, however, reveals a change in magnitude, whereas the line graph is used to show a change in direction. Line graphs are therefore used to reveal trends and relationships between data and to compare trends in different groups of a variable.

In quality improvement, time charts are useful for monitoring change over a period of time and for monitoring the sustainability of change.

Another version of a line graph is a control chart in which changes are demonstrated in relation to a specific target. Control charts are time charts that track the consistency of data over time. They are often used to evaluate processes and to monitor quality performance.

Analyzing qualitative data

Qualitative data can also be analyzed and provides valuable input into your quality improvement initiatives. Analysis generally involves identifying themes and categories of data.

Interpreting and using data

Now that the data are collected and analyzed, what is the next step? How does the team make conclusions about what is going on in the delivery of particular health services and ways to link these conclusions to action?

Depending on the project, this can be a complicated process, so this is an excellent time to involve all stakeholders and seek input regarding the meaning of the data in the context of the organization. The discussion should also include the meaning of the data as they relate to the design, implementation, and/or refinement of the original improvement initiative.

Regular discussions like these should occur at each phase of a quality improvement initiative so that the next steps are well informed and agreed upon.

Clear communication of the project's findings at each phase of data collection is essential and will require organization and communication of data using some of the tools and methods described above. Presentations of data should outline clearly:

- the project's original objectives, including aim statement,
- a brief description of the data collection strategy, including consideration of the sample population, existing data sources, supporting literature and data collection tools,

- a brief description of the analysis strategy, and
- tabulations, graphs, and statistics that describe the findings.

This information can then be considered in light of what else is happening in the organization, as well as what is happening externally.

Checkpoint 6: Preliminary QIP Data Review

The purpose of this activity is to allow quality teams to showcase progress to their colleagues. The process of sharing quality improvement projects supports learning and the valuable experience of giving and receiving insightful feedback from colleagues. The attached PowerPoint template can be used to document all agency- conducted QIPs for 2023-2024.

In the PowerPoint template, the *blue italicized text* represents text that is to be replaced with agency-specific QIP content. The template is located in Appendix E.

Materials Adapted From:

• A guide to using data for health care quality improvement (2008, June). Developed by the Rural and Regional Health and Aged Care Services Division, Victorian Government Department of Human Services, Melbourne, Victoria. Accessible at https://www.aci.health.nsw.gov.au/data/assets/pdf_file/0006/273336/vqc-guide-to-using-data.pdf

Additional Resources:

- *HIVQUAL Workbook: Guide for Quality Improvement in HIV Care* (2006, September). Developed by the New York Department of Health AIDS Institute for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://targethiv.org/library/hivqual-workbook-0
- *Quality Tools* (2020). American Society for Quality. Accessible athttps://asq.org/quality-resources/quality-tools

List of a variety of quality tools and templates including control charts, histograms, flow charts, Pareto charts and many more.

- Health Numeracy, Quality Improvement Webinar Series (2016, June). Developed by the Center for Quality Improvement and Innovation (CQII) for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://www.targethiv.org/library/cqii-health-numeracy
- *Histogram Learning Lab, Quality Improvement Webinar Series* (2019, November). Developed by Kevin Garrett, MSW and Center for Quality Improvement and Innovation (CQII) for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://www.targethiv.org/library/cqii-histogram-learning-lab.

• Understanding Variation and the Tools Used to Identify It, Quality Improvement Webinar Series (2019, January). Developed by Center for Quality Improvement and Innovation (CQII) for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://www.targethiv.org/library/cqii-understanding-variation.

Documenting Results

The data presented typically include baseline data and PDSA cycle results. Graphic displays of data, such as charts, tables, and graphs, help to convey results at-a-glance and should be used whenever possible.

To effectively present project results, the "Four Cs" of effective communication should be applied:

- Clear: Use terms that staff and stakeholders understand and relate to.
- Concise: Be short and to the point.
- Complete: Include all relevant information.
- Correct: Ensure that all data are accurate.

Evaluate Results with the Quality Team, Staff, and Other Stakeholders.

Presenting the progress of the improvement project to the quality team, staff, and other stakeholders are important for several reasons. Sharing this information provides a feedback mechanism on the team's present work and lays the groundwork for getting "buy-in" on how best to spread and systematize changes. It also promotes public relations and helps build future support for improvement activities from the HIV quality program.

Making A Decision

Based on the evaluation of the project, a decision can be made whether the improvement project should be continued for future gains and/or implemented system wide.

Quality improvement project results are evaluated against the following criteria:

- Effectiveness against goals. Did the project reach its promised goal(s)?
- Range of impact. Should the project be further expanded to increase its impact?

Implementing Programs System-Wide

Spreading improvements into the wider system means implementing effective solutions based on the results of the PDSA cycles, where appropriate, throughout the HIV program. Perhaps the larger organization, of which the HIV program is a part, could also be included. A decision to implement the improvement project changes system-wide requires additional discussion and planning.

Different system-wide implementation scenarios are:

• Expansion to the entire HIV program. A successful project could be implemented at the entire clinic or all clinics in the HIV program's network.

• Expansion to non-HIV programs in a facility. A successful project in the HIV program of a hospital could be shared with other departments

Sharing" The Report"

Sharing improvement project progress with the entire program has the additional benefit of educating all staff members on how changes were made and what quality improvement really means. Staff members can learn a great deal about planning resource allocation and prioritizing pilot projects for implementation. The report should also be shared with the HIV program's leadership, board members, consumers, and advisory groups to create buy-in for upcoming steps to sustain the project's improvements.

Materials Adapted From:

- HIVQUAL Workbook Guide for Quality Improvement in HIV Care, New York State Department of Health AIDS Institute, Health Resources and Services Administration HIV/AIDS Bureau, accessible at https://targethiv.org/sites/default/files/fileupload/resources/HIVQUAL-Workbook.pdf
- A guide to using data for health care quality improvement (2008, June). Developed by the Rural and Regional Health and Aged Care Services Division, Victorian Government Department of Human Services, Melbourne, Victoria. Accessible at https://www.aci.health.nsw.gov.au/data/assets/pdf_file/0006/273336/vqc-guide-tousing-data.pdf

Additional Resources:

- *HIVQUAL Workbook: Guide for Quality Improvement in HIV Care* (2006, September). Developed by the New York Department of Health AIDS Institute for the U. S. Department of Health Resources and Services Administration HIV/AIDS Bureau. Accessible at https://targethiv.org/library/hivqualworkbook-0
- Strategies for Implementing Your HIV Quality Improvement Activities (2009, April). Developed by the National Quality Center for the Health Resources and Services Administration HIV/AIDS Bureau. Accessed at https://targethiv.org/cqii/publications

Step 6: Summing It All Up

This section is OPTIONAL. The creation of a QIP poster is not necessary for facilitation and completion of a finished QI project. However, this may be useful for agencies or QI leaders who are interested in fully capturing and documenting the QIP process from start to finish for research purposes, or safe-keeping for future employees of your organization.

Learning Objectives:

- Create QIP Poster
- Communicate results of QIP to stakeholders

QIP Posters

Posters can be used to report about your QIP to your agency, other community members, and other Part A-funded staff. This poster is like an academic or research poster.

Checkpoint 7: Constructing a QIP Poster

The QIP Poster template can be found in *Appendix F*.

Poster Design Tips

- BE CREATIVE! HAVE FUN!
- Make display interesting and easy to read
 - o Use color to complement, not compete with the message
 - o Large font size, readable
- Information
 - o Clearly identify core steps
 - o Concise, to the point
 - o Not too much background information
- Use graphs if data are complex
- Share before and after results
- Show to a few other people for constructive feedback

Poster Components

- Header
 - o Title (Descriptive of project, less than 15 words)
 - o Information about QIP Team
 - o Agency, location, year
- Problem Statement
 - o Define Problem Statement
- What is your improvement opportunity?
- Why did you choose the selected subpopulation?
- Current viral suppression data, assessment information that led you to choose this problem/population
- Use a quote from patient/provider about the challenges

Example: Definition of the Problem

Case managed patients receive comprehensive services and access to resources. VL suppression rates for our case-managed patients should be higher than those who do not receive our case management services.

Jan 2018 - May 2018			Jan-July 2-18
Caseload VL Suppression data	Pts not receiving CMgt at OHCC	RW case- managed pts at OHCC	RW case- managed pts at OHCC
82%	82%	81%	87%
n= 663/809	n=533/648	n= 130/161	136/156 (5 case closed)

Aim Statement

- o Focus on selected HIV subpopulation
 - Elements to consider
 - What will improve?
 - When will it improve?
 - How much will it improve?
 - For whom will it improve?

o Criteria

- Communicates scope
- Concrete and detailed
- Local priorities
- Measurable
- o SMART Goals
 - Specific, measurable, assignable, realistic, time-related

Measures

- o Outcome Measures
 - Define the outcome of interest and how it is measured
 - What is the source of data? (PE, EMR, other)
 - Who collected the data?
 - When was the data collected?
- o What tool/method was used?
 - Can include: Viral Load, Lab Values, Appointment Attendance, Qualitative Data, Client Feedback, Comments

PDSA Cycles

- o List 3-4 PDSA Cycles including
- o What you tested (Plan/Do)
- o What you learned (Study)
- o How that informed the next cycle (Act) o Can incorporate visuals, charts, and tables, if helpful

Results

- o What data did you collect during the project?
 - Graphs
 - Tables
 - Charts
 - Minimize narrative and use a visual when possible

Successes and Challenges

- o What successes and challenges did you experience?
- o Think of the
 - People (clients, staff, management)
 - Processes (check-in, documentation, discharge)
 - Systems (clinic wide, agency-wide, or other macro-level factors)

Next Steps

o What needs to be done based on what you learned from the QIP?

Team Members and Acknowledgements

o Give credit to any team members who participated or assisted you in your QIP

"Headline"

- o Central Slide Placement
- o Tips:
 - Grab people's attention
 - What is your key finding(s)?
 - Use plain language
 - Highlight words that you want to emphasize

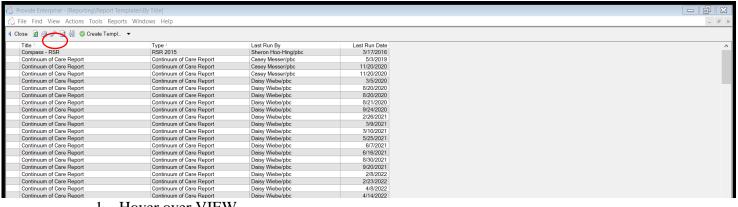
Appendix A

PE REPORTING GUIDE

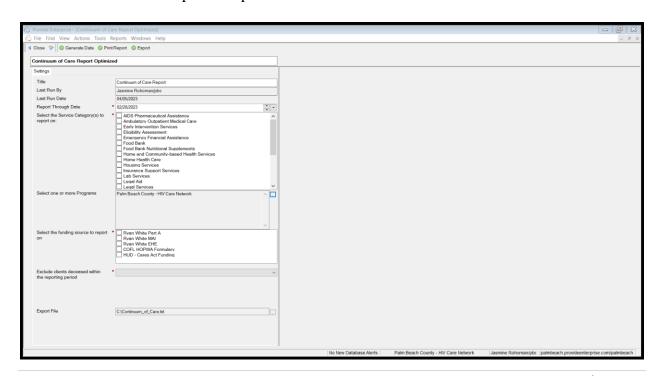
Continuum of Care Report

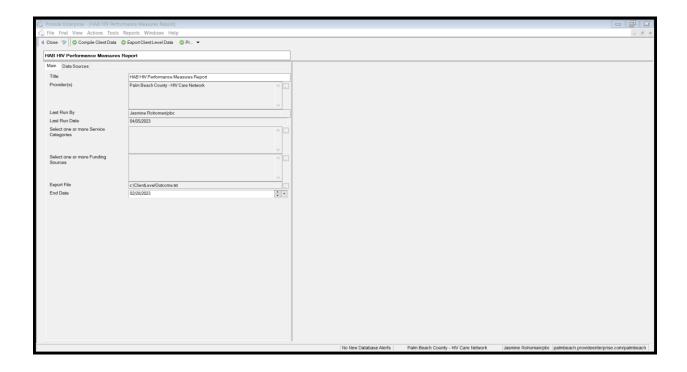
❖ Please note Continuum of Care report accounts for services that were performed whether they were billable or not

Generating



- 1. Hover over VIEW
- 2. Choose Reporting → Report Templates → By Title
- 3. Choose Create Template
 - a. Continuum of Care (Optimized)
 - b. HAB HIV Performance Measures Report
- 4. Fill in the Report Template





- **Title-** It is recommended that you title this report with your agency name, date range, and service category if running specific reports
- Last Run By- This will auto-populate with your information automatically
- Last Run Date- This will auto-populate with the current date
- **Report Through Date** select a date from the calendar pop-out. This report will pull data from the 365 days preceding your Report Through Date (i.e., if Report Through Date is April 25, 2022, then the report will contain data from April 26, 2021- April 25, 2022).
- Select the Service Category(s) to report on: Check the boxes for the service categories your agency provides or of interest for your report.
- **Select one or more Programs**: You should only be able to select your agency.
- Select the funding source to report on: Select Ryan White Part A or Ryan White MAI or both as applicable.
- **Export File** Click "..." and select where to save the output file on your local drive (this file will be empty, but PE requires a place holder)
 - 5. Click "Generate Data" or "Compile Client Data" and wait (PE will likely show that it is not responding; however, it is working)
 - 6. PE will pop-up and say 'data successfully generated'
 - 7. Click "Print Report"
 - 8. Review data to ensure that report pulled properly.

HAB HIV Performance Measures Report

1/ 1/2021 - 12/31/2022

For Agency(s): AIDS Healthcare Foundation - Client Services Florida Department of Health Palm Beach County - Client Services FoundCare - Client Services Midway Specialty Care Center - Client Services Palm Beach County - HIV Care Network

For Service Categories: Ambulatory Outpatient Medical Care

For Funding Source(s): Ryan White Part A

Run Date: 1/24/2023

Check the following to make sure that they match what you chose in the report template:

- Date Range- Ensure that this is the correct date range
- Selected Agencies
- Selected Service Categories
- Look at all pages to ensure that there are no blank tables
- 9. Select Export and save the report as a PDF on your local drive

Appendix B



PALM BEACH COUNTY RYAN WHITE HIV/AIDS PROGRAM



Plan Do Study Act (PDSA) Form

Cycle #:	Start Date:	End Date:	
Project Title:			
Agency Name:		Project Lead:	
 Specific- targ Measurable- Achievable- Relevant- when the second seco	What you are trying to accomplish?): geted population what to measure and clearly stated goal brief plan to accomplish it ny is it important to do now ic- anticipated length of cycle		
-	Act Plan tudy Do		
Test/Implement	ation Plan (Think about what changes y	ou can make that will result in ar	improvement):
	e you testing with the PDSA cycle(s)? W		•
the change take	to implement? What resources will you		_
responsible and	timeline.		
Prediction:			
	Plan (Think about how you will know the		
What data/meas	sures will be collected? Who will collect	the data? When will the collection	n of data take
	the data (measures or observations) be		

DO



Activities/Observations:

Carry out the test on a small scale. Document observations, including any problems and unexpected findings. Collect data you identified as needed during the "plan" stage. Describe what actually happened when you ran the test.

STUDY



Study and analyze the data. Determine if the change resulted in the expected outcome. Were there implementation lessons? Summarize what was learned. Look for unintended consequences, surprises, successes, and failures. Describe the measured results and how they compared to the predictions.

ACT



- Adapt Modify the changes and repeat the PDSA cycle.
- Adopt Consider expanding the changes in your organization to additional clients, staff, and units.
- Abandon Change your approach and repeat PDSA cycle.

If Adapt or Abandon, describe what modifications to the plan will be made for the next cycle from what you have learned.

Please submit completed form to Jasmine Rohoman: jrohoman@pbcgov.org

Appendix C

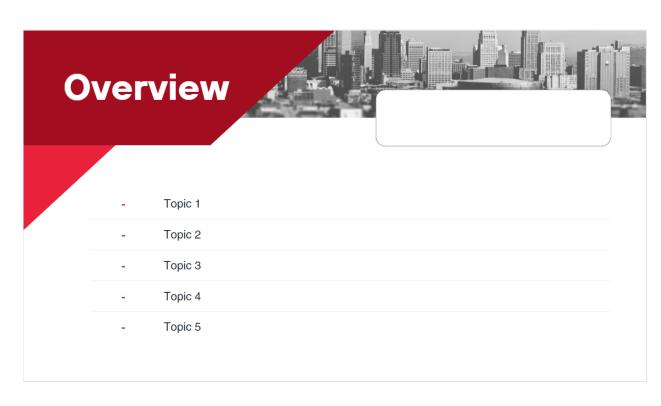
M AGENCY NAME

QIP Title

Data Report

QI Team's Name & Date





Our Quality Management Team

Introduce your staff!



Stella Ornelas
Chief Executive Officer



Bryan Cook
Chief Finance Officer



Blaise Martins
Director



Carl Miller
Accountant



Sadie Jones Finance Manager

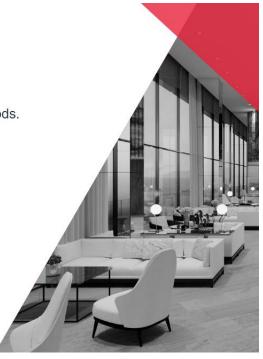


AIM Statement

- What is the problem or area you are trying to improve? Include baseline data.
- What was your AIM statement?

Measures

Briefly elaborate on measurements used and time periods.



Measures

Measure	Type: Process, Outcome, or Balancing	Description	Collection Method
Fill in the name of the measure	Fill in type of measure	Fill in short description of measure	How was the data collected?
Example: # of PHQ-9 Screenings Completed	Process	The amount of PHO-9 screenings done per day	Through Provide Enterprise (PE)

PDSA Cycles Cycle 1

Fill in this section with information from your PDSA cycle forms

Plan	Do	Study	Act

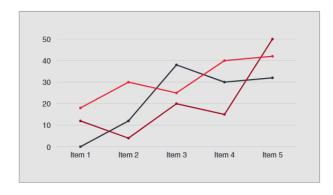
PDSA Cycles Cycle 2

Fill in this section with information from your PDSA cycle forms

Plan	Do	Study	Act	

Results

Describe the results of the data collected, observations, etc.



Data can be qualitative or quantitative

Results of the QIP can be shown as:

- Tables
- Charts
- · Graphs, etc.

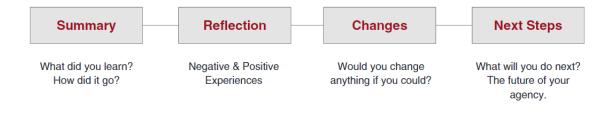
Interpreting the Results

Describe the results of the data collected, observations, etc.

- How did the results affect the outcome of your QIP?
- · Was an improvement achieved in your QIP?
- Have your interventions been implemented as planned?
- Did you experience any barriers during your QIP? What were they and how did they affect implementation? Were you able to overcome them?
- Has the intervention achieved improvement in patient outcomes?
- How has your QIP influenced your agency's retention or viral suppression rates? Was there significant
 improvement, and is this attributable to your intervention?
- Is there anything else going on at your agency that has affected your intervention?

Lessons Learned

Summary, Reflection, & Moving Forward





Thank you!

Email

hello@reallygreatsite.com

Social Media

@reallygreatsite

Call us

123-456-7890



Appendix D

TITLE





