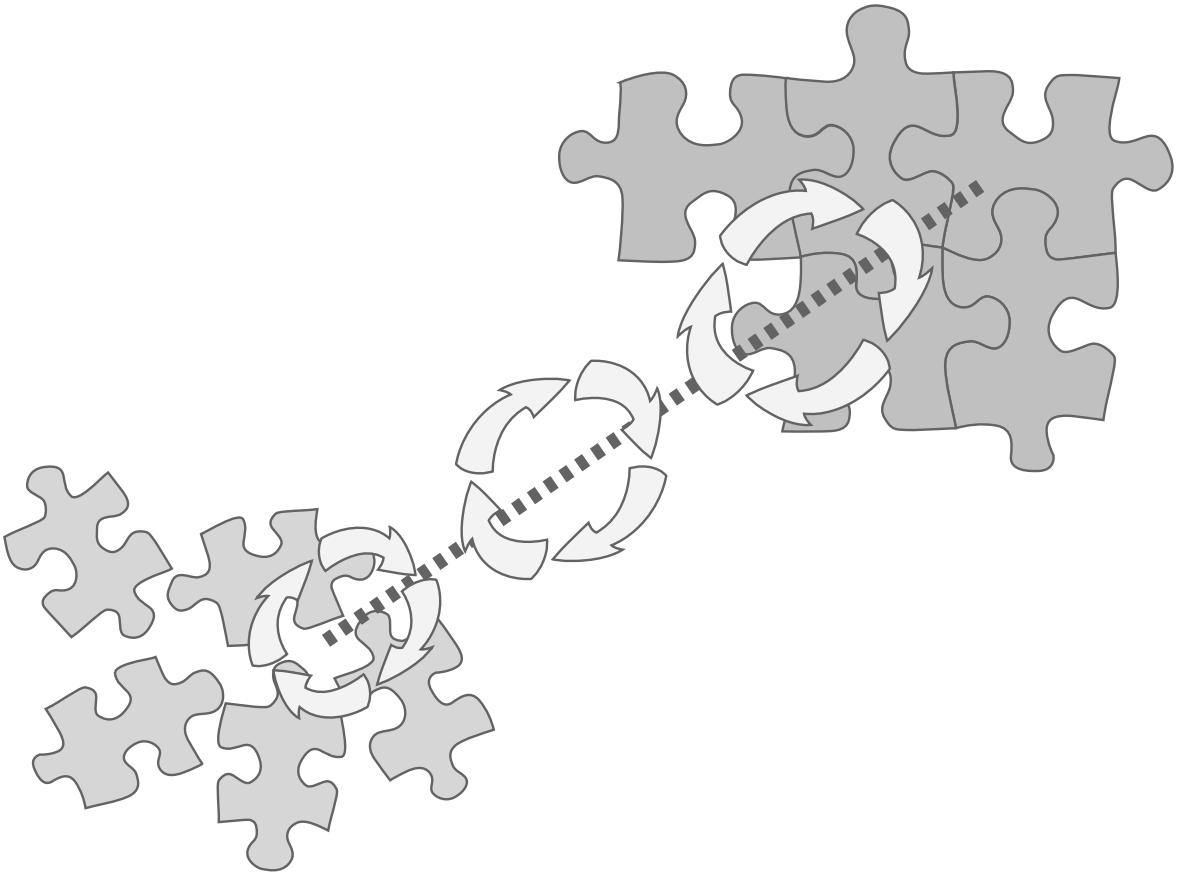
Quality Management

Technical Assistance Manual



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1 Introduction

Overview of Quality Improvement at HAB

The Health Resources and Services Administration's (HRSA) HIV/AIDS Bureau (HAB) is committed to improving the quality of care and services and ultimately the quality of life for people living with HIV and AIDS. This commitment is made evident by the variety and depth of the efforts that HAB undertakes to address the quality of care, treatment, and training across all programs administered by the Ryan White CARE Act. This commitment has been further deepened by the 2000 Reauthorization of the CARE Act, which directs the programs under the CARE Act to develop and implement quality management programs.

Quality Management

All CARE Act programs are required to establish quality management programs to:

1. Assess the extent to which HIV health services are consistent with the most recent Public Health Service (PHS) guidelines for the treatment of HIV disease and related opportunistic infections; and
2. Develop strategies for ensuring that such services are consistent with the guidelines for improvement in the access to and quality of HIV services.

HRSA/HAB's working definition of quality is "the degree to which a health or social service meets or exceeds established professional standards and user expectations." In order to continuously improve systems of care, evaluations of the quality of care should consider the service delivery process, quality of personnel and resources available, and the outcomes. The overall purpose of a quality management program is to ensure that:

- Services adhere to PHS guidelines and established clinical practice;
- Program improvement includes supportive services linked to access and adherence to medical care; and
- Demographic, clinical and utilization data are used to evaluate and address characteristics of the local epidemic.

A quality management program is a systematic process with identified leadership, accountability, and dedicated resources and uses data and measurable outcomes to determine progress toward relevant, evidence-based benchmarks. Quality management programs should also focus on linkages, efficiencies, and provider and client expectations in addressing outcome improvement and be adaptive to change. The process is continuous and should fit within the framework of other programmatic quality assurance and quality improvement activities, such as JCAHO and Medicaid. Data collected as part of this process should be fed back into the quality management process to assure that goals are accomplished and improved outcomes are realized.

Purpose of the Guide

HRSA is committed to improving the quality of health care services for the Nation's underserved and vulnerable populations. HRSA's goals are carried out through four strategies outlined in the agency's Strategic Plan of 2000-2005.

1. Eliminate barriers to care;
2. Eliminate health disparities;
3. Assure quality of care; and
4. Improve public health and health care systems.

The third strategy "Assure Quality of Care" states, "HRSA will assure quality of care is provided to the underserved by fostering a diverse, quality workforce and the utilization of emerging technologies. Sub strategies include: a) Promote appropriateness of care, b) Assure effectiveness of care and c) Improve customer/patient satisfaction."

HRSA's HIV/AIDS Bureau is committed to supporting HRSA's strategic plan by developing and implementing technical support to grantees providing care and services to HIV-infected and affected individuals. The intent of the new legislation around quality improvement is not to apply a "one size fits all" model across all grantees. The approach in improving and demonstrating quality of care in Ryan White CARE Act grantees may be as unique as the individual grantees. However, in order to demonstrate quality of care in an objective and tangible manner, certain components must be in place. This manual offers a framework to demonstrate quality care and provide specific information and tools that will help grantees to plan, design, measure, assess, and improve performance.

Through quality management programs, grantees will be able to provide information to HAB to demonstrate the overall effectiveness of their programs.

Ryan White Care Act themes that can be addressed and supported by quality management programs are:

- Improved access to and retention in care for HIV-positive individuals aware of their status
- Quality of services and related outcomes
- Linkage of social support services to medical services

Background and Rationale

Legislative Requirements/Reauthorization

All CARE Act grantees are required to establish quality management programs to:

- Assess the extent to which HIV health services are consistent with the most recent Public Health Service guidelines for the treatment of HIV disease and related opportunistic infections; and
- Develop strategies for ensuring that such services are consistent with the guidelines for improvement in the access to and quality of HIV services.

The overall purpose of a quality management program is to ensure that:

- Services adhere to PHS guidelines and established clinical practice;
- Program improvement includes supportive services linked to access and adherence to medical care; and
- Demographic, clinical, and utilization data are used to evaluate and address characteristics of the local epidemic.

A quality management program should have the following characteristics:

- A systematic process with identified leadership, accountability, and dedicated resources;
- Use of data and measurable outcomes to determine progress toward relevant, evidence-based benchmarks;
- Focus on linkages, efficiencies, and provider and client expectations in addressing outcome improvement;
- Continuous process that is adaptive to change and that fits within the framework of other programmatic quality assurance and quality improvement (QI) activities (i.e. JCAHO, Medicaid, and other HRSA programs);
- Data collected is used to feedback into the process to assure that goals are accomplished and they are concurrent with improved outcomes.

section 1

Quality management (QM) programs are often implemented to meet external regulatory and funding requirements. Regardless, organizations that embrace QM concepts and methodologies, and integrate them into the very structure of the organization and day-to-day operations, discover a very powerful management tool. Program evaluation becomes an ongoing dynamic process. Priorities are set and resources allocated based on objective information. Job satisfaction is achieved by the inclusion of personnel in decision-making processes and pride in the ongoing evidence of quality services. Team building can improve interpersonal relationships which are so critical to successful programs. Through the tools and techniques of quality management, you will be able to substantiate that you are providing quality care to every patient/client, every day.

Using this Guide

Although CARE Act grantees vary by type of organization, size, focus, and population served, all programs need to develop an ongoing method to measure, evaluate, and improve performance. Tools and techniques utilized to assess quality can be applied in any type of program, whether it is a small single site program or a large multi-site network. A successful quality management program is incorporated into a program's existing structure and should reflect program-wide goals and objectives.

Incorporating quality improvement principles, tools, and techniques into the day-to-day culture and operations of the organization provides an effective method to evaluate your program's performance, promote a coordinated approach to problem solving and help determine if established goals and objectives are being met.

This guide is intended to provide the tools to develop and implement a quality management program and support an ongoing partnership with HRSA to sponsor improved quality of care in all Ryan White CARE Act settings. It provides a step-by-step process that can be applied in any setting including large complex organizations with wide-ranging services as well as small single service providers. Though the nine (9) step process outlined in this manual may seem complex, it is designed for both the experienced and non-experienced grantee; as a starting point for some and as a reference for others who have had difficulty sustaining quality activities over time.

Use the guide to learn about:

- Common quality improvement terminology that is often used interchangeably.
- Use of guidelines and standards of care, whether they are clinical or service oriented, as your guide and starting point.
- Developing a framework to sustain quality improvement activities over time, including leadership support, planning, and priority setting.

- Where you need to start and how to incorporate QM into your existing organizational structure.
- Making decisions based on data, rather than hunches, to look for root causes of problems rather than react to superficial symptoms, and to seek permanent solutions rather than rely on quick fixes.
- The use of simple tools and techniques to measure, analyze, and improve care.
- Multidisciplinary project teams to promote change.
- Dedicating resources and time to quality improvement activities while sharing accountability and responsibility across the program/organization.
- Methods to track your progress and to communicate your successes.
- The use of internal and external data to measure care.
- Developing indicators to measure clinical care and supportive services.
- Incorporating customers into the quality improvement process.
- Designing quality improvement programs which meet regulatory requirements external to the Ryan White CARE Act, and avoid redundancy of effort.

section 1

Defining Terms

Quality improvement terminology is often used interchangeably, so it is important to begin with some working definitions.

Quality is the degree to which a health or social service meets or exceeds established professional standards and user expectations. Evaluation of the quality of care should consider 1) the quality of the inputs, 2) the quality of the service delivery process and 3) the quality of outcomes, in order to continuously improve systems of care for individuals and populations.

Quality Improvement (QI) refers to activities aimed at improving performance and is an approach to the continuous study and improvement of the processes of providing services to meet the needs of the individual and others. This term generally refers to the overriding concepts of continuous quality improvement and total quality management.

Continuous Quality Improvement (CQI) is generally used to describe the ongoing monitoring, evaluation, and improvement processes. It is a patient/client-driven philosophy and process that focuses on preventing problems and maximizing quality of care. The key components of CQI are:

Patients/clients and other customers are first priority.
Quality is achieved through people working in teams.
All work is part of a process, and processes are integrated into systems.
Decisions are based upon objective, measured data.
Quality requires continuous improvement.

Total Quality Management (TQM) is a somewhat larger concept, encompassing continuous quality improvement activities and the management of systems that foster such activities: communication, education, and commitment of resources.

Quality Assurance (QA) refers to a broad spectrum of evaluation activities aimed at ensuring compliance with minimum quality standards.

Performance is the way in which an individual, a group, or an organization carries out or accomplishes its important functions and processes.

A **Performance Measure** is a quantitative tool that provides an indication of an organization's performance in relation to a specified process or outcome.

An **Indicator** is a measure used to determine, over time, an organization's performance of a particular element of care. The indicator may measure a particular function, process or outcome. An indicator can measure:[1]

Accessibility	Efficiency
Appropriateness	Patient satisfaction
Continuity	Safety of the environment
Effectiveness	Timeliness of care
Efficacy	Demographic characteristics

Outcomes are benefits or other results (positive or negative) for clients that may occur during or after their participation in a program. Outcomes can be client-level or system-level.

A **Process** is a sequence of tasks to get to an outcome. It is a goal directed interrelated series of actions, events, mechanisms, or steps.

A **System** is a group of related processes.

Team refers to a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable. Project teams are just one element of a quality effort, though an extremely important one. Teams should include a team leader or project sponsor to lead the initiative.

Continuum of Care relates to a system of connected services designed to match an individual's needs with the appropriate level and type of medical, psychological, health or social service within an organization or across multiple organizations. Assuring quality of care across the continuum can be especially challenging.

Root Cause Analysis describes the process of developing permanent solutions to problems by first identifying all of the contributing and underlying causes of a problem.

Chronic Care Model is a tool to improve the care of individuals with chronic illness, including HIV/AIDS, which focuses on six essential elements: Self Management and Adherence, Decision Support, Clinical Information System, Delivery System Design, Organization of Health Care, and community. The model was originally developed by Ed Wagner, MD, MPH. (See the HAB Website to download additional information regarding the model at http://hab.hrsa.gov)

PDSA or Plan-Do-Study-Act is a widely used framework for testing change on a small scale.

[1] Joint Commission on Accreditation of Healthcare Organizations "Using Quality Improvement Tools in a Healthcare Setting," 1992, Oakbrook, Illinois

2 Begin at the Beginning - Assess Your Current Program

Whether your organization is just getting started, or has been doing quality management for some time, it is always a good idea to assess current activities to determine your next steps or to identify gaps. You may want to ask your staff to participate to determine the level of understanding throughout the organization. Understanding your current status, and the program's strengths and weaknesses around quality management is a good place to start. Here are some questions that will help in your self-assessment.

✓ Does your HIV program have an organizational structure to assess and improve quality of care?

If so, describe this structure, including key leaders in the organization who support the structure.

✓ Do all providers and staff in your program have a basic understanding of continuous quality improvement tools and techniques?

✓ Do all providers and staff in your program understand their roles and responsibilities regarding quality improvement activities?

✓ Do you routinely and systematically collect and analyze data to assess quality of care?

If yes, what areas for improvement has your program identified within the last year?

✓ Do you have resources dedicated to quality management activities? Describe these resources.

✓ Have you identified barriers to fully implement a quality management program?

If yes, do you need technical assistance to overcome those barriers?

This self-assessment tool and the nine-step model which follows will help you get started, or identify areas within your existing program that you should focus on.

3 Step-by-Step Quality Management Guide: Nine Critical Steps

Quality management programs can take many shapes and forms and will be most effective if they are individualized to meet the needs of a specific organization. While each program will look different, successful quality management programs have key characteristics that are critical to the efficient functioning of the program. Figure 1 outlines nine steps that can be used to develop and implement a solid quality program.

Regardless of where an organization stands in the development of a quality management program, the nine steps outlined can either serve as a checklist for those with plans already in place or as a stepping stone for those just beginning. While it may take a significant amount of time before all nine steps are achieved, the most important concept is to get started.

Figure 1: Implementing a Quality Management Program

Implementing A Quality Management Program: Nine Critical Steps

STEP ONE *Confirm Commitment of Leadership & Establish Supportive Organizational Structure*

- ☑ Establish support of program leadership for Quality Management (QM) and confirm commitment.
- ☑ Commit resources to support QM activities.
- ☑ Provide education about CQI tools and techniques to all levels of staff, including senior leadership.
- ☑ Establish a method to inform all levels of staff, including senior leadership and Board of Directors about QM initiatives.
- ☑ Delineate expectations of staff related to QM.
- ☑ Delineate specific QM responsibilities of staff.

STEP TWO *Establish Quality Management Plan*

- ☑ Establish Quality Guidance Team, Steering Committee or utilize existing leadership meetings to oversee the QM program.
- ☑ Develop an organizational QM plan which delineates goals and objectives for the QM program.[2]
- ☑ Establish QM priorities.
- ☑ Develop a time line or calendar of activities for the year.
- ☑ Select a QM approach, such as PDSA or the Chronic Care Model.
- ☑ Clarify QM responsibilities of staff.

[2] A specific QM plan targeted to HIV services should be developed. If the HIV program is part of a larger institution that has an established QM plan, the QM plan should include portions of the HIV-specific plan.

Figure 1 (continued): Implementing a Quality Management Program

STEP THREE

Determine Performance Measures & Collect Baseline Data

- ☑ Based on QM priorities, determine performance measures.
- ☑ Develop indicators to measure performance.
- ☑ Define measurement population and delineate eligibility criteria.
- ☑ Create a data collection plan to include:
  - – Sampling strategy
  - – Determine method of data collection, i.e. chart abstraction, interviews
- ☑ Create data collection tools
  - – Create instructions for data collection tools
  - – Train personnel who will collect data
  - – Conduct pilot test of tool
- ☑ Establish process of communicating with staff about measurement process
- ☑ Collect data

STEP FOUR

Analyze Data

- ☑ Analyze data and review the results.
- ☑ Identify areas where additional data is required.
- ☑ If historical data are available, compare for trends.
- ☑ Display and distribute data to communicate findings and results.
- ☑ Identify areas for improvement and select a quality improvement project.

STEP FIVE

Develop Project-Specific CQI Plan

- ☑ Establish project-specific QM team that represents all staff integral to the service or issue.
- ☑ Identify a team leader or sponsor.
- ☑ Delineate specific goals for the team.
- ☑ Allocate time and resources for the team.
- ☑ Delineate team responsibilities.
- ☑ Develop timeline for reporting findings and improvement strategies.

Figure 1 (continued): Implementing a Quality Management Program

STEP SIX *Study and Understand the Process*

- ☑ Analyze the root causes.
- ☑ Utilize CQI tools and techniques to understand the process, such as flow charts, facilitated brainstorming, cause & effect diagrams, fishbone, etc.
- ☑ Document and track progress by using activity logs, issue identification logs, meeting minutes, etc.
- ☑ Report progress to senior leadership and staff on a regular, defined basis.

STEP SEVEN *Develop and Implement an Improvement Plan*

- ☑ Identify potential solutions to make improvement to the systems of care.
- ☑ Recognize quick fixes and longer term solutions.
- ☑ Try a small test of change and analyze results.
- ☑ Refine improvement plan.
- ☑ Develop timeline for implementation of plan.
- ☑ Delineate team responsibilities.
- ☑ Implement changes.
- ☑ Track changes and improvement actions.

STEP EIGHT *Remeasurement*

- ☑ Determine interval for remeasurement.
- ☑ Remeasure indicator after change has been implemented.
- ☑ Look for incremental improvement.
- ☑ Communicate results to team, staff and leadership.
- ☑ Determine need for and/or level of remeasurement on an ongoing basis.
- ☑ Develop a plan for sustained improvement.

STEP NINE *Celebrate Success*

- ☑ Communicate results of the project to all levels of the organization, including consumers when appropriate.
- ☑ Congratulate team in public forum, i.e. staff meetings, Board of Director meetings.
- ☑ Select a new project and begin at Step 3.

STEP ONE

Confirm Commitment of Leadership & Establish Supportive Organizational Structure

what to do...

Establish support of program leadership for Quality Management (QM) and confirm commitment.

In order for a QM program to be successful, it requires support and "buy-in" from the recognized leadership in the organization. These individuals drive the organization's quality activities in very tangible ways, most importantly, by putting in place a structure to support the assessment of, and improvement in, service provision and quality of care.

what to do...

Commit resources to support QM activities.

It is imperative that the leaders of the organization commit to the concept of quality management. The commitment and support of such a philosophy is embodied not only in words, but also in the assignment of dedicated resources. Specific QM responsibilities of staff should be delineated and dedicated time for participation in QM activities secured. Such responsibilities could include participation in Quality Teams, assistance with data collection, testing of change, and disseminating results. Quality improvement responsibilities should be included in all job descriptions. Every individual can play a part in improving quality and a team of experts can help guide the process. A successful program will also include time allocated for data analysis, dissemination of results, and discussion of QM activities during staff and other department meetings. Technical support, such as management information systems, is another type of resource that is needed to implement a QM program.

what to do...

Provide education about CQI tools and techniques to all levels of staff, including senior leadership.

While many people will want to naturally participate in a program aimed at improving care and services, if they don't have the tools to get the work done, the goals will not be attained. A quality management plan serves as a blueprint for the program and CQI tools and techniques serve as the hammers and nails to build the individual improvement projects. Without these tools, the blueprint will never result in a functioning program. Therefore, it is important that all levels of staff, including senior leadership, must have a solid understanding of quality management concepts and CQI tools and techniques. Opportunities for education either provided in-house or externally, should be made available to broaden the expertise and build the internal capacity of the organization. As staff becomes experienced in the use of CQI tools and techniques, they can become the mentors and train a new generation of quality experts who can also become champions of quality.

what to do...

Establish a method to inform all levels of staff, including senior leadership and Board of Directors, about QM initiatives.

A formal mechanism to inform all levels of staff, including senior leadership and Board of Directors, about QM projects, activities, and results should be established. By raising the visibility of the QM program, a culture surrounding quality can begin to emerge.

what to do...

Delineate expectations of staff related to QM and delineate specific QM responsibilities.

In some organizations, HIV care is part of a larger system of care. When developing a quality management program, a distinction between HIV program leadership and organizational leadership should be made. Support for QM activities from leadership at both levels should be confirmed and, to the extent possible, HIV QM activities should be included as a component of the larger institutional QM plan. HIV programs based in larger institutions can often benefit from QM systems that have already been put into place, especially when QM activities are mandated by other regulatory bodies, such as JCAHO. In some organizations, HIV programs have spearheaded quality management initiatives and served as models for quality improvement within their organizations.

STEP TWO

Establish Quality Management Plan

what to do...

Establish Quality Guidance Team, Steering Committee or utilize existing leadership meetings to oversee the QM program.

Once commitment to a quality management program has been confirmed, a formal process for overseeing the QM activities should be established. The way in which this is achieved will vary based on the size, structure, and unique characteristics of the organization. Many organizations have found it useful to convene a senior group of individuals to drive the QM activities in the form of a Quality Guidance Team, Quality Council or Steering Committee. In general, these are individuals with the expertise and authority to determine program priorities, support change, and if possible, allocate resources. The primary function of this group is to develop an organizational QM plan, establish QM priorities and monitor progress towards goal attainment. Within this group, a Committee Leader should be appointed and a Quality Advisor should be included. The Quality Advisor is an individual with expertise in the use of CQI tools and techniques. In some organizations, existing leadership meetings have been used to oversee the QM program. If this strategy is used, the status of QM activities should be a standing agenda item to ensure adequate attention is paid to the QM program. Depending on the size and structure of the organization and program, the Quality Guidance Team or Steering Committee may or may not be involved in specific CQI projects.

what to do...

Develop an organizational QM plan that delineates goals and objectives for the QM program.[3]

One of the primary responsibilities of this group is to establish a quality management plan that outlines a coordinated approach for assessing quality and process improvement. The plan is designed to provide a systematic process for planning, designing, measuring, assessing, and improving performance. The plan should set realistic and challenging improvement goals, reflect resources provided and be shared with staff throughout the organization, including the Board of Directors.

The QM plan can be written by the leadership group or the leadership group can sanction the program's Quality Council or Steering Committee to create it. Some organizations have a separate quality improvement plan, others integrate quality activities into their strategic plan and some utilize both strategies. Regardless of which approach is used, QM plans should delineate specific goals and objectives for the QM program that are in line with the program's mission, vision, and values.

[3] A specific QM plan targeted to HIV services should be developed. If the HIV program is part of a larger institution that has an established QM plan, the QM plan should include portions of the HIV-specific plan.

what to do...

- ☑ *Establish QM priorities.*
- ☑ *Develop a time line or calendar of activities for the year.*

The plan should establish QM priorities and outline a timeline or calendar of quality activities for the year. In addition, the QM responsibilities of staff should be clarified to ensure quality activities can be accomplished within the defined time frame. At a minimum, the QM plan should be reviewed on an annual basis.

what to do...

- ☑ *Select a QM approach, such as PDSA or the Chronic Care Model.*
- ☑ *Clarify QM responsibilities of staff.*

A specific QM plan targeted to HIV services should be developed. If the HIV program is part of a larger institution that has an established QM plan, it should include portions of the HIV specific plan, i.e. indicators for measurement, identified opportunities for improvement. As part of the QM plan, the approach used to assess quality should be defined. Various approaches, such as Plan-Do-Study-Act (PDSA), can be used and are discussed in Step 7. Appendices A and B provide examples of a QM plan that can be adapted for your organization. Once the QM plan is established, it should be communicated with all program or organizational staff and the specific QM responsibilities delineated.

STEP THREE

Determine Performance Measures & Collect Baseline Data

what to do...

Based on QM priorities, determine performance measures.

Once the QM plan is set and the priorities have been identified, the performance measures must be determined in order to put the plan into motion. Performance measures are designed to serve as yardsticks on which to measure quality. In order to measure a particular element of care, process, or outcome, indicators are selected to assess performance within a particular area of focus. Indicators are quantitative measures that can be used to assess and improve performance. While not a direct measure of quality, indicators are tools that can be used to direct attention to potential performance issues that may require more intense review.

what to do...

Develop indicators to measure performance.

Indicators chosen should reflect key aspects of care which impact on patient outcomes and can be either clinical or service-oriented. Indicators can be grouped by type and address issues such as accessibility, appropriateness of care, effectiveness, continuity of care, etc. An example of a performance measure, indicator, and indicator type is provided below:

Indicator Type:	Accessibility
Performance Goal/Measure:	All new patients will be provided a medical appointment within 2 weeks of referral.
Indicator:	Number of days that elapsed between a new patient's request for a medical appointment and actual date of the appointment.

Together, these measures assess the ease with which new patients access care in a timely fashion. Appendix G provides examples of other indicator types, performance measures, and indicators. Potential data sources are also identified.

what to do...

Define measurement population and delineate eligibility criteria.

Define the target population: Specific eligibility criteria must be established in order to clearly define the population to which you want to apply the performance measures. If this is not done properly, the end result may be useless data. It is important to determine who is part of the target population and who is not. Timing and individual patient characteristics also need to be considered.

In respect to timing, key questions to consider include: a) at what specific points in time should the data be collected; b) should the data be collected as an individual enters the program; or c) does the individual need to be receiving services for three months, six months, or one year. This is determined primarily by the standard that is being measured. For instance, if you want to know if patients have laboratory monitoring performed on a quarterly basis, patients might need to be enrolled in care for at least one year in order to adequately assess this standard. On the other hand, if you want to know whether an individual was referred to a case manager during their first visit as per your standard, any individual entering the system could be included in the population.

Individual patient characteristics should also be considered, such as gender, age, location of service provision, and presentation or treatment status.

Gender: You'll need to determine if the measurement applies to both women and men. Standards measuring gynecological care or treatment for HIV-positive pregnant women would obviously not apply to men.

Age: Some programs provide services to both adult and pediatric individuals. A particular measure may not apply to both. Some clinical standards of care, such as mammograms and colon cancer screening, are based on the age of the individual.

Site/Location: If you have more than one service location, you'll need to determine if all sites will be included in your review. This is of particular interest at sites that utilize multiple sub-contractors. If multiple sites are providing similar services, a uniform standard of care is usually determined and measured consistently across sites, i.e. clinical care, case management. There is an opportunity in these instances to compare site performances and develop benchmarks. Benchmarks, or target performance levels, are based on "best practice" standards. If you do this, you will need to assure that you include all providers and all locations equally, and present comparison data. Comparative data should be used to improve performance and should not be used in a punitive manner.

Presentation/Treatment Status: Some standards of care apply to a particular patient/client need or clinical status. In clinical care this would apply to a particular diagnosis. If you are measuring how an opportunistic infection was managed, the diagnosis of an opportunistic infection would need to be present.

In a case management setting, if you are measuring the degree to which a need has been met, i.e. housing, only those clients with this specific unmet need would be included in the sample.

what to do...

☑ *Create a data collection plan, including: a method of data collection, i.e., chart abstraction, interviews; sampling strategy, and potential data sources.*

Data Collection Method

When determining a data collection method, the following key questions should be asked:

- ✓ Is the data already available in some form?
- ✓ Is the data collection method feasible and not overly expensive?
- ✓ Is there a less time-intensive or less expensive way to collect this information?
- ✓ Will the data be useful, and will it address the desired performance measure?
- ✓ Will the resulting data be credible?
- ✓ Is the data reliable?

After the population has been defined and eligibility criteria outlined, a data collection plan should be formulated to include a sampling strategy and a process for collecting data. The plan can include random sampling or targeted/focused review. This will be determined by the purpose or aim of study, the question you want to answer, and the size of the population that you are studying.

Sampling Strategy

Sampling is a simple, efficient way to help understand how a system is performing. In most cases it is not necessary or feasible to look at 100 percent of your population. Sampling allows you to make presumptions about your larger population based on observations of a smaller subset of that group. The total number of "eligible" cases determines the size of the sample. Many sites use a standard methodology of 30 percent or 30 cases, whichever is greater, of the eligible population. This should be adequate to provide you with the information that you need. For programs with a small number of HIV-positive clients (< 100), a 100 percent sample may be desirable and feasible. It is important to remember that your QM project is not research. You are trying to establish a snapshot of performance in the most current point in time that you have available.

Random sampling, a method to assure that each record has an equal chance of being included in the sample, should be applied. Some organizations will have sophisticated software programs to generate a random sample while others will have to manually select the sample from a printed list of eligible records. Many spreadsheet programs have a random number table to assist in this process.

Targeted or Focused Reviews

A targeted or focused review may be undertaken to provide additional specific information around a particular topic. These reviews can help establish all of the root causes contributing to a problem or to establish the extent of a problem. They are usually short term, require limited analysis, and provide immediate feedback.

Data Sources

We all wish that we had one source of data to answer all of our questions. Unfortunately, most programs have multiple sources of data, and a combination of electronic and paper sources. The appropriate source will need to be identified to assure that you are measuring the intended performance indicator. At times, data collected from various sources will be merged. For instance, data generated from a clinical database can be augmented with data obtained from a review of medical records.

Potential sources of data that should be considered include the following:

- Clinical database
- Medical record (paper or electronic health record)
- Client/patient satisfaction surveys
- Client/patient intake forms and questionnaires
- Billing records
- Client/patient/staff interviews
- Client comments, suggestions and complaints
- Laboratory database
- Case management/social work records
- Scheduling programs

what to do...

☑ ***Create data collection tools: create instructions for data collection, train personnel who will collect data, conduct pilot test of tools.***

Collect data

Depending on the source of the data, an abstraction method will need to be identified. For data collected through paper record abstraction, a data collection tool should be developed. Abstractors will need to understand the purpose of the tool and be trained on each and every data element to assure standardized data collection. The tool should be tested prior to full implementation. No matter how carefully the data collection tool was developed, some problems will be discovered only after the tool has been used and tested. Each abstractor should try the tool on a limited basis, with one or two records, to clarify the data elements.

Based on the results of the pilot test, further revision of the data collection tool may be required before full implementation occurs. To maintain reliability in data extraction processes, it is imperative that a straightforward instruction guide be established along with introducing the tool that will be used for data extraction. This will establish a consistent data collection methodology and ensure that data are extracted the same way each and every time.

Inter-rater reliability is a term used to describe the process of having all of the source/chart abstractors review the same source/chart(s) and compare the results. The number of charts to review is dependent on the size of your sample and the number of abstractors. If all abstractors have the same responses, you can be sure you will have consistency in the data collection. If the responses vary, review the discrepancies with the abstractors and review methods of data collection to understand why the discrepancies occurred.

For data information that will be obtained from an electronic source, work closely with an expert in that system. This could be an information technology (IT) staff person, a computer analyst or specialist, or the data entry person who runs the data reports. When requesting data runs, be very specific about the information you are requesting. The IT staff person may have to run the report from one or many systems. Always review the report closely. If the report is what you want, you may put in a request to have monthly data reports generated. Trust your intuition. Usually we have a good sense of what the results will be ahead of time. If the results vary widely from what you expected take the time to validate the data.

It is likely that you will be obtaining data from various sources if one system does not house all the data you need. Be careful what you ask for. Some requests for data reports can generate too much information that does not answer the question that you want to answer, or will take too much of your time to analyze. Some reports are coded and can only be deciphered by those trained in decoding data. You can always ask for sample data reports to get you started.

Most importantly, KNOW YOUR DATA. Understand the source of where it is coming from; understand how the report was generated and the components of the report; and validate the data through some random checks. Incorrect data, or data that doesn't answer the question can be both a waste of time and lead you down an unnecessary path. This will frustrate staff involved in the process and reduce credibility in the overall QM program.

what to do...

Establish process of communicating with staff about measurement process.

Once the data collection plan has been finalized, it is important to establish a process whereby staff are routinely updated about the measurement process and how data will be handled.

Another important issue to address is the confidentiality of data. As data are being collected, procedures to protect client confidentiality need to be strictly adhered to. HIV providers already have a heightened awareness and concern for the confidentiality of HIV-infected individuals yet it helps to be reminded of standard approaches used to protect confidentiality during the data collection process. In most cases, patients' names are not required and data collection is often conducted by HIV program staff who are already trained in issues related to HIV confidentiality. If external abstractors are to be used, it is important to discuss the ethical implications and the legal consequences of disclosing medical information, particularly the HIV status of patients. All external reviewers should be required to sign a confidentiality statement indicating they understand and will comply with confidentiality standards.

Once the data collection is complete, all related forms and reports should be kept in a locked file and access restricted to those directly involved in the data collection process. If computers or laptops are used for data collection, appropriate steps (password protections, firewalls) must be taken to safeguard the information and ensure patient confidentiality.

Health care organizations must begin following regulations outlined in the Health Insurance Portability and Accountability Act (HIPAA). This Act outlines specific requirements around privacy and security which health care providers must use to ensure a patient's medical information remains private and secure. The Act also has a component that requires that health care organizations have a standardized process for the exchange of electronic information. It is advisable to discuss with your organization steps that they have put into place to assure your organization is in compliance with HIPAA regulations.

STEP FOUR

Analyze Data

what to do...

Analyze data and review the results.

Once the data is collected, the results should be prepared for analysis and presentation. Data should be presented in the simplest and most understandable form possible in order to determine if an opportunity for improvement exists. To assure confidentiality, data should be reported in the aggregate, by unique identifier or by medical record number so that the information cannot be connected to an individual patient.

what to do...

Identify areas where additional data is required.

If historical data are available, compare for trends.

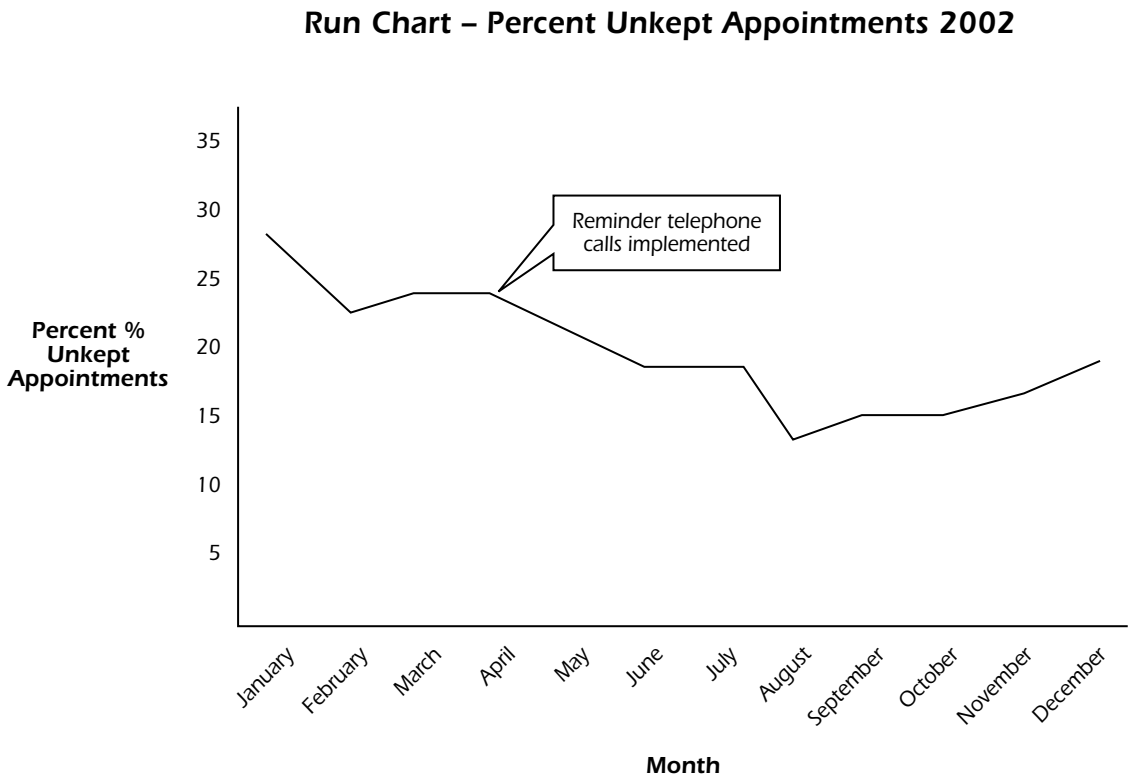
If historical data are available, these should be used to compare trends (e.g., year to year) to help identify opportunities for improvement and assess the severity of the problem. As the data are being analyzed, additional data needs might be identified. It is important, however, to remember that the data were not collected for the purposes of research and a rigorous statistical analysis is not needed.

what to do...

Display and distribute data to communicate findings and results.

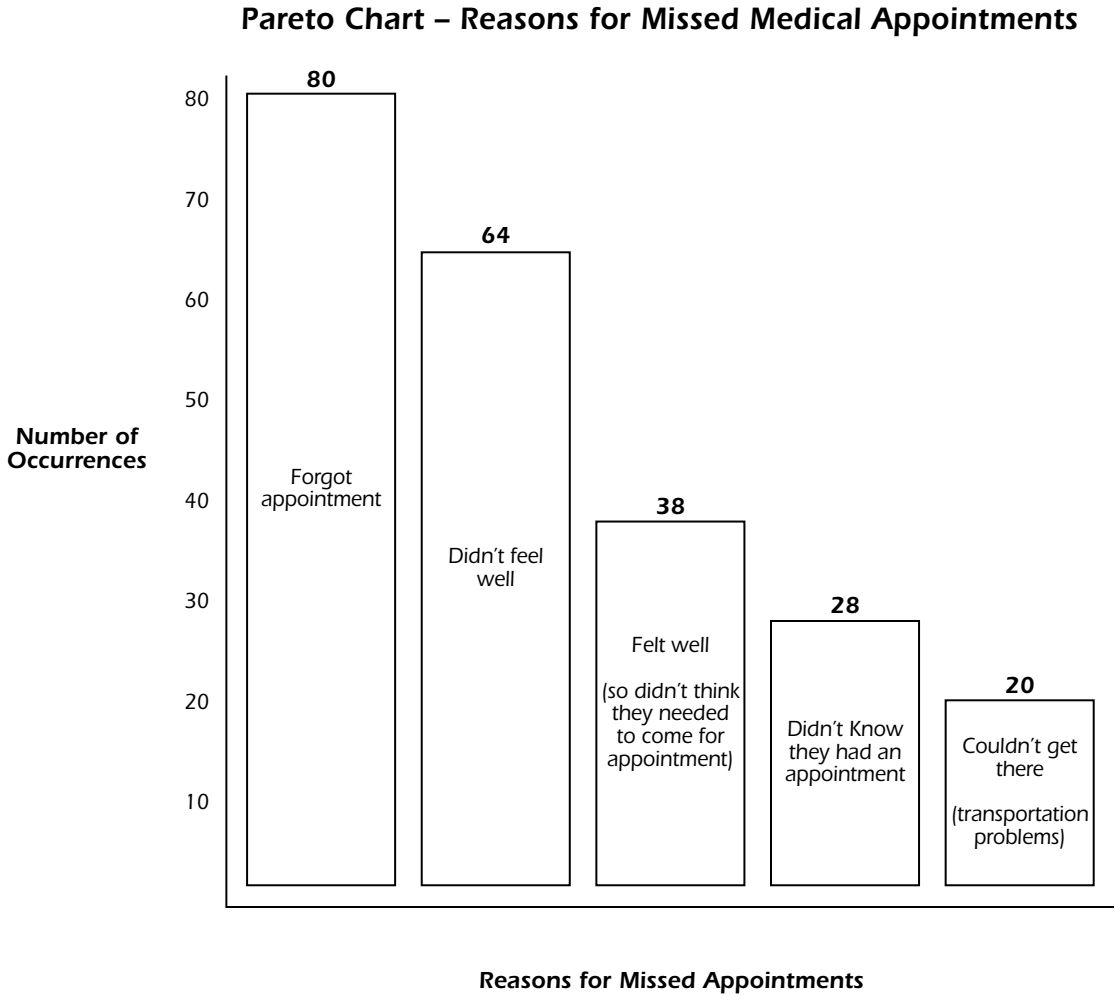
Graphic displays of data, such as charts and graphs, should be used to convey the results at a glance. Run charts and Pareto charts are two charts that are helpful in displaying data. Run charts are line graphs that plot data over time (Figure 2) while Pareto charts are simple bar charts that rank related categories in decreasing order of occurrence (Figure 3).

Figure 2. Sample of Run Chart



[If historical data are available, these should be used to compare for trends to help identify opportunities for improvement and assess the severity of the problem. The above run chart is a line graph that plots data over time.]

Figure 3. Sample of Pareto Chart



[From these data, we derived several reasons for missed appointments. As a result of these findings, the clinic, in order of priority, implemented a follow-up "Reminder System" to help clients/patients remember their appointment date and time. As a result, client/patient missed appointments decreased significantly].

what to do...

Identify areas for improvement and select a quality improvement project.

Once created, the graphic displays can be used to communicate the findings and results and establish a foundation on which to build project-specific quality improvement plans.

STEP FIVE

Develop Project-Specific CQI Plan

what to do...

Establish project-specific QM team that represents all staff integral to the service or issue.

A single person using quality improvement practices can make a difference in an organization, but rarely does a single person have enough knowledge or experience to understand everything that goes on in a process or to single handedly improve the process. Major gains in quality improvement most often result from teams – a group of people pooling their skills, talents, and knowledge. Working together, teams can tackle complex problems and chronic issues and formulate effective solutions that can be sustained over time. In order to comprehensively understand a problem and improve the process, it is essential that all staff integral to the service or issue be involved in the improvement process.

what to do...

Identify a team leader or sponsor.

Once the quality improvement project has been selected, a team leader or sponsor should be identified and team members selected. If the organization or program is small, the Quality Guidance Team or Quality Council might also serve as the project-specific CQI Team.

The team leader, quite simply, runs the team. He/she coordinates the logistical details such as meeting times, provides facilitation during the meeting, maintains the team's focus on the stated goal, and communicates team progress to senior leadership. While the team leader may record the meeting minutes, this responsibility is ideally rotated among team members to reinforce the concept of shared responsibilities and ownership of the process.

The team leader does not need to be the person at the top of the organization. In fact, when the team leader is the top person in the organization, there may reluctance by team members to have full and open discussions about what areas of improvement they feel are necessary and some may feel uncomfortable about expressing their true ideas and opinions. Informal leaders within organizations should be sought out, and include those who are mature, organized, and focused, and who have a good understanding of the process under study. Almost any committed staff member can function as the team leader if they are properly trained. All team leaders should be trained in basic CQI tools and techniques and simple meeting management. The team leader should have some expertise in the issue being discussed.

In addition to the team leader, a sponsor should be identified who can serve as a champion and cheerleader for the quality initiatives being undertaken. The sponsor should be a senior leader and serve as the primary contact person for the team leader and the team. While the sponsor does not need to attend every meeting, he/she should have a solid understanding of the issue being addressed and participate in meetings at key points throughout the process when decisions are being made or finalized for implementation.

Once the team leader and sponsor have been selected, the rest of the team members should be identified. For small programs with only a few staff members, this may be relatively easy since everyone in the program may be a part of the process identified for improvement. In larger programs many individuals may be involved in a particular process. Regardless of the size of your program you will need to select your team members carefully to assure that every step of the process is represented. The number of members on the team will vary, but 6-8 individuals is a good rule of thumb. Anything larger may become unwieldy, and anything smaller may not represent all of the key steps within the process being reviewed. Examples of the composition of teams by type of process being improved are provided below:

Clinical: Increase adherence to Annual Pap Smear standard of care by 15%

- Clinical provider (physician, NP, PA)
- Medical assistant or LPN who might be assisting the providers
- Specialty provider, i.e. gynecologist
- Unit manager or individual responsible for staffing and patient flow
- Outreach worker or client advocate
- QI Coordinator/Quality Advisor

Case Management Team: Improve timeliness of case management client intake

- Case manager
- Supervising case manager or social worker
- 1-2 referral sources, i.e. medical provider, AIDS Service Organization
- Scheduling staff
- Unit manager or supervising staff
- QI Coordinator/Quality Advisor

Access to Care Team: Reduce New Appointment Wait Time from 1 month to 2 weeks

- 1-2 scheduling staff
- Senior provider staff
- Clinical provider (physician, NP, PA)
- Data management staff
- Unit manager or supervising staff

In all cases, consumer representation should be considered, particularly when a project involves client satisfaction. Although it may not be appropriate for all teams and projects, consumers bring added value to the discussion and should be invited to a minimum of one or two meetings to discuss specific components of the process under review.

what to do...

Delineate specific goals for the team.

In order to increase the effectiveness of the team, a clear and understandable goal or aim should be established. The goal or aim should be stated in simple and direct language. Here are some examples:

- Increase the percent of female patients who have an annual PAP smear performed from 60 percent to 90 percent.
- Increase the percent of case management clients who have an initial intake form completed from 85 percent to 98 percent.
- Decrease the waiting time for new patient appointments from 3 weeks to 1 week.

If the goal is not stated clearly and succinctly for the team, a lot of valuable time will be wasted and the team can become disillusioned and frustrated. A clearly stated goal will help keep the team on track and focused.

what to do...

- ☑ *Allocate time and resources for the team.*
- ☑ *Delineate team responsibilities.*

When the team is in place, standard meeting times should be established and resource needs identified and provided. Meetings will run more smoothly if there's an agenda, a chair/facilitator, and a notetaker to record decisions. The team should decide on the most convenient time for the team to meet and safeguard that time as much as possible. During the initial meeting, team ground rules should be established and reviewed. By reminding the team of the ground rules at the beginning of each meeting, the risk of being sidetracked is minimized. Examples of ground rules to establish include the following:

Meeting Attendance: One of the most important ground rules to establish is the expectation that all participants will attend all meetings and actively participate. Meeting time is precious and should be respected by all team members. Meetings should be scheduled through mutual agreement of team members which have clear start and stop times. To encourage participation, these times should be honored. Members will need to arrive on time ready to work. As a group the team can decide what constitutes acceptable reasons to miss a meeting and the process by which the team leader is notified.

Active Participation: The members of the team are chosen because of the unique perspective they bring to the improvement process. It is important that all members of the team speak freely and listen attentively. The value of ideas is determined by the thought put into the idea and by a person's position within the organization or professional degree. High functioning teams respect and value all comments and ideas. The team leader should solicit participation from shy or timid team members and neutralize or diffuse over-bearing individuals by providing opportunities for everyone to provide input. If specific individuals consistently do not follow the ground rules, the team leader should speak with them one-on-one. If the behavior continues, advice from senior leadership should be obtained.

Team dynamics will be as unique as the team members themselves. Remember that we all bring our personalities and styles with us wherever we go. The key to a high functioning team is respecting and exploring each individual's perspective and creating a synergy, where the whole is greater than the individual.

Team Assignments: Since team members are typically staff, balance team tasks with their regular work duties. Much of the work will take place outside of the regularly scheduled meetings. Tasks should be clearly defined and assigned to team members. The timeframe for completion should be negotiated and clearly stated. In some cases, work will need to be completed before the next meeting while others will have longer timeframes. Because it is a team effort, the team leader should not be expected to perform all of the work. Use of an established workplan with appropriate, realistic timelines is helpful for keeping the team on track.

Authority of Team: At times, issues will be raised that fall outside of the quality improvement team's purview. To minimize disruption to the team and the process, the team leader should quickly resolve any issue that impedes the team's progress toward its goal. The team leader, at a minimum, should work with team members to strategize how to resolve these issues and follow-up to ensure a quick and smooth transition back to the team's original plan. As part of the quality improvement process, a wide array of strategies to improve a process can be identified. Some of the strategies proposed may not be a realistic option. For instance, a team may determine that additional staffing will resolve a specific problem, however, the budget cannot support this solution. To minimize these issues, it is important that parameters be established at the beginning of the project so that the team understands the boundaries of their authority. In a case such as this, leadership should take "hiring new staff" off the table as an improvement strategy, but encourage re-designing work flow, changing staff duties or hours as potential solutions.

what to do...

Develop timeline for reporting findings and improvement strategies.

As the team begins to work together, a timeline for reporting findings and outlining improvement strategies should be developed. This will provide target dates for which to strive and will help keep the project on track.

STEP SIX

Study and Understand the Process

what to do...

Analyze the root causes.

Once the team is in place and a clear team aim has been provided, the team will enter into the process of determining the root causes of the problem or opportunity for improvement. Skipping or short-cutting this point in the process may lead to changes and improvement strategies that do not address all of the key issues, and therefore, do not lead to the desired improvement. While the list of root causes may appear to be extensive, further analysis often identifies overlapping issues.

what to do...

Utilize CQI tools and techniques to understand the process, such as flow charts, facilitated brainstorming, cause and effect diagrams, fishbone, etc.

Various quality improvement tools and techniques can be used to help understand the process, such as flow charts, facilitated brainstorming, cause and effect diagrams, fishbone, as well as others.

Flowchart: A flow chart is one of the most useful quality improvement tools as it depicts the sequence of steps performed in a specific process. By studying the process, a common understanding is gained by the team members and misconceptions of how the process works are reduced.

The purpose of the flowchart is to identify the actual path a process follows and to ultimately have a process that is predictable, consistent, and has minimal waste. By documenting a process in this manner, the team is be able to identify redundancies, inefficiencies, misunderstandings, and waiting loops. The flow chart also allows the team members to gain a better understanding of how a process should be performed. Because a single process often involves individuals from different disciplines, departments, and/or agencies, it is important to include representatives from all areas who touch the process at one or more points. In some cases, this will include individuals external to the program or department.

Once a flow chart is created that depicts the way a process currently works (Figure 4), a second flow chart should be created to document the ideal path the process should take (Figure 5).

Improve Clinic Check-In Process
Aim: Reduce Wait Time

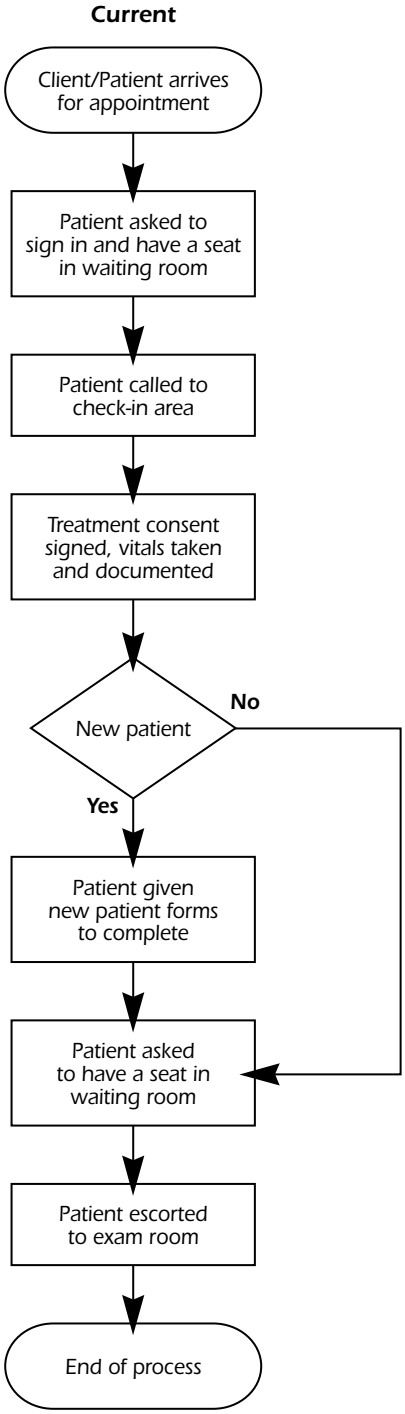


Figure 4 (Current Process)

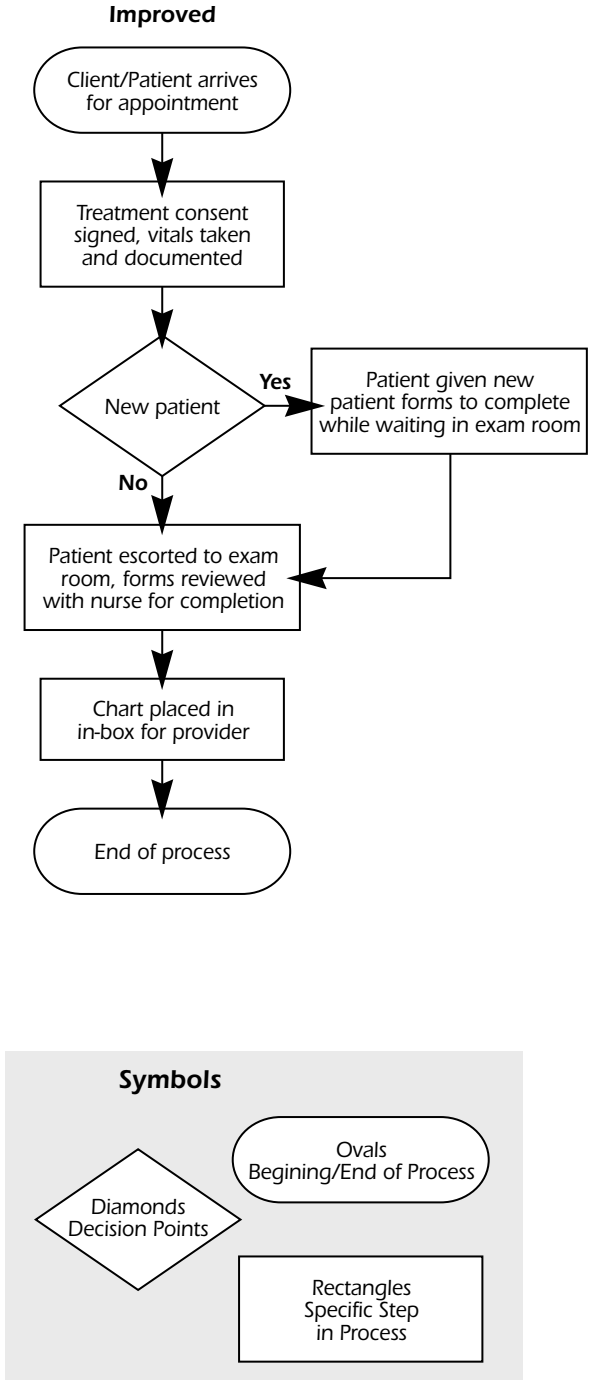


Figure 5 (Improved process)

Developing the flowchart may take some time and may be confusing at first. If developing the flowchart around a process is confusing, it is likely that the process itself is confusing. In order to untangle the process, it must first be understood. Here are a couple of helpful hints to use as you are creating a flow chart:

- Decide on the starting and ending points of the process.
- Brainstorm to record all the activities and decision points involved in the process.
- Arrange activities and decision points in sequence.
- Using this information, create the flow chart.
- Analyze the flow chart.

Cause and Effect Diagram: Cause and Effect Diagram, sometimes called a "fishbone" diagram (because of its shape) or an "Ishikawa" diagram (after Kaoru Ishikawa, the diagram's creator), focuses on causality (Figure 6). It is intended to illustrate the range of causes that lead to a particular outcome. The diagram helps a team visualize how the various components relate to one another and highlights specific conditions that require further attention.

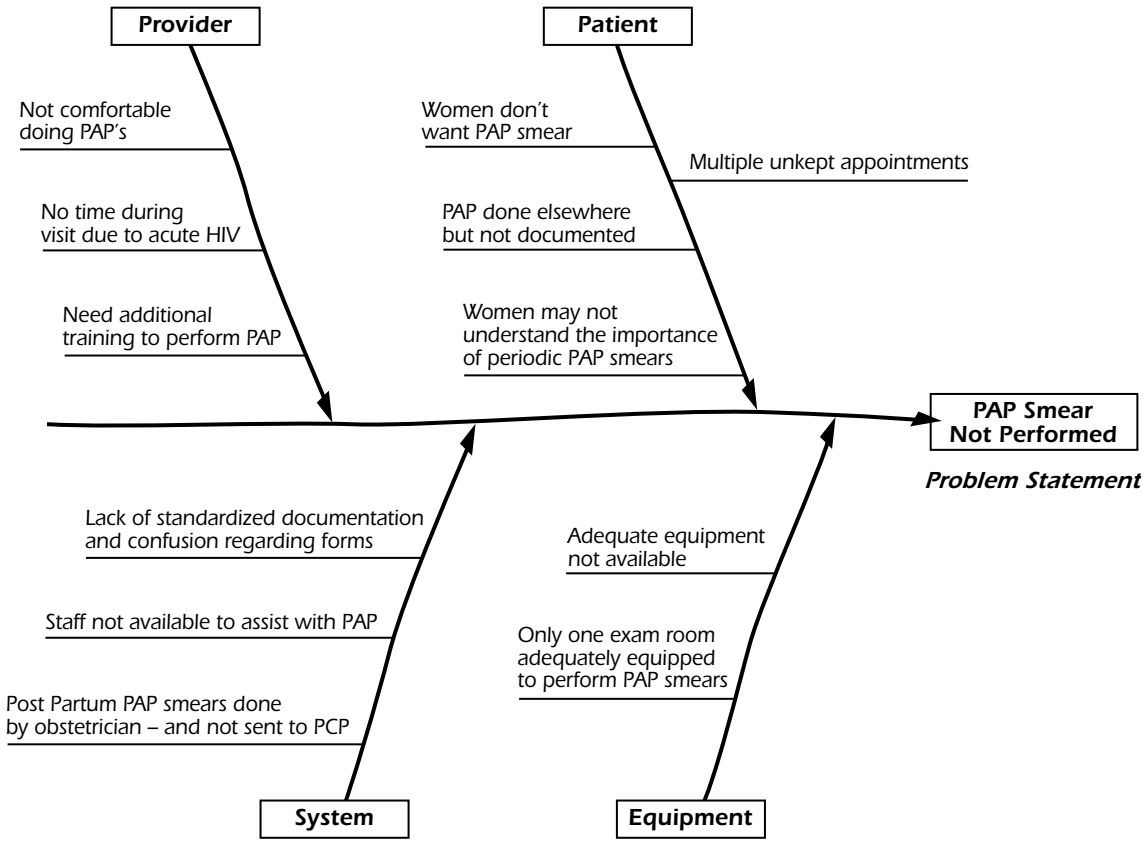
The cause and effect diagram helps the team identify and define an outcome or a problem, determine causes of a given outcome or problem, and identify causes for variation in a process. Review of the cause and effect diagram can help lead the group to appropriate actions and provide ideas for data collection in order to measure performance.

Key steps in creating a cause-and-effect diagram include the following:

- Place the outcome (or problem statement) on the right side of the paper, halfway down: draw a horizontal line across the paper with an arrow pointing to the outcome.
- Determine major categories for the causes; connect them to the horizontal line with diagonal lines.
- Note the major causes and place them under the general categories. This step will take some time. To assure that no causes are missed the team should ask themselves *why* or *how* five times.
- Try to list sub-causes and place them under the main causes. Not every main cause has a sub-cause but the more detailed the diagram the easier it will be to determine an improvement strategy.
- Evaluate the diagram for obvious areas for improvement, causes that are readily solved or eliminated and areas needing further study or additional data collection to be better understood.

Figure 6. Cause and Effect Diagram

Cause and Effect Diagram (Fishbone) Analysis Performance of PAP Smears



A fishbone illustrates the range of causes that lead to a particular outcome. The diagram helps a team visualize how the various components relate to one another and highlights specific conditions that require further attention.

Source: HIVQual Group Learning Guide (2002). NY AIDS Institute http://www.hivguidelines.org

what to do...

Document and track progress by using activity logs, issue identification logs, meeting minutes, etc.

Without proper documentation, it is easy to lose track of the progress made. Documenting the team's work helps to assure focus and may minimize rework. By clearly documenting progress made from one meeting to the next, the team can become more efficient in the team meetings. The tracking method does not have to be complicated or cumbersome, but merely captures the key issues discussed, decisions made, and action steps to be taken.

To ensure accuracy and timeliness, tracking logs and meeting notes should be updated, generated, and distributed immediately after each meeting. This will reinforce the issues discussed, decisions made and inform any team members who were absent. The notes can also serve as a forum to communicate progress to senior leadership and/or the rest of the staff. Such documentation also provides a consolidated process for demonstrating agency compliance with CARE Act legislative requirements related to quality management.

what to do...

Report progress to senior leadership and staff on a regular, defined basis.

Communication of the team's progress on a regular basis will help to promote buy-in from senior leadership, staff, and when appropriate, your clients/patients. Senior leaders may request a high-level summary, where as staff may benefit from the details of the team's discussions. One strategy that has proven to be successful in various Ryan White funded agencies is the inclusion of QM activity reports at every staff, department, and/or program meetings.

STEP SEVEN

Develop and Implement an Improvement Plan

what to do...

Identify potential solutions to make improvement to the systems of care.

Once you have identified an area for improvement, analyzed the root causes, and understood the processes involved, it is time to develop and implement your improvement plan. Just as you were thorough in your process to identify root causes, you should be equally thorough in determining your improvement strategy. The team brainstorms to develop a list of changes that they think will improve the process. The team leader will need to manage this process to assure that consensus is reached regarding the plan.

what to do...

Recognize quick fixes and longer term solutions.

There will be some improvements that can be accomplished very easily and without pretesting. These quick fixes can be a nice jump start for the team and can be very motivating. Other improvements require pretesting, longer term planning, or require a major work redesign.

what to do...

Try a small test of change and analyze results.

Most purposeful improvements will require a systematic approach to achieve the goal. Test your changes on the small scale before they are widely implemented to assure that the change will be effective. We have all been involved in improvement strategies that did not achieve the desired improvement and yet were fully adopted from the start. As there are generally multiple root causes, there may be multiple changes needed to improve the process. You will be relying on multiple cycles to achieve your overall aim. Include conditions in your test that will affect your change in the future. Collect data over time to measure the impact of your change under differing conditions.

During the change process you will need to recognize that staff, providers, and clients react differently to change. Changes should be discussed at a minimum with all individuals involved in the process being addressed, and ideally with all program staff. Lack of communication at this stage can undermine a successful strategy. Expect some resistance but utilize your team members to help decrease negative reactions or behavior that can hinder the change process. Team members are the most influential agents for change. Part of their role will be to bring their colleagues along, answer questions, and show enthusiasm. This can help limit resistance from other staff.

By all means, use common sense. By now, you have already developed a good sense of what strategies will be most effective to improving your process. Use those strategies first, that will maximize your ability to implement an immediate improvement to your program or service. From the list of all possible solutions, review your list with a keen eye and make sure that you sequence your steps in a logical manner that will give you the best result.

Once improvements have been implemented fully, consistent ways of doing the work need to be formalized. This could involve establishing standard ways of performing work activities in a department procedure, standard training for new staff, documentation and ongoing measurement to ensure that the change becomes the normal way things are done.

Below are questions to keep in mind while you are implementing your improvements:

1. What are you trying to *accomplish*?

   Be sure to provide an aim for the improvement effort that will guide and keep the effort focused.

2. How will you know that a change is an *improvement*?

   Criteria or measures need to be identified to answer this question. The effectiveness of the effort to improve depends in part on the ability to measure these criteria.

3. What changes can be made that will result in *improvement*?

   Changes that can lead to improvement need to be identified and tested. In order to implement a change, you will need to identify "who" will do "what," "when," and "where."

Source: Langley, G., Nolan, K., Nolan, T., Norman, C. & Provost, L. (1996). "The Improvement Guide." Joessey-Bass Publishers San Francisco.

A helpful strategy is to test change on a small scale instead of trying to implement a change throughout an entire system. For instance, if you would like to revise the clinical flowsheet, make a few changes and ask one (1) provider to test the revised flowsheet during one (1) clinic session. Once you receive feedback, make other changes as needed and test it again with three (3) providers over the course of a week. Continue making changes as needed and testing with a group of providers. After these small tests of change have been completed, the revised flowsheet will be ready for widespread implementation.

A widely used framework for testing change on a small scale is the Plan-Do-Study-Act cycle (PDSA) or Shewhart cycle named after the individual who developed it. Use this framework to test your improvement ideas prior to full implementation. (See references for more information on this tool.)

PDSA Cycle

Plan (Plan a change)

After root cause analysis has been completed, brainstorm changes that may improve the process. Since there are multiple root causes, there may be multiple changes needed to achieve the desired improvement.

Do (Try it out on a small scale)

Before full implementation of a change, determine if the change will have the desired or predicted result. Test or pilot the change for an appropriate interval. Keep the test small and the interval short. The quicker the learning cycle, the quicker you will reach the improvement goal that you set.

Study (Observe the results)

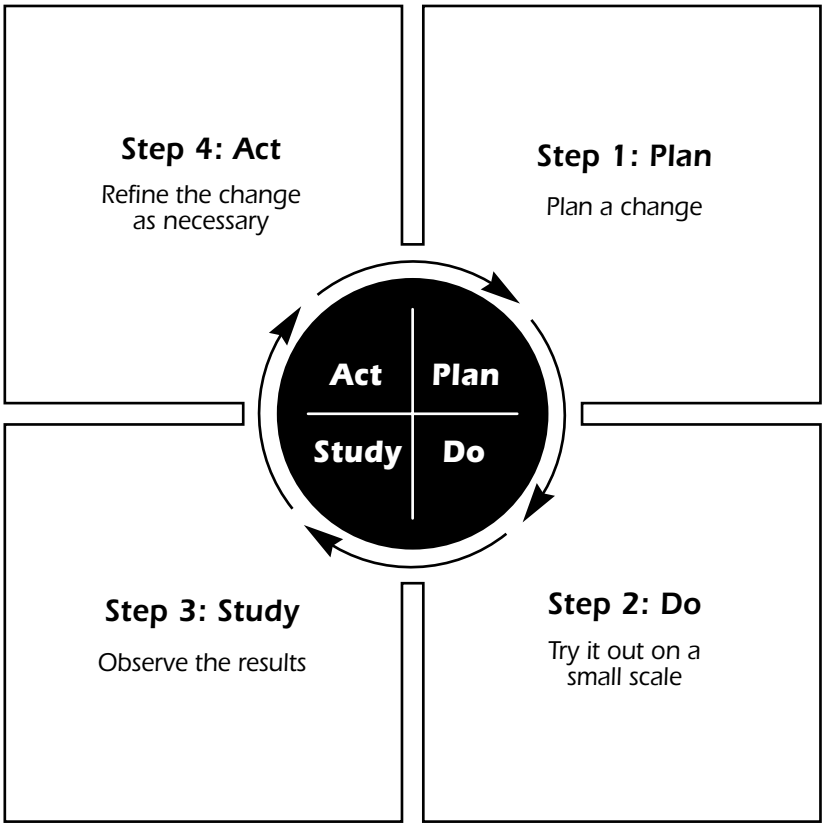
Analyze and assess the results and use the information to plan the next test cycle. The completion of each cycle should always lead directly to the next cycle. Questions to ask during this phase are:

What worked and what didn't?
What should be kept, changed or discarded?

ACT (Refine the change as necessary)

Refine the change until it is ready for broader implementation. The cycle is completed for a particular process once the change is fully implemented. Regularly revisit the changed process to assure that it is sustainable over time.

The PDSA Cycle



The PDSA Cycle – The PDSA cycle above is showing the four steps required to assess change within your organization.

Source: Institute for Health Care Improvement, Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB). HIV/AIDS Bureau Collaboratives: Improving Care for People Living with HIV/AIDS Disease, publication supported by grant number 54 U69 HA 00042-03 from the Health Resources and Services Administration.

what to do...

- ☑ *Refine improvement plan.*

Testing the plan on a small scale can help you understand what works and what doesn't. Set up a feedback loop including additional data collection to determine if the change was successful. This refinement process may take some time, and you may need to re-test the changes prior to full implementation.

what to do...

- ☑ *Develop timeline for implementation of plan.*
- ☑ *Delineate team responsibilities.*
- ☑ *Implement and track changes and improvement actions.*

Once you are sure that the plan is ready for full scale implementation, you will need to develop a timeline and again communicate to all key stakeholders. The improvement plan and timeline are to keep the team focused on their progress. They should include the who, how, what and when.

As much as possible, give team members responsibilities that are closely related to their jobs. They may be able to tap into information and knowledge about their programs and use it in the QM effort.

Below are two formats to document your plan which you may find helpful. Improvement Plan (1) organizes the plan by action item; Plan (2) by the source of the change. The plan should include a timeline as well as responsible individuals for each improvement. The plan should be updated regularly and can be used to communicate to key stakeholders and individuals not on the project team. Within the improvement plan, specific staff responsibilities should be delineated. (See Appendix F for an additional Project Workplan, which will help you document your progress.)

Improvement Plan (1) **Opportunity/Aim: Decrease the unkept appointment rate from 30% to 20%** **Team Leader/Sponsor: Project Nurse**				
Action Item	**Start Date**	**Person(s) responsible**	**End Date**	**Result**
Call all patients one day prior to appointment to remind them of day and time	1/02	Appointment Secretary	2/02	Difficult to reach patients due to disconnected telephone numbers. 100% called, 50% reached
Develop and implement system to update patient contact information	1/02	Check-in staff Clinic Manager	2/02	Completed at check-in, computer updated
Call patients who miss appointment to determine reasons	1/02	Peer Advocate	2/02	Multiple reasons for missed appts identified
Prepare a list of individual patients with history of missed appointments to target individual approach	1/02	Data Manager Peer Advocate Team	2/02	Completed
Document missed appointments in medical record and notify provider	1/02	Medical Assistants	3/02	Documentation in place, difficult to determine best way to notify provider
Provider contacts individuals who consistently miss appointments	1/02	All clinical providers	3/02	Providers unable to consistently contact patients

Improvement Plan (2)

Opportunity/Aim: Decrease the unkept appointment rate from 30% to 20%
Team Leader/Sponsor:

Source	Issue	Improvement	Result
Patient	- Patients make appointments and do not keep them - Patients face multiple barriers to keeping appointments, i.e. lack of transportation and childcare, work schedules, mental illness and active drug/alcohol use	- Appointment Secretary to call all pts one day prior to appointment - Check-out clerk educates patients re importance of keeping appointment and calling to cancel and reschedule if they cannot keep it. - Provide additional support to patients who miss serial appointments - Referral of all patients who regularly miss appointments to Peer Advocate and Social Work team	Difficult to reach patients due to disconnected telephone numbers Despite support system in place, some patients still cannot keep appointment
Provider	Providers have limited appointment availability and get frustrated when patients do not keep appointments. They are unable to monitor patients clinical status without regular laboratory monitoring	- Provider to emphasize importance of keeping appointments and regular lab monitoring - Provider to review missed appointments with patients who serially miss appointments	Providers more involved with educating patients re importance of visits
System	No system in place to update patient contact information No system in place to contact pts prior to their appointment and to follow-up for missed appointments No system in place to notify provider of missed appointments	- Check-in clerk to request updated contact information for every pt. for every visit and update computer system and chart - Appointment secretary to call all patient on the day before their appointment - All missed appointments documented on progress note for review by provider	Implementation successful but need backup staff to assure system is implemented fully without gaps

STEP EIGHT

Remeasurement

what to do...

- *Determine interval for remeasurement.*
- *Remeasure indicator after change has been implemented.*

In order to determine if your improvements have been successful, you must re-measure. Use the same data collection method and same sampling strategy as your baseline data, but apply it to a different data set. The new sample will need to represent a timeframe that will show whether the improvement strategy has had an impact. In other words, make sure enough time has elapsed for the changes to take hold. This is completely dependent on the performance measure and the change initiated, but 1 to 2 months is probably a good rule of thumb. It may take several re-measurement cycles to know whether it is the changes that impacted the data, or just chance.

what to do...

- *Look for incremental improvement.*

You are looking for incremental change to determine if your improvements have had the desired effect. Your first set of new data may show only a small increment of improvement or in some cases no improvement at all. Do not be discouraged. Improvements over time are the true test of a successful strategy. Re-assess the strategy to make sure that it was implemented as you expected. Pre-testing should help to avoid fully implementing strategies that will not have an impact. If no improvement is noted after several cycles of data collection, further analysis may be needed.

what to do...

Communicate results to team, staff and leadership.

Feedback of the re-measurement results is critical. Wide dissemination of the results will help to keep the team, staff, and senior leadership involved in the process. At this point in time your program will have invested considerable time and resources on the project. Data can be very powerful as a motivational tool, so be sure to communicate the results.

To sustain improvements, data should be collected regularly at pre-established intervals and disseminated to key stakeholders. Do not underestimate the power of the data. If you have adequately engaged all staff in this process, they will be anxious to help maintain improvements. The team should be reconvened periodically to review the data and discuss any problems or new issues.

what to do...

Determine need for and/or level of remeasurement on an ongoing basis.

Develop a plan for sustained improvement.

In order to determine whether your changes are effective over time, a plan for re-measurement should be developed. In the early stages of the improvement you may want to re-measure on a monthly basis. Once the improvements are firmly entrenched, and you have reached your goal, the interval for re-measurement can be reduced. Integrate the data collection interval into your annual QM plan noting the monthly, quarterly or annual re-measurement. In some instances, remeasurement could be conducted every 6 months, 1 year or 2 years. There may also be times when the need for remeasurement no longer exists. Continue to feed back the results to the team, staff, and senior leadership.

Many things can hinder improvements and sustained performance over time such as:

1. Lack of an adequate QM organizational structure to support improvements over time;
2. Lack of ongoing communication and feedback to providers and staff;
3. Lack of periodic re-monitoring and feedback to providers and staff;
4. Staffing changes without sufficient training of new staff; and
5. Changing priorities and lack of interest.

STEP NINE

Celebrate Success

what to do...

Communicate results of the project to all levels of the organization, including consumers when appropriate.

Never miss an opportunity to celebrate your success. The day-to-day pressures on every organization to be fiscally responsible and meet the ever-changing needs of its clients are a challenge to say the least. We often do not take the time to highlight the things we have done well. In practical terms, recognizing the success of your teams will continue to motivate them to actively participate in Quality Management activities. Take the time to let your clients know about your activities as well. Summarize activities in newsletters, display on bulletin boards and present to consumer advisory board forums.

what to do...

Congratulate team in public forum, i.e. staff meetings, Board of Directors meetings.

When the team has completed its purpose and met its goal, congratulate the team members and everyone involved in the process in a public way. The team should be encouraged to present their project to an appropriate audience, department, or organization. A storyboard is a good way to do this. This a pictorial display of the teams work, including base line and follow-up data, improvement strategies, and next steps. This is also a great way to re-train staff on the CQI process, illustrating how each step was implemented. Storyboards can be used to present activities to other outside regulatory agencies, like the JCAHO (for health care organizations) and to Boards of Directors for community agencies.

This last and final step includes the selection of a new project based on another identified opportunity for improvement. When you choose your next team, include some of the members of the previous one. Their expertise and enthusiasm will get your next project off to a great start.

what to do...

Select a new project and begin at Step 3.

This new project may be another priority you already identified or other developments (e.g., new policies).

4 Implementation of Quality Management Requirements Within Titles I and II

The goals, purpose and type of agencies funded across the Titles vary extensively. Title I and II grantees serve as agents to distribute and administer funds while Title III and IV grantees function primarily as direct service providers[4]. Expectations for implementing quality management at the administrative level have not been defined as clearly as the quality management expectations set for direct service providers. For Title I and II grantees, implementation of a quality management program has two main components:

1. Conceptualization and implementation of a quality management program across the defined service area, such as the EMA or State; and
2. Utilization of data for planning and monitoring implementation of the quality management plan.

Conceptualization and Implementation

An overall strategy for quality management must be conceptualized and developed for the service area. In some service areas, a standardized approach may be utilized where all providers address a common set of issues, such as tracking and monitoring referral outcomes for substance abuse services or provision of annual pap smears for women. In other service areas, each provider would be expected to implement set quality improvement activities, but the specific issues explored would be defined by the provider agency. Regardless of the strategy employed, the administrative agent is expected to work in conjunction with the planning body to develop a strategy that is most appropriate for the service area.

Once the strategy or approach is defined, the specific quality improvement projects need to be prioritized and the requirements of sub-grantees to participate in the quality efforts delineated. The *Request for Proposals* can serve as a forum to clearly communicate the requirements related to quality management. Formal contracts can be used to reiterate the expectations related to participation in the region's quality management efforts. Below are a few examples of quality outcomes that can be incorporated into the contracts with agencies that you monitor:

The contractor will:

- Conduct random chart audits of 10 percent of primary care population or 35 charts, whichever is larger.
- Identify and track two quality indicators during the grant year.

[4] It is recognized that some Title III and IV grantees serve as administrative agents for a network or consortium of providers.

- Participate in all evaluations, studies, and reviews conducted by either the administrative agent or the planning council/consortia regarding services funded with grant funds.
- Participate in the quality management program implemented by the administrative agent.
- Implement an ongoing quality improvement program to assure that medical care is provided in accordance with PHS guidelines.

As the grantee, planning bodies and individual provider agencies identify indicators and measures to track over time and across the region, a logical starting point is to look to the Standards of Care that have been developed and implemented. The Standards are designed to guide service provision and set minimum expectations in the respective service categories. Indicators and performance measures can be based on these standards. Examples of measures include the following:

- Percent of clients enrolled that meet defined eligibility criteria;
- Number of referrals made for substance abuse services and appointments kept;
- Number of referrals made for mental health services and appointments kept;
- Percent of patients enrolled in case management whose service plan is current;
- Percent of primary care patients with visit(s) in the last 3 months;
- Percent of patients with CD4 count >350 cells/mm^3;
- Percent of patients with viral load $<$ 10,000 copies;
- Percent of patients on HAART;
- Percent of patients with PPD screens in the last 12 months;
- Percent of female patients with pap smear in the last 6 months;
- Percent of patients with Hepatitis B and C screening.

The specific measures and indicators selected should address questions or issues that are pertinent to the service area and can be used to improve service delivery. For example, if an EMA feels that clients are being lost to follow-up after an initial diagnosis of HIV infection, measures such as the following might be appropriate to track:

- Percent of patients entering primary care HIV-positive and asymptomatic; or
- Percent of newly diagnosed HIV-positive patients who have a follow-up appointment within 3 months of diagnosis.

As sub-grantees initiate and implement quality efforts, technical assistance can prove to be invaluable. A variety of strategies can be employed such as agency-specific consultation, region-wide educational or discussion forums and provision of sample tools, such as patient satisfaction surveys or chart audit forms.

Utilization of Data and Monitoring Activities

As the grantee of record, Title I and II agencies are not only responsible for ensuring the services are provided in accordance with PHS guidelines and industry standards but are also responsible for globally assessing the system of care. The quality management program should enable the EMA or State to examine and refine their processes for administering the grant at the programmatic and fiscal level and ensure sufficient collaboration with the planning bodies to allow the region to remain responsive to changing trends in the epidemic.

Quality management data can play a critical role in informing the community and helping to identify needs and gaps in service; information that is necessary for planning bodies to make informed decisions. The information gathered through the quality management program can and should be used as part of the priority setting process to identify the key service categories for which funds should be allocated.

As contracts are executed and funds allocated, the grantee assumes responsibility for monitoring implementation of the quality management plan at both the level of the region and sub-grantee. Strategies to ensure compliance vary and can include site visits, submission of quarterly reports, submission of data for defined quality indicators and chart audits conducted by external reviewers. Over time, analysis and trending of data will guide the quality management plan, impact funding priorities, identify needs and gaps in service and challenge the region to enhance and improve the system of care. As improvements are made in one area, new measures can be selected to enhance another part of the service delivery system.

Characteristics of Quality Management Programs

As previously indicated, five key characteristics of quality management programs have been identified by HAB. The way in which these characteristics can be demonstrated will vary by Title and agency. Strategies for implementing QM programs and demonstrating the key characteristics are presented in Appendix I. These strategies are provided as examples and are not required elements. The suggestions will, however, assist the grantee in meeting the legislative requirements related to quality management.

5 Frequently Asked Questions

Question

How do I incorporate QI into the day-to-day activities of the program?

Answer: There is no one way to incorporate quality improvement activities into your day-to-day operations. The nine (9) steps outlined in Section 3, provide a guide on how to implement a QM program. It is important to have a quality plan in place, with priorities determined by the Leadership of the organization. These priorities should be communicated to all program staff. Quality Improvement activity updates should be provided at all program staff meetings. QI data collection, tracking systems and improvement strategies can be folded into daily workflow. Each staff member can be included on some level to promote shared accountability and buy-in on all levels.

Train everyone in CQI tools and techniques so that they understand its focus on improving systems of care and not on individual performance. This will help to reduce fear that may be present. Avoid punitive use of data collected for QM for this same reason.

Encourage dialogue and suggestions around improving care delivery from every level of staff.

Question

We are a small agency funded to provide case management services only. Where do we get started? The steps to implementing a quality management program seem very overwhelming for a small agency. How much do we really have to do?

Answer: The nine steps to implementing a quality management program can seem overwhelming especially for small agencies with limited staff and administrative personnel. These steps are intended to be guiding principals that if fully implemented will lead to a strong sustainable QM program. However, the most important step for you to take is to "get started". Start with the self assessment in the beginning of this manual. Maybe you already have data available, but you've never really analyzed it in a formal manner. Maybe you have a team of case managers who work beautifully together and are always finding ways to improve services. Maybe this group can serve as your first quality project team. Start with what you already have in place; recognize your strengths and build from there. HRSA will look for you to formalize your processes, and show that you are identifying opportunities for improvement and making incremental but effective changes.

Question

How do I avoid duplicate data collection for quality improvement activities for multiple funding sources and multiple regulatory entities?

Answer: We all wish we had one big database that provided us with all the data we needed, in any form we needed it, at the touch of a button. Unfortunately funders and regulatory agencies are very specific in how they would like demographic and service data reported and there is no magic bullet to accomplish this. When it comes to quality improvement data collection, most agencies will encourage you to collect meaningful data to measure your quality of care based on the priorities that you have set for your program based on your mission. For instance, if you are a medical program you will surely want to show evidence that you are providing care based on recognized national standards of care. If you are an AIDS Service Organization (ASO) you will collect data that reveals your ability to provide case management services or other supportive services to your clients. This kind of data and documented activities to improve services will generally satisfy an agency that you are regularly monitoring and evaluating the care and services that you deliver.

For example, a JCAHO accredited and Medicaid-approved provider should consider using a single HIV/AIDS improvement project, where feasible, to meet the quality management requirements of the Ryan White CARE Act, Medicaid, and JCAHO. The requirements would need to be consolidated and the higher standards applied to each domain of the project, but in this way, duplicate efforts could be avoided.

Question

How do I keep busy physicians engaged in the process?

Answer: Clinical providers have many competing priorities in today's health care system, including patient care, research, meetings, etc. Quality Management activities are not always on the top of the list, though clearly they care about the quality of care they provide to their patients. HIV providers are a unique and committed group.

One strategy is to make sure that the physicians are part of the process of choosing the performance measurements. If they care about the topic you will more likely keep them engaged. Another strategy is to highlight some projects that have improved care so that they can see how the process can work. Build QM discussions into existing meetings and forums so that additional meetings do not need to be scheduled. Finally, engage a physician leader in the process and utilize their expertise and enthusiasm to get others involved.

Question

How do we deal with difficult personality styles that are not always conducive to good teamwork?

Answer: Some people are born team players and seem to understand innately how to work with a group of people to achieve a common goal. Some people aren't. Individuals used to being in charge and making unilateral decisions, may have a difficult time adapting to a system that promotes a team approach to decisions. Physicians, in particular are trained to be the "captain of the ship". In an operating room this is a useful and critical trait. In a team setting where decisions are shared, processes examined in great detail and changes tested before being fully implemented, some individuals may become frustrated adapting to the process. Organizations with a very entrenched hierarchical structure may also find individuals slow to adjust to a philosophy of teamwork. However, remember that human beings are highly adaptable. Teamwork is a skill that can be taught and nurtured. Remain optimistic and give each team member ample time to adjust. Sometimes team pressure alone will help to neutralize difficult personalities. When an individual continues to exhibit behavior that is counterproductive to the process, senior leadership may need to step in, and in some cases, the individual may be asked to leave the team. The important thing to remember is that no one individual should be allowed to retard the momentum of the team.

Question

Does this QI process supersede my current organizational standards and compliance measures?

Answer: No. Some organizations are accredited and have other types of standard compliance measures in place. This process is meant to complement existing systems, where appropriate, not replace them. For example, regulatory organizations such as, JCAHO, State and local department of health all have external regulatory requirements that are incorporated into the organization's plan to ensure that the organization meet strict regulations. If the accrediting and regulatory bodies' requirements match those of the RWCA, then there is no need for duplication.

A JCAHO-accredited and Medicaid-approved grantee should consider using a single HIV/AIDS improvement project to meet the quality management requirements of Ryan White, Medicaid, and JCAHO. The requirements would need to be consolidated and the higher level standards applied to each domain of the project will satisfy the requirements.

When in doubt, develop a crosswalk with the accrediting bodies' regulatory requirements and those of the RWCA.

Question

What indicators should we be examining?

Answer: The first step in choosing an indicator is to determine concisely what you want to know. What is the performance standard that you want to measure? For Ryan White funded agencies, an easy way to prioritize is to review your project work plan. What did you say you were going to accomplish? How do you know that you were successful? Do you have data that supports every key goal and objective? If you are heavily funded to provide clinical care, you should prioritize adherence to PHS guidelines to show that you are providing care that meets national standards. If you are funded to provide case management services, what are the standards of service that you expect from your case management team?

Starting with recognized standards of care or service is always a good first step.

Question

Is there a minimum number of indicators that we should monitor?

Answer: No. This depends on the variety of services you provide and the size of your organization. As above, try to include one key indicator for each goal and objective in your work plan. You can start small and increase the number of indicators over time. The most important point is to get started.

Question

Is it enough to just focus on clinical care and not look at support services, such as case management?

Answer: Probably not. We know that supportive services can enhance an individual's ability to adhere to his/her clinical care. If you provide both clinical care and supportive services you will need to assess the quality of both. If you provide only clinical services and refer your patients to other organizations for case management services you may want to assess the referral process and access issues. This would be a great opportunity to work collaboratively with another agency and promote continuity of care.

Question

Who should be part of the QM teams?

Answer: Everybody. At some point everyone in your organization should be engaged in a project team. You want to avoid having the same people on the teams, except in small programs where staffing may be an issue. Larger programs should consider all staff persons when assigning team members.

Question

How does HIPAA impact QM?

Answer: The new HIPAA (Health Insurance Portability and Accountability Act) regulations are intended to standardize the way health care data is exchanged electronically in order to streamline the processing of health care transactions, reduce the volume of paperwork, save money, and provide better service for providers, insurers and patients. Consult with your organization to determine how HIPAA impacts on your program and what procedures they have put into place to assure compliance. (See attached HIPAA resources for additional information on the HIPAA).

6 Resources

Quality Management: Technical Assistance Manual. Through a 9-step framework, the manual provides information and tools to help grantees plan, design, measure, assess, and improve performance. See http://hab.hrsa.gov/tools/QM

Improving Care for People Living with HIV/AIDS Disease. Institute for Health Care Improvement, HRSA/HAB. HIV/AIDS Bureau Collaborative. Order via the HRSA Information Center at http://ask.hrsa.gov (use the search word "quality" or go to http://www.ask.hrsa.gov/detail.cfm?id=HAB00289) or call 888-ASK-HRSA.

RW CAREWare. Includes the CAREWare software, manual, and data dictionary for Ryan White CARE Act grantees and providers. Available from the Office of Science and Epidemiology, HRSA/HAB, Room 7-90, 5600 Fishers Lane, Rockville, MD 20857 or download from http://hab.hrsa.gov/careware

Primary Care Assessment Tool (PCAT). An on-site review tool used to assess CARE Act grantee administrative, fiscal, clinical and support services.

A Practical Guide to Evaluation and Evaluation Terms, Evaluation Monograph Series. Contains evaluation terms, relates quality management to evaluation, and explains steps in conducting evaluation studies.

Outcomes Evaluation TA Guides. This series covers: primary medical care, case management, and "how to" develop an outcomes evaluation.

Outcomes Evaluation, National TA Call, April 1999. Included are: HAB's expectations on outcomes evaluation; a definition of outcomes evaluation; steps to follow; and examples of grantee efforts.

To Obtain HRSA/HAB Materials and TA

- HRSA HIV/AIDS Bureau http://hab.hrsa.gov/CATIE (see Tools for Grantees, search on "quality")
- HRSA Information Center 888-ASK-HRSA http://www.ask.hrsa.gov
- Technical assistance is available from HAB through the Technical Assistance Contract. Ask your project officer.
- See http://hab.hrsa.gov/special/qualitycare.htm

HIVQUAL. Continuous quality improvement (CQI) software and consultation services for CARE Act programs focused on systems improvement, and information and performance management. See http://www.hivguidelines.org/public_html/center/quality-of-care/hivqual-project/hivqual-project.htm.

HRSA Center on Quality. See http://www.hrsa.gov/quality

HRSA Bureau of Primary Health Care Quality Center. See http://bphc.hrsa.gov/quality

Other Quality Resources

Agency for Healthcare Research and Quality (AHRQ). Lead HHS agency supporting research regarding quality of care, costs, and access to essential services. See http://www.ahrq.gov/qual

Center for HIV Quality Care. Part of the Infectious Diseases Society of America and funded by HRSA/HAB, identifies standards of care for People Living with HIV (PLWH) at various stages of illness; determines the cost of care for PLWH; and examines variations in state Medicaid program eligibility, benefits and financing. Resources include: HIV/AIDS Practice Guidelines; State Health Policy Profiles; HIV Experienced Provider Definitions; and Center Issue Briefs. See http://www.hivma.org/HIV/tocCEN.htm

Centers for Medicare & Medicaid Services (CMS). Listed are resources on the Health Insurance Portability and Accountability Act of 1996 (HIPAA). CMS is responsible for implementing various provisions of HIPAA. See http://cms.hhs.gov/hipaa/

Crossing the Quality Chasm: A New Health System for the 21st Century. An Institute of Medicine report outlining a strategy for improving the quality of health care. See http://www.nap.edu/books/030907343X/html

HIV Clinical Resource: Quality of Care Web Site. Tools include a guide to setting up a quality of care program, standards, and a quality algorithm—located at the NYS Dept of Health AIDS Institute site. See http://www.hivguidelines.org

Institute for Healthcare Improvement. Resources/teaching tools for health care professionals to manage improvement efforts at their agencies, covering topics like: quality improvement; end of life care; and patient safety. See http://www.ihi.org

National Quality Measures Clearinghouse (NQMC). This website is a database and Web site for information on specific evidence-based health care quality measures and measure sets. NQMC is sponsored by AHRQ to promote widespread access to quality measures by the health care community and other interested individuals. See http://www.qualitymeasures.ahrq.gov/

National Quality Forum. This organization creates comprehensive quality measures that are consistent with national quality goals. See http://www.qualityforum.org

QA Reporting Requirements: A Report on Managed Care Performance. Results of a New York analysis of quality performance data from managed care plans. Information is used by the state to work with plans and providers to improve care and health outcomes health plan enrollees through performance feedback, quality improvement programs, technical assistance and best practices. http://www.health.state.ny.us/nysdoh/mancare/main.htm

U.S. Consumer Gateway Health Care Quality Page. Information and links on healthcare quality on such topics as selecting a plan, purchasing health care services, and privacy. See http://www.consumer.gov

7 Appendices

Appendix A

Sample Quality Management Plan

Organization Name _____

I. Purpose:

The purpose of this plan is to set forth a coordinated approach to addressing ***quality assessment and process improvement*** at _____. The program has established as its mission (insert mission statement, i.e. excellence in HIV-related patient care, education and research).

II. Goals and Objectives:

A systematic, department-wide process for planning, designing, measuring, assessing and improving performance with the following components:

A. *Develop a planning mechanism* incorporating baseline data from external and internal sources (list data sources) and input from department leadership, staff and patients. Clinical, operational and programmatic aspects of patient care will be reviewed.

B. *Emphasize design* needs associated with new and existing services, patient care delivery, work flows and support systems which maximize results and satisfaction on the part of the patients and their families, physicians and staff.

C. *Evolve and refine measurement* systems for identifying trends in care and sentinel events by regularly collecting and recording data (through a valid sampling program when appropriate) and observations relating to the provision of patient care across the continuum.

D. *Employ assessment* procedures to determine efficacy and appropriateness and to judge how well services are delivered and whether opportunities for improvement exist.

E. *Focus on improving* quality in all of its dimensions by implementing multidisciplinary, data driven, project teams and encouraging participatory problem solving.

F. *Promote communication*, dialogue and informational exchange across the department and throughout the organizations reporting structure, with regard to findings, analyses, conclusions, recommendations, actions and evaluations pertaining to performance improvement.

G. *Strive to establish collaborative relationships* with diverse community agencies for the purpose of collectively promoting the general health and welfare of the community served.

III. Structure

A. Framework

The *department's leadership group*, INSERT TITLES is *accountable, responsible and answerable* for planning, directing, coordinating and improving healthcare services in the HIV Program. This leadership group approves the performance improvement plan, and reviews quality improvement activities during its regular meetings. *A Quality Committee (QC)* has been established, under the direction of the (medial director, administrator, etc.) (see QC Goals and Objectives).

The programs Consumer Advisory Board was established to assist in the quality improvement activities and will participate in specific projects as appropriate.

The department's quality activities are reported through the hospital's *Total Quality Council* which oversees, prioritizes and directs planning, designing, measuring, assessing and improving organizational performance.

Through the *Division of Medicine,* the HIV program also provides ongoing Quality improvement reports to the *Division Chiefs meeting* (Infectious Diseases, Internal Medicine).

B. Content

The program is designed to address QA/PI content regarding the following major functional areas and important aspects of care:

- Clinical Primary Care
- Patient and Staff Education
- Continuity of Care
- Patient Satisfaction
- Case Management
- Medical Record/Information Systems
- Managed Care/Utilization Review

Special attention will be given to high volume, high risk and problem prone areas as well as areas with external regulatory requirements.

C. Data Collection Plan

- ✓ Selection of ***performance measures*** for the major functional areas and the important aspects of care and service.
- ✓ Regular ***review of data for performance measures*** from a variety of sources will occur as per the attached schedule. The Data Manager and the Quality Management Coordinator will coordinate these activities. Data reports will be presented for review to Quality Committee and designated teams. Data sources will include but will not be limited to:
    - *Clinical Measures utilizing HIVQUAL software program and based on established HIV care guidelines*
    - *Patient Satisfaction Survey results administered through the Office of Public Relations*
    - *Demographic data, visit frequency and missed appointment data from CAREware and unit based database*
    - *Utilization pattern and pharmacy use prepared by Managed Care Organizations*
- ✓ Data collection will be implemented utilizing appropriate sampling methodology and will include both concurrent and retrospective review.

D. Assessment and Evaluation

Assessment and evaluation of the data will be performed by various existing teams who will determine if the data warrants further evaluation. Based on this ongoing review, priorities will be set and opportunities for improvement identified.

E. Multidisciplinary Team and Development of Improvement Plan

Once an opportunity for improvement has been identified a multidisciplinary team will be convened to analyze the process and develop improvement plans. These teams will include those staff members closely associated with the process under study. Every attempt will be made to include individuals from other departments who may be impacted by changes made by the team and to help promote collaboration between departments.

Continuous Quality Improvement Methodology will be utilized and will include but not be limited to the following:

- PDSA (Plan/Do/Study/Act)
- Flow Chart Analysis
- Cause-and-Effect Diagrams
- Brainstorming
- Observational Studies/patient flow
- Activity Logs

Quality Committee/Team Meeting Record Improvement Plans will be developed and implemented by the teams. Improvements may include:

- System Redesign
- Education (Staff/Patients)
- Clinical Guidelines review, revision or development
- Procedure and policy changes
- Form development or revision

All improvement plans will be communicated to all staff and to patients if deemed appropriate. Meetings, e-mail, memos, informal verbal communication are all considered appropriate methods to communicate the team's activities and improvement plans.

F. Sustaining Improvements

Regular feedback regarding improvement projects is critical to its success in sustaining improvements over time. Once an improvement plan has been successful a regular monitoring schedule will be implemented to determine whether the plan remains successful over time. A calendar for ongoing monitoring is attached.

G. Communicate results to relevant individuals and groups

As described in Section III, Structure, all performance activities of the HIV Program will be reported to the appropriate inter- and intra-departments.

Signatures: (leadership group)

_____ _____

Executive Director Date

_____ _____

Medical Director Date

Appendix B

QM Plan Grid

HIV Program Performance Improvement Plan
Activities Table for 2003

Major Function	Important Aspect of Care	Opportunity Identified	Approach	Staff Sponsor/ Leader	Dates/ Timeline
Clinical Care	PPD Screening: PPD placed and read on an annual basis	Yes PPD's placed routinely but not read consistently	Baseline and follow-up data collected utilizing HIVQUAL. Assess standard of care for low prevalence area.		Annual Fall Campaign (Sept through Dec.)
	Gynecological care	Yes Follow-up data collection with HIVQUAL revealed a decrease in adherence to annual pelvic exam standard.	Develop and implement improved GYN care tracking form; Further evaluate care to determine adherence to GYN standard; implement improved follow-up. Continue to track progress.		Data collected quarterly
	Hepatitis Screening	Yes Initial data collection revealed 70% of charts had documented Hepatitis A, B, C labs and vaccine.	Develop Hepatitis stamp for medical record. Educate providers.		Data collected quarterly
	Dental Care	Yes Initial data revealed fewer than 50% have documentation of last dental visit.	Add annual dental exam. Add section on progress note to track annual dental visit. Collaborate with dental school to increase access to dental school appointments.		Data collected quarterly

Major Function	Important Aspect of Care	Opportunity Identified	Approach	Staff Sponsor/ Leader	Dates/ Timeline
Mental Health Services	Kept Psychiatry visits	Yes High rate of no show noted for new patients scheduled for mental health visits	Monitor new patients in care by reviewing initial patient questionnaire regarding alcohol use and psychiatric symptoms. Assess rate of referral for new patients and kept appointments. Plan to improve use of mental health services and to reduce no shows.		Missed appointment rates reviewed quarterly Monthly Case Conferences for difficult patients
Patient Education	Assessment of educational needs	Yes Need to assess patients educational needs and prioritize	Utilize Peer Advisory Board to provide input regarding all patient education events and materials. Assure basic HIV education incorporated into each medical visit.		Ongoing
Continuity of Care	Patient retention	Yes Retention rate assessed at 85% of patients seen quarterly.	Multiple approach: Regularly assess patients not seen in 6 months. Peer advocate to call all patients after missed appointment. Monitor missed appointment rates.		Ongoing

Appendix C

Quality Committee Structure

I. Mission Statement: Insert Program/Organization's mission

Excellence in HIV related patient care, education and research, consistent with the medical center's mission to provide premier programs in patient care, biomedical and health sciences research and teaching that will contribute to the prevention, diagnosis, and treatment of human disease and disability.

II. Purpose

- To provide oversight and facilitation of the _____ quality management (QM) program.
- To provide a mechanism for the objective review, evaluation, and continuing improvement of the HIV program.

III. Goals:

A. Address goals outlined in the quality management plan:

- *Develop a planning mechanism incorporating baseline data from external and internal sources (List sources) and input from department leadership, staff and patients. Clinical, operational and programmatic aspects of patient care will be reviewed.*
- *Emphasize design needs associated with new and existing services, patient care delivery, work flow and support systems which maximize results and satisfaction on the part of the patients and their families, physicians and staff.*
- *Evolve and refine measurement systems for identifying trends in care and sentinel events by regularly collecting and recording data (through a valid sampling program when appropriate) and observations relating to the provision of patient care across the continuum.*
- *Employ assessment procedures to determine efficacy and appropriateness and to judge how well services are delivered and whether opportunities for improvement exist.*
- *Focus on improving quality in all of its dimensions by implementing multidisciplinary, data driven, project teams and encouraging participatory problem solving.*

- *Promote communication, dialogue and informational exchange across the department and throughout the organizations reporting structure, with regard to findings, analyses, conclusions, recommendations, actions and evaluations pertaining to performance improvement.*

- *Strive to establish collaborative relationships with diverse community agencies for the purpose of collectively promoting the general health and welfare of the community served.*

- *Address QM content regarding the following major functional areas and important aspects of care: a. Clinical Primary Care, b. Clinical Research (AIDS Clinical Trials Group - ACTG), c. Patient and Staff Education, d. Continuity of Care, e. Patient Satisfaction, f. Support Services, g. Medical Record/Information Systems, and h. Utilization Review.*

B. Review and update the quality plan yearly.

C. Conduct an annual evaluation of the HIV Quality Management program.

D. Prioritize quality goals and projects so the most critical areas are addressed.

E. Plan for appropriate education relating to quality improvement concepts and techniques.

F. Provide guidance for site visits.

G. Develop a program-reporting calendar to the quality committee.

IV. Committee Membership:

- Program medical directors
- Program administrator
- Quality management coordinator
- Unit Manager
- Data manager
- Pharmacist
- Social worker
- Psychiatric Nurse
- Nurse practitioner
- Family Nurse
- Peer Advocate
- Research nurse

V. Committee Meeting Schedule:

- Meet 10 times a year and as indicated

VI. Committee Reporting Structure:

- Forward committee minutes to leadership
- Provide reports to relevant individuals and groups

Appendix D

Quality Committee/Team Meeting Record

Committee Team _____

1. Members Present:

2. Date: _____ Call to Order: _____(Time)
   Prior Minutes Approved: __ Yes __ No ___ NA

3. Topic:

   Findings/Analysis/Discussion/Conclusions:

   Recommendations/Actions:

   Follow-up:

   Topic:

   Findings/Analysis/Discussion/Conclusions:

   Recommendations/Actions:

   Follow-up:

4. Adjournment: _____ (Time)

5. Signature of Recorder: _____ Date: _____

Appendix E

Quality Committee/Team Meeting Minutes Format

Committee/Team Minutes Attendance: _____

Committee/Team: _____

Date: _____ **Call to Order:** _____**(Time)** **Prior Minutes Approved:** ___ **Yes** ___ **No** ___ **NA**

Topic: Findings/Analysis/ Discussion/Conclusions	Recommendations/Actions	Follow-Up

Adjournment: _____ **(Time)**

Signature of Recorder: _____ **Date:** _____

Appendix F

Sample Work Plan of Activities

Activities	Key Action Steps	Anticipated Outcomes	Target End Date	Person(s) Responsible	Cost and/or Resources Needed to Accomplish Task
(1). Increase client/patient appointment show rate.	Meet with appropriate staff to assess possible reasons why clients/patients do not show up for follow-up appointments.	Increase client/ patient follow-up show rate by 50%	By the end of June.	(1). Appointment Manager, Receptionist and patient scheduler.	(1). Phone calls to clients/patients who did not show over past six months. (2). Document reasons for no-shows and analyze information. (3). Assess feasibility of overtime for scheduling staff to conduct the calls vs. outsourcing to another department. (4). Contact finance/ budget office and get cost estimates for OT for two non-exempt employees grade 9.

Appendix G

Sample Indicators by Types

Indicator Type	What it Assesses	Indicator	Performance Measure	Potential Data Source
Accessibility of care	The ease with which patients can obtain the care that they need when they need it	Number of days between date patient called for an appointment and date of appointment	All new patients will be provided an appointment within two weeks	Automated scheduling system Manual log kept by scheduling staff
Appropriateness of care	The degree to which the correct care is provided given the current state of the art	Patient with CD4 count under 500 on HAART	HAART therapy will initiated based on current PHHS guidelines	Electronic Health Record report Manual chart review
Continuity of care	The degree to which the care needed by patients is coordinated among practitioners and across organizations and time	Dental appointment provided to patient and documentation of kept appointment noted in chart	All patients will have an annual dental exam	Manual log
Effectiveness of care	The degree to which care (for example a procedure) is provided in the correct manner (that is, without error)	Number of client/ patients that receive care and treatment that is congruent with their diagnosis	Patient charts will be randomly selected for review.	Chart sampling
Efficacy of care	The degree to which a service has the potential to meet the need for which it is used	Number of patients that report improved condition of illness and satisfaction with health care visit	All patients will be given an opportunity to complete a wellness and satisfaction survey.	Review records or surveys for improvement in health status and satisfaction with health visit
Efficiency of care	The degree to which the care received has the desired effect with a minimum of effort, expense, or waste	Cost per service output or cost per service completion for each client/ patient in the clinic	At the end of the year, the clinic will look at what monies were "allocated" for services at the beginning of the year, and compare it with the end of the year "actual cost."	Beginning of the year program allocation plan and compare with end of year expended costs

Indicator Type	What it Assesses	Indicator	Performance Measure	Potential Data Source
Patient perspective issues	The degree to which patients (and their families) are involved in the decision-making processes in matters pertaining to their health and the degree to which they are satisfied with their care	Where appropriate, in assisting persons infected and affected with HIV/AIDS, family members will be given an opportunity at every 4th or 7th visit to fill out a questionnaire regarding the effectiveness of our engaging them in the planning and decision-making of their love ones health care	Twice a year, family members and client/patient will answer a short questionnaire on their perspective of their input in decision-making	Each quarter collect information from questionnaires
Safety and the care environment	The degree to which the environment is free from hazard of danger	Number of client/ patient and staff that report safety issues	Quarterly review of incident reports	A review of incident, accident, and grievance reports
Timeliness of care	The degree to which care is provided to patients when it is needed	Number of patient complaints that deal with timeliness issues	Number of complaints, no shows and other pertinent information	Management By Walking Around (MBWA) observations and satisfaction survey

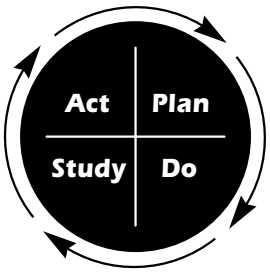
Appendix H

Model For Improvement

Cycle: _____ *Date:* _____

CYCLE FOR LEARNING AND IMPROVEMENT

Objective:



PLAN:

Objective of first test:

What did you predict?

What was the plan? (who, what, where, when, how)

What tasks were necessary in order to conduct your first test?

What measure(s) did you plan to use to assess the success of this test?

DO:

What actually happened?

STUDY:

What were the results of the test, and how did they compare with your prediction?

ACT:

Based on what you learned, what will you do next?

Appendix I

QM Characteristics Grid By Ryan White Title

Characteristic	Evidence of QM by Title			
	I	II	III	IV
Systematic process with identified: ❑ **Leadership** ❑ **Accountability** ❑ **Dedicated Resources**	✓ Quality Management Plan for EMA in place and shared with Planning Council ✓ QM Plan reviewed and updated on annual basis to assure ongoing relevancy ✓ Determine standard methodology for data collection and analysis: CareWare, HIVQUAL, PDSA, Chronic Care Model ✓ QM activities discussed at Planning Council Meetings and discussion documented in meeting minutes ✓ Language in sub-contracts supporting QM activities ✓ Site visits include review of vendor initiated QM activities and recommendations documented in site visit report ✓ CQI training available for vendor personnel and QM point person identified by vendor ✓ Use of standardized reporting format for all vendors ✓ Improvement strategies implemented and outcomes documented	✓ Quality Management Plan for State in place ✓ QM Plan reviewed and update on annual basis to assure ongoing relevancy ✓ Determine standard methodology for data collection and analysis: CAREWare ✓ Language in contracts and sub-contracts supporting QM activities ✓ Site visits include review of vendor initiated QM activities and recommendations documented in site visit report ✓ CQI training available for vendor personnel and QM point person identified by vendor ✓ Use of standardized reporting format for all vendors ✓ Improvement strategies implemented and outcomes documented	✓ Quality Management Plan in place and approved by program Leadership (Medical Director, Administrator) ✓ QM Plan reviewed and update on annual basis to assure ongoing relevancy ✓ Dedicate staffing to collect, analyze and report data ✓ Implement oversight committee to review results and appoint project teams when opportunities for improvement are identified (i.e. Quality Council, Leadership Team) ✓ Provide CQI training for CQI ✓ Develop QM work-plan and timeline to track Quality activities	✓ Quality Management Plan in place and approved by primary grantee and for each subcontractor ✓ QM Plan reviewed and updated on annual basis to assure ongoing relevancy ✓ Implement oversight group for Title IV Network to review quality activities and identify opportunities for improvement ✓ Provide CQI training to subcontractors where needed ✓ Develop and implement reporting format ✓ Develop QM work-plan and timeline to track Quality activities

Characteristic	Evidence of QM by Title			
	I	II	III	IV
❑ **Use of data and measurable outcomes to determine progress toward relevant, evidence-based benchmarks**	✓ Determine standard performance measures and indicators: • Clinical • Case Management • Supportive services ✓ Schedule for vendors to report data to EMA grantee determined ✓ Assistance provided to vendors with sub-optimal results ✓ Data aggregated, reported, and reviewed by Planning Council	✓ Determine standard performance measures and indicators: • Clinical • Case Management • Supportive services • ADAP ✓ Schedule for vendors to report data to grantee determined ✓ Assistance provided to vendors with sub-optimal results	✓ Determine standard performance measures and indicators: • Clinical • Case Management • Supportive services ✓ Collect data and report results to quality committee or leadership group	✓ Determine standard performance measures and indicators: • Clinical • Case Management • Supportive services ✓ Collect data and report results to Title IV Network Advisory Board
❑ **Focus on linkages, efficiencies, and provider and client expectation in address-ing outcome improvement**	✓ Utilize Client Satisfaction survey to determine opportunities for improvement ✓ Develop performance measures to assess continuity of care and care delivery processes ✓ Discuss results and improvement strategies at EMA Planning Council	✓ Utilize Client Satisfaction survey to determine opportunities for improvement ✓ Develop performance measures to assess continuity of care and care delivery processes	✓ Utilize Client Satisfaction survey to determine opportunities for improvement ✓ Develop performance measures to assess continuity of care and care delivery processes	✓ Utilize Client Satisfaction survey to determine opportunities for improvement ✓ Develop performance measures to assess continuity of care and care delivery processes

Characteristic	Evidence of QM by Title			
	I	II	III	IV
❑ **A continuous process that is adaptive to change and that fits within the framework of other programmatic quality assurance and quality improvement activities (i.e. JCAHO, Medicaid and other HRSA programs)**	✓ Assess other regulatory requirements at vendor level to assure non-duplication of quality management activities and work towards common performance measures	✓ Assess other regulatory requirements at vendor level to assure non-duplication of quality management activities and work towards common performance measures	✓ Assess other regulatory requirements to assure non-duplication of quality management activities and work towards common performance measures	✓ Assess other regulatory requirements to assure non-duplication of quality management activities and work towards common performance measures
❑ **Ensure the data collected is fed back into the quality improvement process to assure that goals are accomplished and that they are concurrent with improved outcomes**	✓ Report data to EMA Planning Council (blinded by vendor site) ✓ Document findings in EMA Planning Council minutes ✓ Provide feedback to vendors re changes in priorities	✓ Report quality management activities to planning body ✓ Provide feedback to vendors re changes in priorities	✓ Report quality management activities and data to all levels of organization: leadership, staff meetings, provider meetings ✓ Compare with established goals in QM plan	✓ Report quality management activities and data to all levels of organization: leadership, staff meetings, provider meetings, Network Advisory meetings ✓ Compare with established goals in QM plan

Appendix J

HAB Quality Initiatives

Initiative	CARE Act Program(s) Targeted	Focus of Initiative	Type of Assistance Provided	HAB Contact
Division of Training & Technical Assistance (DTTA)	All Titles	DTTA utilizes CARE Act grantees and other quality management consultants to provide assistance to specific agencies, regions or EMAs. A wide range of other TA activities supported by DTTA	• TA consultation • TA conference calls • Listserv for Title III grantees & SPNS evaluators • Ryan White CARE Act 2002 Grantee Conference • Support of Resource Centers through cooperative agreements	Requests are made through your project officer
HIVQual Continuous Quality Program	Titles III and IV	Developed by the New York State Department of Health AIDS Institute, HIVQual is an approach to improve quality of care for persons with HIV. The program focuses on systems improvement, information management and performance measurement	• Quality monitoring software • Agency-specific quality improvement consultation	Division of Community Based Programs
Institute for Health Care Improvement (IHI) Collaborative	Titles I, III, IV and AETCs	The IHI Collaborative focuses on implementing rapid learning strategies to accelerate the pace of improvement among CARE Act grantees. The Chronic Care Model is used, which focuses on assuring the delivery of evidence-based clinical care and strong support for self-management	• Learning Sessions • Quality management coaches • Listserv • E-mail discussion groups • TA conference calls • Resource materials	Division of Training and Technical Assistance

Initiative	CARE Act Program(s) Targeted	Focus of Initiative	Type of Assistance Provided	HAB Contact
HIV Quality of Care Studies	Titles III & IV and providers supported indirectly by Title I & II	The initiative is designed to develop the capacity of CARE Act grantees to conduct analyses to examine the quality of care currently provided and undertake quality improvement efforts	• Consultation in design of quality management analyses • Creation and use of computerized client-level data	Office of Science & Epidemiology, HAB
Center for HIV Quality Care	All Titles	Policy research on the care of PWAs in Medicaid programs focus on systems that provide access to standard of care	• State Profiles • 12 Steps to Managed Care (MC) • MC TA resources • Cost of care Evaluations	Office of Science & Epidemiology, HAB
Resource Materials	All Titles	A wide range of resource materials is available to help support quality management initiatives at all levels of care	• Publications, e.g. Evaluation Monograph Series • Quality Management Technical Assistance Guide • Management information systems, e.g. CAREWare	http://hab.hrsa.gov/tools.htm http://www.hab.hrsa.gov/special/qualitycare.htm
Primary Care Assessment Tool (PCAT)	All Titles	The PCAT is a site visit protocol that can be adapted for use in all CARE Act programs. Four areas of review are delineated. Review of quality improvement plans are incorporated in the clinical module	• Clinical module • Administrative module • Fiscal module • Support services	http://hab.hrsa.gov/tools.htm

Appendix K

Health Resources and Services Administration HIV/AIDS Bureau Team

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