MASSACHUSETTS GENERAL HOSPITAL

PERFORMANCE IMPROVEMENT AT MGH

Revised August 2007
1 Philosophy and Approach to Performance Improvement

Improving performance is integral to the mission of the institution and day-to-day work of all hospital staff and employees. MGH has a culture of local accountability for performance and performance improvement in the context of organization-wide values and priorities.

1.1 Aims of Performance Improvement

MGH has held a position of leadership in quality of care and innovation since its foundation in 1811. Early quality assurance models were typified by service-based mortality and morbidity conferences, which continue today. As the health care system has evolved into its modern phase, MGH has increasingly broadened its approach to quality improvement, recognizing that there are a number of different domains of quality (see 1.3 below), while maintaining the highest standards for clinical safety and effectiveness.

1.2 Performance Improvement Methodology

Continuous improvement is the fundamental principle of quality assurance and performance improvement at MGH. The MGH currently uses the basic performance improvement philosophy of “Plan, Do, Check, Act,” or PDCA:

- **Plan** – identify an opportunity for improvement, measure current performance, set goals and develop an improvement plan
- **Do** – Implement the improvement plan by identifying resources and piloting the solution
- **Check** – Standardize the process and monitor to sustain improvement
- **Act** – Measure performance again to see if the plan worked.

In addition to the basic PDCA approach, the MGH has also deployed a variety of performance improvement tools, including the following:

- **Six sigma** – a sophisticated analytic tool kit aimed at reducing errors
- **Lean** – process improvement focused on improving flow and reducing waste
- **High-reliability improvement methodology** - a design that highlights the need for standardization, mitigation of failures, redundancy, and system redesign
- **Failure Mode and Effects Analysis (FMEA)** – a team based, systematic and proactive approach for identifying and correct process and system related problems.

1.3 Priority Setting

The Boards of Trustees Quality Committee (see 2.1.1 below) oversees and advises on setting of major institution-wide quality improvement priorities and policies.

Considerations about priorities include the following:

- Does the priority address an important clinical or environmental issue?
• Is there a clear need for improvement?
• Is the priority of high institutional importance/related to our mission (whether or not deficiencies are demonstrated)?
• Does this proposal address an issue that is important to monitor while implementing efficiency and operational improvements? and
• Are the institutional priorities balanced (see following)?

The Institute of Medicine identified six aims for health care system improvement in its report *Crossing the Quality Chasm: A New Health System for the 21st Century*. The IOM scheme has been widely endorsed and supported, and there is broad consensus that health care should be –

- **Safe** – avoiding injuries to patients from the care that is intended to help them;
- **Effective** – providing services based on scientific knowledge to all could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively);
- **Patient-centered** – providing care that is respectful and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions;
- **Timely** – reducing waits and sometimes harmful delays for both those who receive and those who give;
- **Efficient** – avoiding waste, including waste of equipment, supplies, ideas, and energy; and
- **Equitable** – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

The last two of these goals are frequently taken to be characteristics spanning the others, rather than separate dimensions. A subsequent IOM report, *Envisioning the National Health Care Quality Report*, speaks of the first four performance improvement aims as intersecting in four phases of care: staying healthy, getting better, living with illness or disability, and coping with the end of life.

Opportunities for performance improvement are identified through a number of sources, including aggregate data, reports on events, and studies of dedicated task forces. The process of priority setting is interactive and iterative, with strong components both “bottom up” and “top down.”

### 1.4 Structural & Process Relationships

#### 1.4.1 Oversight

Ultimate responsibility for oversight and priority-setting resides in senior committees of the MGH/MGPO. These include the Board of Trustees Quality Committee, the General Executive Committee (GEC), the Center for Quality and Safety Steering Committee (see description of the Center below), Quality Oversight Committee, the Medical Policy Committee, the Patient Care Services Executive Committee, and the Clinical Performance Management (CPM) Executive Committee.
1.4.2 Coordination and Implementation

Beginning in late 2006, the MGH began a significant reorganization of its quality and safety infrastructure. The first senior vice president for quality and safety was appointed in December 2006. Since then, several previously existing departments – the Office of Quality and Safety and parts of the Clinical Care Management Unit (CCMU) – have been merged to create the MGH/MGPO Center for Quality and Safety (CQS). As of this writing, some organizational details were still being finalized. However, this document includes some of the broad programmatic aims of CQS and the broader MGH quality and safety agenda.

In addition to CQS, several groups share responsibility for coordinating the various arms of the MGH/MGPO in implementing the policies set by the oversight groups. The Hospital Safety Committee chaired by the Director of Corporate Compliance, oversees physical plant and environment of care issues. Implementation of performance improvement goals is a shared responsibility of all hospital departments. Special roles belong to the Patient Care Assessment Committee (PCAC) and clinical service quality committees; the Office of Patient Advocacy; the Clinical Performance Management (CPM) Teams; and the Clinical Care Management Unit. As part of the quality and safety reorganization, the CPM infrastructure will be sunset by early fall 2007. Teams that have achieved their goals will be ended, and new performance improvement teams focused on high-priority quality and safety initiatives will be convened beginning in late 2007 and early 2008.

2 Structural Components

2.1 Oversight

2.1.1 Boards of Trustees Quality Committee

The Quality of Care Committee serves as a joint committee for The General Hospital Corporation and the Massachusetts General Physicians Organization, Inc. The Committee’s goal is to provide comprehensive information exchange between the hospital and the governing boards of the General Hospital and MGPO focusing in three specific areas: quality of care review, clinical direction, and professional staff credentialing and privileging. As part of the quality and safety reorganization, the specific charge of the committee is being reviewed. However, its activities will continue to include the following:

- Advice to the professional staff on quality matters as they arise and will oversee thorough and detailed reports to the General Hospital and MGPO Board of Trustees on a regular basis.
- Advice on policy, conflict resolution and program effectiveness to promote safe and effective patient care;
- Oversight of the quality review efforts of the hospital staff. Within the scope of activity will be included incident reporting, quality improvement processes and compliance with health care regulations.
- Oversight of issues of patient rights, clinical ethics and practice conflicts;
- Oversight of policies and systems surrounding appointment and reappointment to the professional staff of the General Hospital;
• Within its scope of activity, oversight of activities of medical staff committees relating to membership on the professional staff; and
• Coordination of its work with other hospital committees.

The Committee meets at least quarterly. A majority of the MGH membership also serve on one or more of the MGH Trustees’ standing committees, thus ensuring that the Quality of Care Committee’s work is well coordinated with the work of the MGH standing committees.

2.1.2 CPM Executive Committee

The CPM Executive Committee, chaired by CEO of the MGPO and co-chaired by the President of the MGH, is charged with setting goals, monitoring progress, and reporting to the GEC on the CPM effort. Composition of the committee currently includes the CNO, CMO, the MGPO Medical Director, and the Senior Vice President and Vice President for Quality and Safety.

As part of the quality and safety reorganization, the CPM program is evolving. However, this executive committee will remain intact, and serve as a steering and planning committee for the new Center for Quality and Safety.

2.1.3 Quality Oversight Committee

The Quality Oversight Committee is chaired by the Senior Vice President for Quality and Safety, and includes both the CMO, CNO, and Vice President for Quality and Safety. As part of the quality and safety reorganization, both the membership and scope of the committee are being revised. While details are still being finalized, the committee will serve as a forum to ensure clear communications and alignment across the institutional quality and safety agenda. Its representation will include quality and safety stakeholders from around the institution.

2.1.4 Medical Policy Committee

The Medical Policy Committee of the MGH/MGPO serves as a standing subcommittee of the GEC and the MGPO Executive Committee and acts as the medical policy development body for the GH and MGPO on issues relating to clinical performance, operational performance and quality issues. The committee is multidisciplinary and includes senior GHC and MGPO management, representatives of the Chiefs’ Council, and Patient Care Services. Its functions are to –

• Evaluate and modify, as needed, current institutional clinical policies effecting the quality and efficiency of patient care;
• In conjunction with the hospital Administrative Policy Committee and the Chiefs’ Council, and its individual members, provide clinical input pertinent to hospital and individual service operations and efficiency; and
• Oversee the integration of utilization and quality management activities of the GH and MGPO.
2.1.5 Patient Care Services Executive Committee

The Patient Care Services Executive Committee is the working leadership committee with oversight for policy development, standards of practice, and resource allocation. The Committee –

- Considers, and on behalf of Patient Care Services, adopts policies and procedures relating to patient care; education for nursing and allied health professions; and at the request of the Senior Vice President for Patient Care Services and Chief Nurse Executive, other matters affecting the optimal operation of Patient Care Services;
- Acts in an advisory capacity to the Senior Vice President for Patient Care Services and Chief Nurse Executive on all matters affecting the optimal operation of Patient Care Services; and
- Serves as a liaison between the Nursing and Allied Health Professionals staff and the administration of the hospital.

2.2 Coordination and Implementation

2.2.1 MGH/MGPO Center for Quality and Safety (CQS)

Created in 2007, CQS supports the MGH/MGPO aspiration of creating the highest quality, safest environment for patients and staff, and leading the nation in quality and safety. The finer organizational details for CQS are still being finalized, but the Center will include the following functional areas

- **Safety** – This team, primarily staffed by nurses, is responsible for triaging and, if appropriate, investigating events entered into the MGH’s electronic incident reporting system. It works extensively with the PCAC, and supports the review and reporting of cases.
- **Measurement and Analysis** – This group is responsible for developing and reporting on quality measures internally and externally. It helps ensure that the hospital meets its reporting requirements for the Joint Commission, CMS, state of Massachusetts, and other external bodies requiring routine data reporting. It is staffed by data analysts and nurses.
- **Care Improvement** – This group, staffed primarily by MPH or MBA prepared project managers, provides staff support to key quality and safety initiatives.
- **Applied Informatics** – This team, in collaboration with the Lab of Computer Sciences, develops and manages the information systems needed to support quality measurement and reporting activities, including the incident reporting system and dashboard.

2.2.2 Hospital Safety Committee

The Hospital Safety Committee coordinates programs, subcommittees and activities to assure safe and healthy environment for patients, staff and visitors. The Safety Committee –

- Receives reports of environmental; incident investigation and monitors corrective actions;
• Monitors measures of environmental safety status including fire drills, employee injury rate, medical equipment failures, utilities performance and public safety incidents;
• Directs environmental surveillance program for hospital units, support areas, outpatient practices, laboratories, research facilities, and health centers;
• Develops safety policies, guidance and training materials; and
• Receives reports of regulatory requirements and oversight concerning the institutional environment.

2.2.3 Patient Care Assessment Committee (PCAC) & Service Quality Committees

The Patient Care Assessment Committee consists of the departmental QA Chairs and representatives of selected committees as defined by regulation.

• Monitors and evaluates quality of care within clinical services according to occurrence screening criteria;
• Provides direction of the professional credentialing unit;
• Educates personnel regarding quality improvement;
• Establishes incident reporting criteria and maintains reporting system; and
• Reports conduct of a licensed health care provider that indicates impairment or incompetency according to the bylaws and regulatory standards.

The PCAC reviews sentinel event alerts from the Joint Commission, the Department of Health, the Board of Registration in Medicine, and other parties, and assigns responsibility for appropriate follow-up within the institution.

Each clinical department is charged with quality assurance for its own internal affairs and with coordination of these internal activities with hospital-wide structures and processes. For this purpose, the departments appoint interdisciplinary quality committees. The committee chair is generally the PCAC representative as well. For FY 2008, the job description for the PCAC QA chairs has been expanded to include departmental measurement and improvement activities.

2.2.4 Office of Patient Advocacy (OPA)

The Office of Patient Advocacy serves as the liaison and change agent between patients and the organization in their expressions of commendation or concern so that moral, ethical, operational, and care standards are upheld on behalf of the MGH patients. Its functions include –

• Providing objective representation in a neutral, non-threatening manner on issues that are brought to the office by patients, families, visitors, and/or staff;
• Providing guidance to patients, families, visitors, and/or staff on patient’s rights and responsibilities;
• Building versatile mechanisms for effecting change when it is needed based on input from patients; and
• Establishing formal support strategies that empower staff to manage commendations and/or concerns on a local level.
2.2.5 Clinical Performance Management (CPM) Teams

While the CPM program is being changed as part of the reorganization, some of its most salient features will continue in some fashion going forward. As currently constituted, the Clinical Performance Management (CPM) Program includes ten interdisciplinary teams chaired by physicians and nurses, organized around clinical and operational areas of the institution. By design, the teams represent those clinical and operational areas where the CPM Executive Committee and other senior leadership have set priorities for change. CPM has four principal goals:

- Improve the quality of patient care: Teams work to improve quality according to institutional priorities, for example, improving the quality of discharge experience, as well as quality improvement priorities identified by the individual teams.
- Increase the efficiency of the care delivery processes: Teams identify initiatives that improve efficiency or reduce the inappropriate use of clinical resources and reduce costs.
- Optimize inpatient and outpatient capacity: Teams reinforce front-line utilization management initiatives to ensure that hospital beds are being used most efficiently.
- Improve the quality of professionals’ practice lives: Teams consider the impact of any initiatives on professionals’ practice lives.

2.2.6 Clinical Care Management Unit

The Clinical Care Management Unit performs several functions in implementation of performance goals set by leadership. The CCMU includes a number of coordinated subgroups related to quality and safety.

The Registrar/Credentialing Unit is the central facility for the collection, verification and dissemination of physician data and documentation necessary for (1) hospital appointments and privileging, (2) enrollment in managed care and other insurance plans, and (3) physician billing. This Unit responds to the needs and requirements of institutional by-laws and outside agencies such as the Joint Commission, NCQA, contracting HMOs, managed care organizations and other insurance companies. The Unit serves as the central repository of physician credentialing data for the institution. Among the Registrar’s functions is maintenance of data and reporting systems, varying by specialty, showing performance of individual physicians in comparison to aggregate data.

The CCMU also includes Case Management, which monitors the level of hospital services provided to patients and facilitates smooth transitions between levels of care; and Managed Care Operations and Analysis, which performs a variety of special administrative and coordination functions.

2.2.7 Office of Quality and Safety – Patient Care Services

The Office of Quality and Safety is interdisciplinary in its efforts to lead Patient Care Services in its mission of offering the safest and the best care to our patients, families and staff in every moment. A robust and collaborative relationship exists with all other hospital groups charged with ensuring safety and quality for the hospital community. All initiatives of the Office are based upon the Six Aims for Improvement identified by the Institute of Medicine (Safety, Effectiveness, Patient Centeredness, Timeliness, Efficiency and Equity). Charges of this Office include:
• Develop a comprehensive quality and safety program that is vibrant and central to the experience of each patient, family, and staff member.
• Effect cultural change by using the Six Aims for Improvement as the framework for all program design and evaluation.
• Support all of Patient Care Services in complying with regulatory and accreditation standards.
• Establish and leverage internal and external relationships that enhance our efforts to avoid harm (safety) and improve outcomes (quality) for patients, families and staff.

3 Processes and Procedures

3.1 Adverse Events and Medical Errors

Procedures for reporting of incidents are described in the Clinical Policies and Procedures manuals of the institution. Hospital personnel must use our electronic incident reporting system to report the following general categories of events: any event in which there is injury or potential injury to a patient, visitor or employee; any circumstance which is not consistent with the routine care of a particular patient; any condition of the environment or equipment which might be hazardous to safety; adverse drug reactions; or any event which is not consistent with the routine operation of the institution.

A small number of events will involve death, serious physical or psychological harm, or the risk of harm. These are termed critical events and receive immediate investigation and response. Standard incident reporting materials provide further details about these events and required reporting; often, common sense will dictate an immediate response to an event or risk in advance of a formal report.

Some events will merit special attention because the severity, outcome, or simply the nature of the event represents a significant risk for future patients. These events will require a root cause analysis. This is a process for identifying the basic or causal factors that underlie variation in performance. Root cause focuses primarily on systems and processes rather than individual performance. The product of a root cause analysis is an action plan that identifies the strategies that the organization intends to implement to reduce the risk of similar events occurring in the future.

The MGH/MGPO Policy on Adverse Events and Medical Errors provides detailed definitions, procedures for evaluation and response, and policies on disclosure and confidentiality.

3.2 Aggregate data

There are many routine sources of aggregate numeric data about quality of care at MGH. These include reports from Partners and external collaborations and agencies; internal reports covering MGH-wide quality; and departmental records and systems. From time to time, there are special studies of processes and outcomes of particular interest.

A set of key quality and indicators is regularly reported on an institutional Quality Dashboard. The dashboard is currently being implemented on business intelligence software, the
goal of which is to disseminate it more broadly and link the metric displays to underlying data sources. This should accelerate the dissemination and the analysis of the data.

4 Annual Reports

Many of the principal committees of the quality and safety structure issue and receive annual reports. These include reports by the Center for Quality and Safety to the Trustees Quality Committee, reports by the PCAC to the Trustees and the Board of Registration in Medicine, and others.