

**Georgia Department of Behavioral Health &
Developmental Disabilities**

Quality Management Plan

**Update
July 2012**

Quality Management Plan

Section 1

Introduction

Statement of Purpose for the Department of Behavioral Health & Developmental Disabilities (DBHDD) Quality Management Plan

The purpose of this document is to:

- Provide an understanding of quality management activities of the DBHDD for all stakeholders.
- Describe the DBHDDs Quality Management structure and guiding principles.
- Establish roles, responsibilities, and expectations for all components of the Quality Management Program.
- Identify annual quality management goals.
- Guide the development of future quality management activities.

Introduction: DBHDD Mission, Vision, Values & Scope of Service

The Georgia Department of Behavioral Health & Developmental Disabilities Mission, Vision, Values and Scope of Services are:

Mission:

Provide and promote local accessibility and choice of services and programs for individuals, families and communities through partnerships, in order to create a sustainable, self-sufficient and resilient life in the community.

Vision:

Every person who participates in our services leads a satisfying, independent life with dignity and respect.

Values:

- **Dedication** – people with Behavioral Health, Developmental Disabilities, and Addictive Disease are the heart of everything we do, and this is embodied in the way we represent ourselves and the way we conduct our business.
- **Integrity** – we are honest, trustworthy and transparent in all we do.
- **Excellence** – we ensure an experienced workforce which is culturally competent and sensitive, uses evidence-based best practices and promotes innovation and increasing knowledge.
- **Knowledge** – we use the most current and accurate local and national data and methods available to guide our policies and actions to promote healthy living in Georgia.

- **Accountability** – we are stewards of the public trust and funds, holding ourselves and others to high standards measured by meaningful outcomes.
- **Inclusion/Collaboration** – we value contributions from our employees, stakeholders and the people we serve. We develop partnerships and positive relations thereby strengthening our capacity to achieve the Mission.
- **Respect** – we support the provision of services with dignity and courtesy.
- **Safety** – we strive to ensure an environment free from harm, injury or danger.
- **Innovation** – we support creative ideas or insights to make a difference, resulting in new or altered business processes within the organization, or changes in the services provided.
- **Transparency** – we strive to provide information to the public which can be used to inform and empower choice.

Scope of Services

The DBHDD service system is organized into three divisions by disability area:

- Behavioral Health
- Developmental Disabilities, and
- Addictive Diseases.

DBHDD is responsible for provision of services for citizens of Georgia with severe and persistent mental illness, intellectual disabilities, substance related disorders, or a combination of any of these.

DBHDD operates 6 state hospital campuses and provides and oversees community-based services across the state. One key goal of community-based services is to serve people as close to home as possible in the least restrictive setting. Community-based services provided by DBHDD include but are not limited to:

- Treatment through providers such as Community Service Boards;
- Mobile Crisis services for children, adolescents and adults;
- Services for people with intellectual disabilities;
- Assertive Community Treatment (ACT) teams that provide services to those with persistent mental illness in their living and working environments;
- Crisis Stabilization Programs;
- Supported Housing;
- Peer Support Services;
- Case Management

The service delivery system provides services in three ways:

1. Direct Services – which are provided by state hospitals and hospital operated community service boards.

2. Contract Services – which are provided by community hospitals, specialty hospitals, Community Service Boards (CSBs) and educational institutions.
3. Partnership Services – which are provided in collaboration with the Department of Community Health, Department of Juvenile Justice, Department of Human Services, etc.

The Quality Management Program Mission

The mission of the Quality Management program is to monitor and evaluate DBHDD programs/services in order to continuously improve the quality of care for all consumers served in the DBHDD system and those impacted by the service delivery system.

Quality Management Program Vision

The Quality Management Program will hold itself to the highest standards to support a service delivery system that provides the highest quality of care.

Definitions

- **Quality:** the degree to which a health or social service meets or exceeds established professional standards and user expectations.
- **Quality Assurance (QA):** refers to a broad spectrum of evaluation activities aimed at ensuring compliance with minimum quality standards.
- **Continuous Quality Improvement (CQI):** the ongoing monitoring, evaluation and improvement of processes. It is a person centered, data driven philosophy and set of processes that focus on improving outcomes and the processes that contribute to those outcomes.
- **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 Improvement Principles

Quality improvement is a systematic approach to assessing services and improving them on a priority basis. The DBHDD approach to quality improvement is based on the following principles:

- **Customer Focus.** High quality organizations focus on their internal and external customers and on meeting or exceeding needs and expectations.
- **Recovery-oriented.** Services are characterized by a commitment to promoting and preserving wellness and to expanding choice. This approach promotes maximum flexibility and choice to meet individually defined goals and to support person-centered services.
- **Employee Empowerment.** Effective programs involve people at all levels of the organization in improving quality.

- **Leadership Involvement.** Strong leadership, direction and support of quality improvement activities by the Commissioner and the DBHDD executive team are key to performance improvement. This involvement of organizational leadership assures that quality improvement initiatives are consistent with DBHDD's mission and/or strategic plan.
- **Data Informed Practice.** Successful QI processes create feedback loops, using data to inform practice and measure results. Fact-based decisions are more likely to result in the desired outcome(s).
- **Statistical Tools.** For continuous improvement of care, tools and methods are needed that foster knowledge and understanding and support continuous improvements in care. CQI organizations use a defined set of analytic tools such as run charts, cause and effect diagrams, flowcharts, Pareto charts, histograms, and control charts to turn data into information.
- **Prevention Over Correction.** Continuous Quality Improvement entities seek to design good processes to achieve excellent outcomes rather than fix processes after the fact.
- **Continuous Improvement.** Processes must be continually reviewed and improved. Even small incremental changes make an impact, allowing providers to find opportunities to make things better.

Leadership

The key to the success of the Continuous Quality Improvement process is leadership. The following describes how the DBHDD quality management organization is structured and how the DBHDD leadership provides support to quality improvement activities.

A DBHDD Executive Quality Management Council provides ongoing operational leadership for continuous quality improvement/management activities.

It does so within a structure (see Appendix A) that includes three supporting Program Quality Councils (PQCs) each of which has responsibilities within their respective program areas, and, as appropriate, for those areas of shared interest. They are:

- The Behavioral Health (BH) Quality Council
- The Developmental Disabilities (DD) Quality Council
- The Hospital System Quality Council

The **DBHDD Executive Quality Council** meets quarterly and consists of the following membership:

- DBHDD Commissioner
- Medical Director
- Assistant Commissioner for BH
- Chief of Staff/CEO
- Director of Hospital Operations
- Assistant Commissioner for DD
- Assistant Deputy Commissioner for BH and ADA Settlement Coordinator
- Addictive Disease Services Director
- DBHDD Director of Quality Management
- Ad hoc members as needed

The **Behavioral Health Program Quality Council** meets at least quarterly and consists of the following membership:

- Assistant Commissioner for Behavioral Health
- Deputy Assistant Commissioner for BH and ADA Settlement Coordinator
- Addictive Disease Services Executive Director
- Director Community Mental Health Services
- Director Adult Mental Health Services
- Suicide Prevention Manager

- Addictive Disease Services Assistant Executive Director
- Transitions Director
- A Regional Coordinator Representative
- Federally Funded Program Manger
- DBHDD Director Quality Management
- Ad hoc members as needed

The **Developmental Disabilities Quality Council** meets at least quarterly and consists of the following membership:

- Assistant Commissioner for Developmental Disabilities
- DD Director of Quality Assurance
- State Level DD Staff
- Self-Advocates
- Parents of Individual's receiving DD supports and services
- Representatives from DD Service Providers
- Representation from DD Support Coordination Agencies
- DD Director for the Georgia Advocacy Office
- State Director for Georgia ARC
- Ad hoc members as needed

The **Hospital System Quality Council** meets at least quarterly and consists of the following individuals:

- Director of Hospital Operations
- Regional Hospital Administrators
- Hospital Quality Management Directors
- Director Forensic Services
- Director of Hospital System Quality Management
- DBHDD Director of Quality Management
- Ad hoc members as needed

The purpose of the Executive Quality Council is to provide leadership for consistent, systemic review and improvement of the DBHDD services provided within the services system.

Executive Quality Council Responsibilities:

The DBHDD Executive Quality Council will:

- Support and guide implementation of the Quality Management Plan.
- Establish and support specific quality improvement initiatives.
- Receive and review reports of performance improvement activities.
- Address systemic issues that affect quality.

- Set priorities.
- Periodically assess information based on indicators, taking action as evidenced through quality improvement initiatives to solve problems and pursue opportunities to improve quality

The Leaders support QM activities through the planned coordination and communication of the results of measurement activities related to QM initiatives and overall efforts to continually improve the services provided. This sharing of QM data and information is an important leadership function. Leaders ensure that staff, consumers and family members have knowledge of and input into QM initiatives.

Program Quality Councils

- The PQCs serve at the will of the DBHDD Executive Quality Council and each council identifies its own chair (rotating or permanent), membership, and meeting schedule.
- Each of the PQCs incorporates enterprise wide DBHDD strategic goals and objectives as a basis for their goals and objectives including but not limited to:
 - developing service systems which meet the needs and goals of the individuals it serves (not only minimum standards but also higher quality of life expectations),
 - meeting regulatory and/or governmental requirements,
 - developing processes and techniques which convert data into information that can be used to improve services,
 - incorporating evidence-based and best practices standards into programs and services,
 - ensuring the health and safety of its consumers,
 - identifying emerging needs and barriers to care,
 - developing methods to improve data collection, reporting and accuracy.
- Each PQC ensures that it works collaboratively with the other PQCs on shared projects and issues including the addition of ad hoc members, as needed.
- Each PQC ensures that it tracks member participation and records, distributes and approves meeting minutes for each meeting held.
- Leadership from each of the PQC's will meet together on a periodic and/or as needed basis in order to facilitate communication and coordination across all PQCs.

See Appendix B for sources of information used by the PQCs and the PQC Quality Cycle.

Communication Plan

Because there are so many stakeholders to relay information to and receive feedback from,

it is important to have a QM communications plan. “Stakeholders” include but are not limited to people who influence decisions about resource allocation, participants of evaluation projects and individuals/providers who will be affected by the findings of evaluation projects. Participation varies across stakeholders; several examples are listed below.

Program Quality Councils

The Hospital System, Community BH and DD Quality Councils help shape the overall quality management program. At this level priorities are communicated to staff, and feedback may be provided while PI indicators are in the draft stage. Research protocols/tools may be reviewed, and feedback may be given while reports are in draft stage.

Communication: The PQC leadership (Hospital, Community Behavioral Health and Developmental Disabilities) communicates on as needed basis amongst each other as well as with the Executive Quality Council.

Contractor (Delmarva)

The Georgia Quality Management System for DD contracts with an external quality improvement organization (QIO). The QIO is experienced in data collection, analysis, and reporting. The QIO regularly provides data reports to the Division of DD’s Statewide and Regional Quality Improvement Councils.

Communication:

The Director of Quality Assurance for DD directs the work of the QIO and is in regular contact with the QIO’s leadership. Planning meetings are held throughout the year, as needed.

Community

The Quality Management Program engages the community through networking at external trainings, supporting advocacy initiatives, and posting evaluation reports on the DBHDD public website.

Communication: DD annual quality reports are currently available on the Department’s web site at:

http://www.files.georgia.gov/DBHDD/Files/GQMS_Yr3_Annual_Report_FINAL.pdf.

The year to date 2012 QM data results will be posted on the Departments website by July 1, 2012.

Additional communication methods may also be utilized such as:

- Story boards and/or posters displayed in common areas
- Recipients participating in the QM Committees reporting back to recipient groups
- Newsletters and/or handouts

The Executive Quality Council assists with identifying and defining goals and objectives to be accomplished each year. These goals include training of clinical, administrative and provider staff regarding both continuous quality improvement principles and quality improvement initiatives. Progress in meeting these goals and objectives is an important part of the annual evaluation of quality improvement activities.

The following are the short term goals for the DBHDD Quality Management Program:

- To identify clinical, service, patient safety and/or behavioral health issues important to DBHDD consumers.
- To identify opportunities for improvement within the clinical, behavioral health, service and/or patient safety areas.
- To create quality improvement activities to address these opportunities.
- To meet or exceed targets set for performance indicators.
- To develop and implement a model for organizing the community based programs QM structure (i.e. within an Administrative Services Organization).
- To develop a system wide QM training program.

The long term goals for the Quality Management Program include:

- To support and achieve DBHDD's mission, vision, common values, strategic goals and objectives.
- To improve the Care of the Individuals – improve consumer safety, reduce hospital readmissions, improve the reliability of care, and increase person-centered care through the evaluation of measures.
- To integrate Care for the Individuals – expand and improve effective integrated care.
- Excellence in Operations: assure integrity in programs and payment/reimbursement & improve consumer satisfaction.
- To have a work force that's knowledgeable and effective in using QM principles and practices.
- To ensure that quality data is integrated into decision-making regarding service development and quality management of providers.
- To enhance organization-wide communications providing feedback, follow-through, and follow-up on issues identified through quality improvement processes.

Additionally a structure will be set up which ensures that all delivery systems (not only direct but contract and partnership services) provide quality programming. Methods that will be used include utilizing contract management strategies, setting of provider performance indicators, performance dashboards and financial incentives and or penalties.

Stakeholder Involvement in Quality Management

It is important to have stakeholder participation in quality management. The Department seeks participation through a variety of mechanisms including but not limited to Regional Planning Boards, Regional Quality Improvement Councils, Advisory Committee Meetings, and the DBHDD Advocacy and External & Legislative Affairs Departments.

The Regional Planning Boards represent the counties and regions in which services are provided. Their role is to give a voice to consumers and their families and other citizens in the regions in assessing needs and recommending priorities for the Department. The planning board makes recommendations about services and works with the regional office to develop an annual plan. Regional planning board members stay informed about local needs and issues and in effect serve as advocates. One of the main objectives of the board is to identify community needs and gaps in the service delivery system and to make recommendations based upon their findings. The Regional Planning Boards are currently working with their communities at the local level and provide input into quality management via the Region's Network Analysis. Values and opinions are obtained through a variety of mechanisms which may include discussions, surveys and forums.

DD Regional Quality Improvement Councils – the purpose of this council is to provide ongoing guidance and feedback to DD Division staff regarding quality assurance and system improvement. There are six regional and one statewide committees.

Advisory Committees, such as the Behavioral Health Advisory Committee includes opportunities for citizen comment at their meetings.

The Advocacy Department works closely with all advocate groups for people diagnosed with mental illness, addictive diseases and developmental disabilities. The Advocacy Department works with all divisions of the agency including Quality Management to ensure that services provided are aligned with the needs of the populations served. Additionally the Advocacy Department provides periodic group forum(s) for obtaining feedback from interested advocacy groups/persons and shares progress on key indicators.

In addition to working with advocacy groups, the Advocacy Department maintains grass roots relationships with the individuals served. Therefore, in coordination with the Advocacy Department a series of interactions will be developed in order to obtain input from individuals served above and beyond input received from satisfaction surveys or interviews.

The External and Legislative Affairs Department ensures that consumers, representatives, guardians, associations, agencies, contractors, subcontractors, or those who seek to become involved with the delivery or receipt of services may file complaints and grievances.

All complaints and grievances are accepted and triaged and referred to the Incident Management & Investigations Department for review and action as needed.

Performance Measurement is the process of regularly assessing the results produced by the DBHDD's programs and services. It involves identifying and designing processes, systems and outcomes that are integral to the performance of the service delivery system; selecting indicators of the quality of these processes; systems and outcomes; and analyzing information related to these indicators on a regular basis. Continuous Quality Improvement involves taking action as needed based on the results of the data analysis and the opportunities for performance they identify.

The purposes of performance measurement and assessment are to:

- Assess the stability of processes or outcomes to determine whether there is an undesirable degree of variation or a failure to perform at an expected level.
- Identify problems and opportunities to improve the performance of processes.
- Assess the outcome of the care provided.
- Assess whether a new or improved process meets performance expectations.

Measurement and assessment involves:

- Selection of a process or outcome to be measured, on a priority basis.
- Identification and/or development of performance indicators for the selected process or outcome to be measured.
- Aggregating data so that it is summarized and quantified to measure a process or outcome.
- Assessing performance with regard to these indicators at planned and regular intervals.
- Taking action to address performance discrepancies when indicators indicate a process is not stable, is not performing at an expected level or represents an opportunity for quality improvement. Reporting within the organization on findings, conclusions and actions taken as a result of performance assessment.

Selection of a Performance Indicator. A performance indicator is a quantitative tool that provides information about the performance of the Department's process, services, functions or outcomes. Selection of a Performance Indicator is based on the following considerations:

- Relevance to mission - whether the indicator addresses the population served;
- Importance - whether it addresses an important process that is:
 - high volume
 - problem prone or
 - high risk

Characteristics of a Performance Indicator. Factors to consider in determining which indicator to use include:

- Scientific Foundation: the relationship between the indicator and the process, system or outcome being measured
- Validity: whether the indicator assesses what it purports to assess
- Resource Availability: the relationship of the results of the indicator to the cost involved and the staffing resources that are available
- Consumer Preferences: the extent to which the indicator takes into account individual or group (e.g., racial, ethnic, or cultural) preferences
- Meaningfulness: whether the results of the indicator can be easily understood, the indicator measures a variable over which the program has some control, and the variable is likely to be changed by reasonable quality improvement efforts.

The Performance Indicator(s) Selected for the Quality Improvement Plan. For the purposes of this plan, an indicator(s) comprises five key elements: name, definition, data to be collected, the frequency of analysis or assessment, and preliminary ideas for improvement. The following Table will be used for each performance indicator chosen by the DBHDD, along with the corresponding descriptors.

<i>Measure of Service Quality</i> (Complete this table for each indicator which is selected.)	
Name	<i>Usually a brief two or three word title.</i>
Definition	<i>With detail, explain the name by including the data elements and the type of numerical value to be used to express the indicator (percentage, rate, number of occurrences etc.).</i>
Data Collection	<i>Describe how the data will be collected as well as the method and frequency of collection, and who will collect the data.</i>
Assessment Frequency	<i>State how often the Quality Management Council will assess information associated with the indicator.</i>

Assessment. Assessment is accomplished by comparing actual performance on an indicator with:

- Self over time.
- Pre-established standards, goals or expected levels of performance.

- Information concerning evidence based practices.
- Other States, programs or similar service providers.

Assessment strategies are chosen (see Appendix C) after performance indicators have been chosen.

Key Quality Performance Indicators and Data Trending:

The following section describes the performance indicators that have been identified in several key areas that the DBHDD has decided to track and trend. It is anticipated that aggregated data will provide the Department with a more global perspective about program performance.

Consumer Satisfaction – BH Community Services

Consumer input is an integral part of the Quality Management Program and gathering consumer input is a priority. The Department has implemented an audit program which follows individual consumers served through a variety of community programs and/or services. Beginning with the April 2012 audit cycle, the two customer satisfaction performance indicators are:

- The percent of individuals satisfied with the services they are receiving and
- Percent of individuals who feel their quality of life has improved as a result of receiving services.

For Assertive Community Services (ACT) the key performance indicators are:

- The average number of days from referral to initial assessment and
- The number of admissions to psychiatric hospitals within the past month.

For Intensive Case Management (ICM) Community Support Teams (CST) and Case Management (CM) the key performance indicators are:

- Percent of ICM/CST/CM consumers with a Psychiatric inpatient admission within the past month and
- Percent of individuals housed (non-homeless as defined in the programmatic report) within the past month.

For Supported Employment (SE) the key performance indicators are:

- Percent of providers that meet a caseload ratio average of 1:20 (staff to consumer) and
- Percent of unduplicated ADA individuals who had first contact with a competitive employer within 30 days of enrollment.

For the Georgia Housing Voucher Program (GHVP) the key performance indicators are:

- Percent of individuals in stable housing (greater than 6 months) and
- Percent of individuals who have left stable housing under unfavorable circumstances and have been re-engaged where possible, and reassigned

vouchers as indicated.

For Addictive Disease Services the key performance indicators are:

- Percent of Adult Addictive Disease consumers who abstain from use or experience a reduction in use while in treatment, and
- Percent of Youth Addictive Disease consumers who abstain from use or experience a reduction in use while in treatment.

The results of the above performance indicators will be aggregated and summarized on a periodic basis.

The Georgia Mental Health Consumer Network (GMHCN) has performed community based customer satisfaction surveys for the Department for several years under the Mental Health Block Grant. They report feedback from thousands of consumers from a variety of age groups, annually. These surveys encompass questions from the following areas: access, quality and appropriateness, outcomes, participation in treatment planning, general satisfaction, social connectedness, and functioning. This information is shared with the program and quality councils and incorporated into programming, as appropriate.

Each of the six hospitals in the DBHDD Hospital System has its own Quality Management Plan and Quality Council, each of which is overseen by and reports to the Hospital System Quality Council. In turn, the Hospital System Quality Council reports key issues and performance indicators to the Department's Executive Quality Council. Data used by the Hospital System come from a variety of systems/databases, some of which are currently being replaced by systems that are better designed to meet the needs of the Hospitals. An example is the Risk Incident Management System (RIMS), which is intended to help meet the requirements of recently developed state-wide risk and incident management policies. Core measures that recently have been standardized and are being tracked include: the presence, timeliness and quality of Individual Recovery Plans, justifications for anti-psychotic poly-pharmacy use at discharge, and receipt and effectiveness of post discharge continuing care plans. Additionally, while the Hospitals historically have used a variety of surveys and measures of consumer satisfaction; effective in February 2012 all hospitals began participating in a nationally recognized system of survey methodology for consumers of mental health services.

The Division of Developmental Disabilities utilizes an external Quality Improvement Organization as part of its Quality Management System. For the most recent annual report for the year ending June 2011 please click on the following link:

http://www.files.georgia.gov/DBHDD/Files/GQMS_Yr3_Annual_Report_FINAL.pdf

Division of DD key Performance Indicators include but are not limited to:

- The percentage of Individual Support Plans in which services and supports align with the individuals needs

- The percentage of individuals who report that their support needs are met and
- The percentage of individuals who report they were given a choice of providers and services

Examples of Other Data Elements and Sources of Information (see appendix B for additional information) are noted below:

Critical Incident reporting is a system wide service provider requirement. Data is tracked and trended on a quarterly basis.

Complaints and grievances are received in the Office of Legislative Affairs and Constituent Services. Data is tracked and trended on a quarterly basis.

Data Collection

Data is available through, but not limited to, the following resources:

- Quality Look Behind Audits
- Incident/Injury Data
- Hospitalization Data

Once the performance of a selected process has been measured, assessed and analyzed, the information gathered by the above performance indicator(s) is used to identify a continuous quality improvement initiative to be undertaken. The decision to undertake the initiative is based upon Department priorities. The purpose of an initiative is to improve the performance of existing services or to design new ones. The model utilized at DBHDD is called Plan-Do-Study-Act (PDSA) which is a cyclical four stage improvement process.

- **P**lan-The first step involves identifying preliminary opportunities for improvement. Data is gathered on the current situation and past history. At this point the focus is to analyze data to identify concerns and to determine anticipated outcomes. Ideas for improving processes/solutions are identified. This step requires the most time and effort. (For tools used during the planning stage, see sections “a” thru “k” in APPENDIX: C.)
- **D**o -This step is an experimental stage which involves using the proposed solution, and if it proves successful, as determined through measuring and assessing, implementing the solution usually on a trial or pilot basis becomes a new part of the process.
- **S**tudy - This step describes the measured results and how they compared to the predictions.
- **A**ct – This last step describes next cycle plan modification from what was learned. This stage involves making the changes a routine part of the targeted activity. It also means “Acting” to involve others (other staff, program components or consumers) - those who will be affected by the changes, those whose cooperation is needed to implement the changes on a larger scale, and those who may benefit from what has been learned. Finally, it means documenting and reporting findings and follow-up.

See Appendix D – PDSA Testing for Change Worksheet.

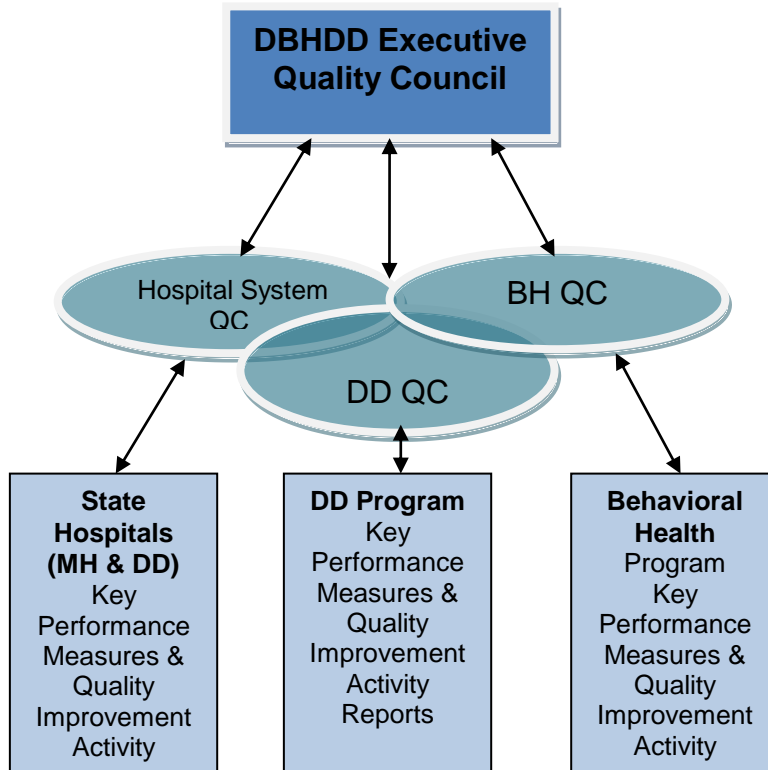
The Department conducts an evaluation at the end of each calendar year.

Starting in February 2012 and biannually thereafter an evaluation will be completed which summarizes the goals and objectives of the Department's Quality Management Plan, the quality improvement activities conducted during the past year, including the targeted processes, systems and outcomes, the performance indicators utilized, the findings of the measurement, data aggregation, assessment and analysis processes, and the quality improvement initiatives taken in response to the findings.

Potential Future Quality Management Projects

1. Develop health status indicators for individuals receiving community based services.
2. Initiate a pilot project looking at an individual treatment progress for individuals receiving community based services.
3. Initiate discussions regarding the use of performance indicators for development of a pay for performance system for community based programs.

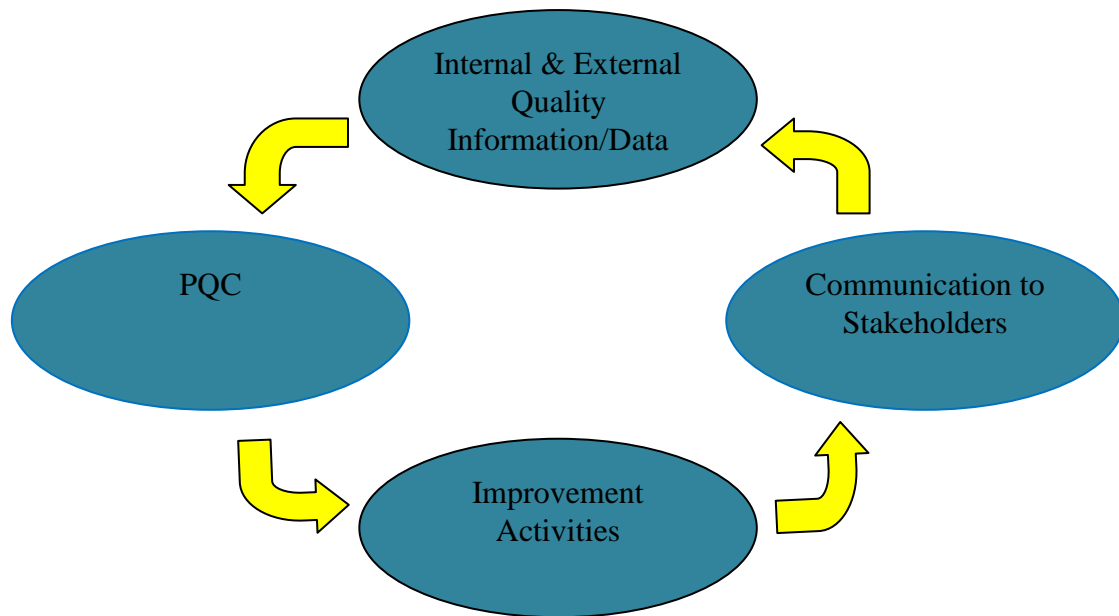
DBHDD Quality Management Structure



Examples of Sources of Information used by the PQC's

Internal	External
Audits (QM, Fidelity, ERO etc)	External Surveys (CMS, HFRD, JC, etc)
Performance Indicators	Customer Satisfaction Surveys
CIR Trending	Complaints & Grievances Trending
Incident Reports	Advocacy Input
Monthly Program Reports	National Core Indicators
Financial and other Business Related Data	State and Federal Governmental Agency Information/Data

PQC Quality Cycle

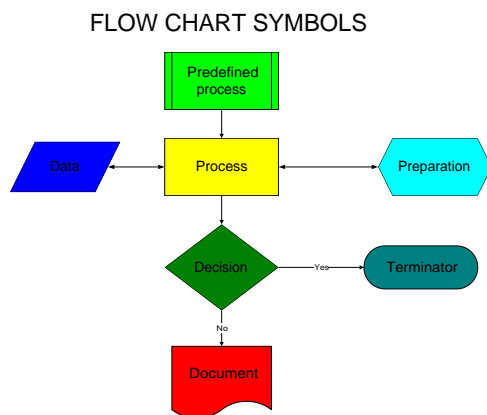


Quality Improvement Tools

Following are some of the tools available to assist in the Quality Management process.

a. Flow Charting: Use of a diagram in which graphic symbols depict the nature and flow of the steps in a process. This tool is particularly useful in the early stages of a project to help the team understand how the process currently works. The “as-is” flow chart may be compared to how the process is intended to work. At the end of the project, the team may want to re-plot the modified process to show how the redefined process should occur. The benefits of a flow chart are that it:

- 1) Is a pictorial representation that promotes understanding of the process
- 2) Is a potential training tool for employees
- 3) Clearly shows where problem areas and processes for improvement are.



Flow charting allows the team to identify the actual flow-of-event sequence in a process.

b. Brainstorming: A tool used by teams to bring out the ideas of each individual and present them in an orderly fashion to the rest of the team. Essential to brainstorming is to provide an environment free of criticism. Team members generate issues and agree to “defer judgment” on the relative value of each idea. Brainstorming is used when one wants to generate a large number of ideas about issues to tackle, possible causes, approaches to use, or actions to take. The advantages of brainstorming are that it:

- 1) Encourages creativity
- 2) Rapidly produces a large number of ideas
- 3) Equalizes involvement by all team members
- 4) Fosters a sense of ownership in the final decision as all members actively participate
- 5) Provides input to other tools: “brain stormed” ideas can be put into an affinity

diagram or they can be reduced by multi-voting.

c. Decision-making Tools: While not all decisions are made by teams, two tools can be helpful when teams need to make decisions.

- 1) Multi-voting is a group decision-making technique used to reduce a long list of items or ideas to a manageable number by means of a structured series of votes. Priorities are thereby assigned quickly with a high degree of team involvement. The result is a short list identifying what is important to the team.
- 2) Nominal Group Technique (NGT) – is a process used to identify and rank issues when everyone’s opinions are taken into account.

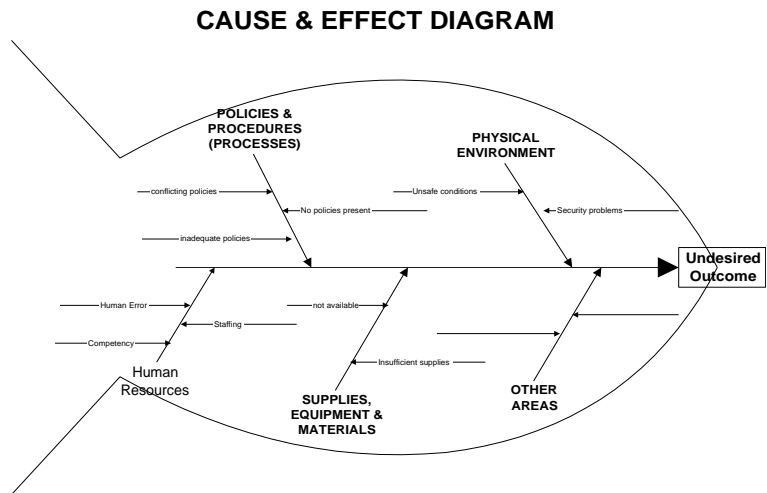
d. Affinity Diagram: The Affinity Diagram is often used to group ideas generated by brainstorming. It is a tool that gathers large amounts of language data (ideas, issues, opinions) and organizes them into groupings based on their natural relationship. The affinity process is a good way to get people who work on a creative level to address difficult, confusing, unknown or disorganized issues. The affinity process is formalized in a graphic representation called an affinity diagram. This process is useful to:

- 1) Sift through large volumes of data.
- 2) Encourage new patterns of thinking.

As a rule of thumb, if less than 15 items of information have been identified; the affinity process is not needed.

e. Cause and Effect Diagram (also called a fishbone or Ishakawa diagram): This is a tool that helps identify, sort, and display. It is a graphic representation of the relationship between a given outcome and all the factors that influence the outcome. This tool helps to identify the basic root causes of a problem. The structure of the diagram helps team members think in a very systematic way. The benefits of a cause-and-effect diagram are:

- 1) Helps the team to determine the root causes of a problem or quality characteristic using a structured approach
- 2) Encourages group participation and utilizes group knowledge of the process
- 3) Uses an orderly, easy-to-read format to diagram cause-and-effect relationships
- 4) Indicates possible causes of variation in a process
- 5) Increases knowledge of the process
- 6) Identifies areas where data should be collected for additional study.



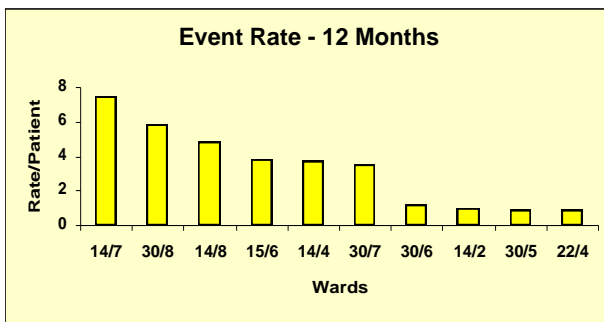
Cause and effect diagrams allow the team to identify and graphically display all possible causes related to a process, procedure or system failure.

f. Histogram: This is a vertical bar chart which depicts the distribution of a data set at a single point in time. A histogram facilitates the display of a large set of measurements presented in a table, showing where the majority of values fall in a measurement scale and the amount of variation. The histogram is used in the following situations:

- 1) To graphically represent a large data set by adding specification limits one can compare;
- 2) To process results and readily determine if a current process was able to produce positive results that assist with decision-making.

g. Pareto Chart: Named after the Pareto Principle which indicates that 80% of the trouble comes from 20% of the problems. It is a series of bars on a graph, arranged in descending order of frequency. The height of each bar reflects the frequency of an item. Pareto charts are useful throughout the performance improvement process - helping to identify which problems need further study, which causes to address first, and which are the “biggest problems.” Benefits and advantages include:

- 1) Focus on most important factors and help to build consensus
- 2) Allows for allocation of limited resources.

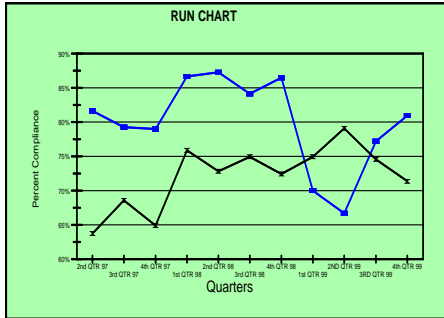


Pareto charts allow the team to graphically focus on the areas and issues where the greatest opportunities to improve performance exist.

h. Run Chart: This is the most basic tool to show how a process performs over time. Data points are plotted in temporal order on a line graph. Run charts are most effectively used to assess and achieve process stability by graphically depicting signals of variation. A run chart can help to determine whether or not a process is stable, consistent and predictable. Simple statistics such as median and range may also be displayed. Trend lines can also be included to identify possible changes in performance.

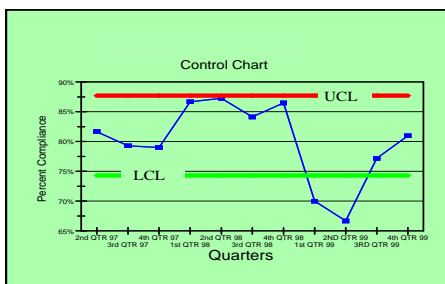
The run chart is most helpful in:

- 1) Understanding variation in process performance
- 2) Monitoring process performance over time to detect signals of change
- 3) Depicting how a process performed over time, including variation.



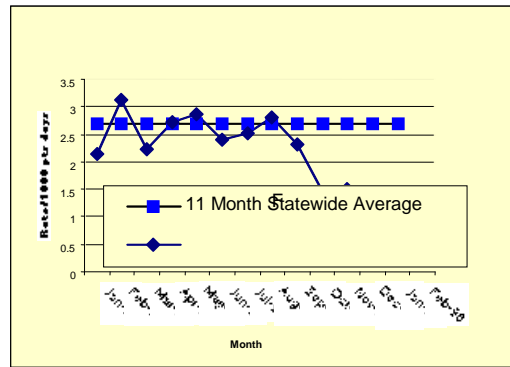
i. **Control Chart:** A control chart is a statistical tool used to distinguish between variation in a process resulting from common causes and variation resulting from special causes. It is noted that there is variation in every process, some the result of causes not normally present in the process (special cause variation). Common cause variation is variation that results simply from the numerous, ever-present differences in the process. Control charts can help to maintain stability in a process by depicting when a process may be affected by special causes. The consistency of a process is usually characterized by showing if data fall within control limits based on plus or minus specific standard deviations from the center line. Control charts are used to:

- 1) Monitor process variation over time
- 2) Help to differentiate between special and common cause variation
- 3) Assess the effectiveness of change on a process
- 4) Illustrate how a process performed during a specific period.



Using upper control limits (UCLs) and lower control limits (LCLs) that are statistically computed, the team can identify statistically significant changes in performance. This information can be used to identify opportunities to improve performance or measure the effectiveness of a change in a process, procedure, or system.

- j. **Bench Marking:** A benchmark is a point of reference by which something can be measured, compared, or judged. It can be an industry standard against which a program indicator is monitored and found to be above, below or comparable to the benchmark.



- k. **Root Cause Analysis:** A root cause analysis is a systematic process for identifying the most basic factors/causes that underlie variation in performance.

PDSA Worksheet for Testing Change

Appendix D

Aim: (overall goal you wish to achieve)

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do

Describe what actually happened when you ran the test

Study

Describe the measured results and how they compared to the predictions

Act

Describe what modifications to the plan will be made for the next cycle from what you learned