Quality Assessment, Performance Improvement, and Patient Safety Plan
FY 2018

I. INTRODUCTION

PURPOSE:

The purpose of the Quality Assessment, Performance Improvement (QAPI) and Patient Safety Plan is to provide a formal mechanism by which the University of Toledo Medical Center (UTMC) utilizes objective measures to monitor and evaluate the quality of services provided to patients. Quality is defined broadly to include care that is safe, effective, patient-centered, timely, efficient, and equitable. The plan facilitates a multidisciplinary, systematic performance improvement approach to identify and pursue improved patient outcomes and reduce the risks associated with patient safety in a manner that aligns with the mission of UTMC.

MISSION:

The mission of UTMC is to improve the human condition by providing patient-centered, university quality care in a way that facilitates the achievement of the University’s educational mission.

OBJECTIVES:

Objectives of the FY 2018 QAPI and Patient Safety Plan are:

- Maintain and grow a comprehensive QAPI infrastructure, i.e., human capital, data collection, analysis, process improvement, outcome assessment, software, education and training.

- Create a robust performance improvement culture focused on high reliability measures that enhance quality and safety throughout the organization.

- Integrate quality, safety, and service into performance improvement opportunities, implementing actions, and evaluating results based on the goals of providing care that is safe, effective, patient-centered, timely, efficient, and equitable.

- Encourage an environment that supports safety, encourages non-punitive reporting, addresses maintenance and improvement in patient safety issues in every department throughout the facility, and establishes mechanisms for the disclosure of information related to errors.

- Focus and coordinate the organization-wide performance improvement, patient safety, and patient experience initiatives based on sound metrics, state of the art analysis, and contemporary improvement methods.

- Communicate, report, and document quality, patient safety, and patient experience activities to professional staff, administration, and appropriate governing members.

- Maximize effective organizational and clinical decision making.

- Promote teamwork and group responsibility in identifying and implementing opportunities for improvement.

- Utilize tools and approaches that capitalize on knowledge regarding holistic approaches to improving quality and safety systems, including those developed outside of health care.

- Enhance the integration of residents and Graduate Medical Education (GME) programs into meaningful patient safety, patient experience, and quality initiatives.
II. STRUCTURE AND LEADERSHIP

Key employees responsible for the QAPI and Patient Safety Plan include the UTMC Chief Executive Officer, Chief Nursing Officer, Service Excellence Officer, Chief Administrative Officer, Quality & Patient Safety, and the hospital Chief Medical Officer. These leaders work to improve quality by setting priorities, modeling core values, promoting a learning atmosphere, acting on recommendations, and allocating resources for improvement. They are supported by committees and work groups where the components of the program are defined, implemented, refined, and monitored. These groups are structured around six key dimensions of care delivery. See Diagram - Appendix 1. The quality domains include effective, timely, appropriate, safe, efficient, and patient-centered care. These groups are comprised of attending physicians, resident physicians, staff, and management and are represented via a reporting process to the Quality and Patient Safety Council, which acts as the “oversight committee” for QAPI and patient safety reporting. The Quality and Patient Safety Council reports to the Medical Staff Executive Committee, which in turn reports to the Clinical Affairs Committee of the Board of Trustees. Refer to Committee Chart - Appendix 2.

III. QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT PROCESS

Prioritization of Areas for Measurement

The process for identifying priorities for measurement requires input and discussion with senior leadership, departments, and services from all areas. Priorities are identified based on leadership objectives, regulatory requirements, opportunities identified in external benchmark projects, opportunities identified through analysis of patient safety event reports and opportunities identified through sentinel events, standard of care findings or “Sentinel Event Alerts.” These objectives or topics are then displayed in a matrix to better understand which areas of importance and relevance they cross (high risk, high volume, problem prone, mission, internal and external customer satisfaction, clinical outcome, safety, and regulatory). See Appendix 3 where the priorities of the objectives are defined.

Developing Measure Specifications

Work groups or committees define the metrics (indicators, goals, and benchmarks) for each topic. Representatives from all involved services collaboratively develop quality performance measure specifications based on the opportunities identified to be studied. Team members are identified with the help of clinical and administrative leadership. Work groups develop written measurement specifications, along with data abstraction tools when necessary.

Gathering Data

Data is then gathered on a pre-determined timeframe (weekly, monthly, and quarterly). Regular reporting of data requires continued attention from teams. A designated person will be assigned and held accountable for gathering data and having the information available when due. Sampling sizes are determined based on recognized, statistically significant sample sizes of: 

- <30/month – 100%;
- 31-100/month - 30;
- 101-500/month – 50; and
- >500/month – 70

Real time data are collected as possible.
Analyzing and Reporting Data

The work groups discuss data analysis and determine what initiatives must be implemented to attain the desired outcome. Analyses usually involves multiple iterations to examine different aspects of the quality issue. Whenever possible and appropriate, statistical control methods, trending, and/or comparison with published benchmarks are used to analyze quality and safety measures.

Implementation of Actions and Dissemination of Information

Implementation begins and re-measurement occurs with refinement in actions if the desired outcome is not achieved or the outcome is not maintained. Communication of quality and safety information is the responsibility of clinical and administrative leadership. This information is reported by the Quality Management Department, and throughout the organization, using the Performance Improvement Quarterly report and/or other acceptable formats. Annually or more frequent as necessary, the performance is presented at the Quality and Patient Safety Council, with minutes from the Quality & Patient Safety Council presented to the Medical Executive Committee.

IV. QAPI MODEL

The quality assessment and performance improvement model developed internally and adopted by UTMC is the “Plan, Measure, Analyze, Act, and Review Quality Cycle.” See Appendix 4. This cyclical model incorporates defining the opportunity, identifying the objective, collecting and measuring the data, analyzing performance while comparing with objectives, determining action steps and initiatives as appropriate based on performance, educating and re-measuring.

V. CONTENT/SCOPE OF ACTIVITIES

The QAPI and Patient Safety Plan is the framework for integration of departmental activities within the organization. Each department links to one of the main areas of focus identified for improvement. All departments develop annual objectives to address and support improvement of the care, treatment, service, and safety outcomes that align with the UTMC mission and annual QAPI areas of focus. These objectives become the essence of the QAPI activities organization-wide.

The FY 2018 QAPI areas of focus include:

Improve Patient Safety, Quality, & Service

- Maintain Standardized Infection Rate (SIR) below threshold, while continuously striving to eliminate hospital acquired infections related to:
  - Catheter related Blood Stream Infections
  - Catheter related urinary tract infections
  - Surgical site infections for Colon and Hysterectomy surgeries
  - Clostridium Difficile infections
- Decrease the number of Patient safety indicator events related to post op VTE, sepsis, and pressure ulcers by 5%.
- Monitor trends in patient safety events through Patient Safety Net and implement actions to reduce harm
- Implement and monitor processes associated with pain management, including safe opioid prescribing.

Improve Patient Experience

- Improve 5 percentile points on Press Ganey, rating of hospital for Inpatient satisfaction survey.

Improve Resource Utilization

- Reduce readmissions by 2%
Monitor external regulatory compliance indicators

- Core Measures (ED, Flu Immunizations, DVT, Stroke and Sepsis)
- Restraints
- Adverse Drug Reactions
- Blood Utilization (Transfusion Reactions)
- Pain
- Radiology CT indicators
- Resuscitation
- Organ conversion rates
- Operative/Invasive procedures
- Occurrence/Sentinel/Never Event report trends
- Sedation Analgesia
- Seclusion
- Suicide risk
- Behavioral Management and Treatment
- Mortality and Autopsy
- Hazard Management
- Operative Diagnosis Concurrence
- National Patient Safety Goals
- Patient flow/throughput

MEDICAL STAFF COMMITTEE QAPI PROCESS

Blood and Laboratory Utilization Committee (BUC) - The goal of the BUC is to ensure the safe, effective, and efficient use of blood products and appropriate use of the lab, i.e., blood draws. Blood usage is monitored ongoingly utilizing data that is reviewed and analyzed quarterly by the committee. Clinically valid criteria and indicators used in screening and in the more intensive evaluation of any identified or suspected concerns in blood usage. Blood usage measurement will include key process indicators related to ordering, preparation, handling and dispensing, blood administration, and transfusion outcomes. The committee reports findings of their QAPI program to the Quality & Patient Safety Committee on an annual basis.

Cancer Committee - The Cancer Committee is responsible for the oversight of care and treatment provided in the hospital to patients with cancer. The committee monitors and evaluates patient care, either directly or by interaction with, and review of data from other committees. Cancer Conference presentations occur monthly, which includes all major cancer sites treated at this hospital. The Cancer Committee plans and conducts a minimum of two outcome studies annually. The Cancer Committee will provide summaries of their QAPI plan to the Quality & Patient Safety Council on an annual basis.

Infection Control Committee - The Infection Control Committee meets no less than quarterly to review and evaluate the hospital-wide infection control activities. The committee approves and evaluates the type and scope of surveillance activities based on problem prone areas, targeted indicators, or house wide surveillance initiatives. Quality data presented at the infection control meetings includes surgical site infections, central line infections, ventilator associated pneumonias, and catheter related urinary tract infections. The Infection Control Committee reports the annual summary to the Quality and Patient Safety Council. The committee oversees the implementation of the antimicrobial stewardship program.

Medical Records Committee - The Medical Records Committee ensures the timely completion and accuracy of the medical record. The committee optimizes the use of the electronic medical record. The committee monitors
regulatory requirements for completion of required documentation. This list may include, H&P, post operative notes, nursing assessments, etc. The Medical Records Committee reports annually to the Quality and Patient Safety Council.

**Medical Staff Executive Committee** - The Medical Staff Executive Committee is delegated the primary authority over activities related to quality assessment and performance improvement of the professional services provided by individuals with clinical privileges. The Executive Committee meets monthly and receives and acts upon reports and recommendations from medical staff committees.

**Operating Room Services Committee** – The Operating Room Committee is responsible for monitoring the quality of the care provided to surgical patients. The committee reviews all adverse events and mortalities that occur in the OR. In addition, the committee develops an annual QAPI program consistent with the goals of the organization and reports annually to the Quality and Patient Safety Committee.

**Pharmacy & Therapeutics Committee** - The Pharmacy & Therapeutics Committee oversees the quality assessment and performance improvement related to the selection, ordering and transcribing, preparing and dispensing, administering, and monitoring of medications throughout the organization. The committee works closely with nursing, Infection Control, and other medical staff departments in developing policies and QAPI monitoring. Pharmacy is responsible for tracking and monitoring medication errors and adverse events and reporting findings to the Quality & Patient Safety Committee. In addition, they maintain and make recommendations to the drug formulary.

**Procedural Case Review Committee** - This committee is responsible for the review of operative and other high-risk procedures for appropriateness based on surgical specimen removal. In addition, the committee reviews all adverse events, mortalities, and autopsies related to unexpected outcomes or adverse events occurring in surgical procedures. The committee selects high-risk patient populations based on identified problem prone or high-risk procedures. The committee meets quarterly or more often as needed and reports annually to the Quality & Patient Safety Committee.

**Trauma Committee** - The Trauma Committee is responsible for the oversight for the quality of care provided to the Trauma patients. The Committee tracks and monitors quality indicators based on the identified QAPI trauma program. The committee reports annually to the Quality & Patient Safety Committee.

**HOSPITAL AND/OR SUPPORT SERVICES**

The quality and appropriateness of patient care is monitored and evaluated in all important aspects of care, key processes, and in the clinical departments and support services. Each department/service is responsible for establishing specific quality improvement indicators which reflect the hospital-wide plan and prioritizes aspects of care to be studied. Each department/service identifies and participates in the analysis of issues/concerns impacting system processes and functions which affect patient care, experience, and safety. The following hospital department/support services maintain quality reports in their departments while reporting annually to the Quality & Patient Safety Council. Finally, each department/service submits to the annual evaluation of the hospital QAPI program. The following list provides the department/services along with the responsible parties.

- **Ambulatory services** – Allen Seifert
- **Anesthesia Services** – Clinical Service Chief
- **Behavioral Health** – Clinical Service Chief, Director Behavioral Health, Nurse Manager
- **Cardiac Catheterization Laboratory** - Director of Cardiac Services and Medical Director of the Cath Lab
- **Cardiac Rehabilitation Program** – Director of Cardiac Rehabilitation
- **Dietary Services** – Director of Food & Nutrition and Clinical Nutrition Manager
- **Endoscopy** – Medical Director, Nurse Manager
- **Laboratory Services** – Clinical Service Chief and Director of Laboratory Services
- **Nursing Services** – Chief Nursing Officer
- **Pharmacy** – Director of Pharmacy
Radiation Therapy – Medical Director of Radiation Therapy
Radiology – Clinical Service Chief and Director of Radiology
Resource Utilization – Director of Outcomes Management
Respiratory Care - Director of Respiratory Care
Transplant Service – Medical Director Transplant, Administrator Transplant Services

UNUSUAL CHANGES OR EVENTS

The Quality and Patient Safety Plan is flexible to accommodate significant services changes, structure changes, unusual events or other similar elements. Objectives and topics can be introduced at any time to be prioritized and included in the scope of the Quality and Patient Safety Plan.

SAFETY

The patient safety program is integrated with all quality assessment and performance improvement activities. It encompasses risk assessment and avoidance tactics such as conducting a “Failure Mode Effect Analysis” (FMEA). FMEA is a proactive risk assessment which examines a process in detail including sequencing of events, assessing actual and potential risk, failure, or points of vulnerability and through a logical process, prioritizes areas for improvement based on the actual or potential impact on patient care.

The FY 2018 FMEA includes:
Implementation of processes in the care of Inpatient Detox patients.

The safety program proactively institutes action plans based on findings from the “Sentinel Event Alert” which are provided periodically by the Joint Commission. Use of this resource for initiatives is another proactive approach to patient safety.

All patient safety events in the safety program track and trend or initiate activities that address process, system, protocol, or equipment events. This includes near miss occurrences and unsafe conditions, as well as findings from adverse events. As the entire organization reports patient safety events, this component integrates all departments into the safety program.

Additionally, all developments from Root Cause Analysis activities, including those from Sentinel Events, are implemented and monitored through the safety program.

The Quality and Patient Safety Program is also engaged in the following patient safety initiatives which will continue over the next few years:
- Implementation of a new inpatient Electronic Medical Record;
- Dissemination of trended information from Patient Safety net.

VI. OVERSIGHT AND SHARING OF INFORMATION

As part of the oversight process, the quality assessment performance improvement information flows from the departmental/service work groups and committees to the Quality and Patient Safety Council. Minutes from the Quality and Patient Safety Council are submitted to the Medical Staff Executive Committee and reports are given to the Clinical Affairs Committee of the Board of Trustees. Through this process, an annual review of the entire QAPI and Patient Safety Plan content and results occurs. The various duties of these oversight committees are further defined below:

1. The Board of Trustees of the University of Toledo establishes, maintains, supports, and exercises oversight of the quality monitoring and performance improvement function of UTMC. The Board of Trustees fulfills its responsibilities related to the quality assessment, performance improvement, and safety functions through
the specific activities and interactions of its Clinical Affairs Committee with the Hospital Senior Leadership Teams (SLT) and with the medical executive committee of the medical staff.

2. The Clinical Affairs Committee of the Board of Trustees reviews and provides feedback related to the Quality Report submitted to the committee and the Board of Trustees. The Clinical Affairs Committee approves the annual QAPI plan and annual reappraisal. They are also responsible for making recommendations to enhance the QAPI and patient safety program and initiatives.

3. The Executive Committee of the Medical Staff provides oversight for reporting quality initiatives from the medical staff committees and hospital initiatives.

Additionally, as a mechanism to share performance improvement activities with institution staff and visitors, the following activities also take place:

- Departmental in-services on special quality performance improvement topics;
- Lectures and presentations to students, residents, staff and faculty;
- Reports of clinical data distributed to the Clinical Affairs Committee of the Board of Trustees, Executive Committee of the Medical Staff, members of management and leadership teams and the Senior Leadership Team;
- Display of Quality Data on individual units.

VII. RESOURCES

The Quality Management Department supports and facilitates ongoing organizational quality assessment, performance improvement, and patient safety activities. Resources within the Quality Management Department assist hospital staff and physicians with data, retrieval of data, development, and coordination of quality performance improvement activities, and analysis of data to support and evaluate quality performance improvement efforts.

The primary functions of this department include:
- Promoting patient safety through evidence-based clinical programs and initiatives;
- Monitoring regulatory standards compliance data;
- Clinical data management and analysis;
- Collaboration with Service Excellence Department on the integration of patient experience in all process improvement initiatives;
- Quality improvement training and education;
- Preparation of QAPI reports;
- Coordination of internal and external databases that are used for QAPI projects or quality data analysis;
- Dissemination of patient safety event reports to departments, Quality and Patient Safety Council, and other key groups in the organization;
- Patient safety event, sentinel event, and never event report tracking and analysis;
- Coordination of root cause analysis for sentinel events and other occurrences requiring intense analysis;
- Coordination of Action Plans related to sentinel events or failure mode effect analysis (FMEA) projects;
- Quality performance improvement project for issues found in patient safety event reports; and
- Process or procedure modifications related to findings from patient safety event trends and/or FMEA projects.
VIII. SUMMARY

The Quality Assessment, Performance Improvement, and Patient Safety Plan provides the framework for UTMC to implement quality assessment, performance improvement, and safety activities. These activities improve patient outcomes, patient experience, and patient safety in a comprehensive, methodical, and systematic manner and compliment the Hospital Plan for the Provision of Collaborative Patient Care Services.

IMMUNITY/CONFIDENTIALITY CLAUSES

The Quality and Patient Safety Council is a UTMC quality assurance committee as referenced in the Ohio Revised Code. Those sections of the Ohio Revised Code pertaining to immunity and confidentiality apply to the Quality and Patient Safety Council.

Ohio Revised Code §2305.24 (eff. 9/29/2009)

“Any information, data, reports, or records made available to a quality assurance committee or utilization committee of a hospital or long-term care facility or of any not-for-profit health care corporation that is a member of the hospital or long-term care facility or of which the hospital or long-term care facility is a member are confidential and shall be used by the committee and the committee members only in the exercise of the proper functions of the committee.

No physician, institution, hospital, or long-term care facility furnishing information, data, reports, or records to a committee with respect to any patient examined or treated by the physician or confined in the institution, hospital, or long-term care facility shall, by reason of the furnishing, be deemed liable in damages to any person, or be held to answer for betrayal of a professional confidence within the meaning and intent of section 4731.22 of the Revised Code.”
Original Date: 9/87
Revised:
Utilization Management Plan 4/90
Quality Assessment Plan 6/90
Quality Assessment and Improvement Plan 7/92
Patient Care and Service Improvement Plan 1/93
Quality Improvement Plan 1/94
Quality Improvement Plan 1/95
Quality Improvement Plan 1/96
Quality Improvement Plan 1/97
Quality Improvement Plan 1/98
Quality Improvement Plan 1/99
Performance Improvement Plan 4/99
Performance Improvement Plan 6/99
Performance Improvement Plan 9/00
Performance Improvement Plan 3/02
Performance Improvement Plan 5/03
Performance Improvement Plan 12/04
Performance Improvement Plan 6/06
Performance Improvement Plan 11/07
Quality and Patient Safety Plan 12/08
Quality and Patient Safety Plan 2/2010
Quality and Patient Safety Plan 2/2012
Quality and Patient Safety Plan 12/2012
Quality Assessment, Performance Improvement and Patient Safety Plan, 11/2013
Quality Assessment, Performance Improvement and Patient Safety Plan, 1/2015
Quality Assessment, Performance Improvement and Patient Safety Plan, 7/2015
Quality Assessment, Performance Improvement and Patient Safety Plan, 8/2016
Quality Assessment, Performance Improvement and Patient Safety Plan, 8/2017

Dan Barbee
Chief Executive Officer

Michael Ellis, M.D.
Chief Medical Officer

Samir Khoury, M.D.
Chief of Staff
Appendix 1

Six Key Dimensions of Care Delivery
Appendix 2

Committee Chart
Appendix 3

Prioritization Matrix
2018 Hospital Goals
# PRIORITIZATION MATRIX –FY 2018

## Quality and Patient Safety Goals

### Improve Patient Safety & Quality

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>High Risk</th>
<th>High Volume</th>
<th>Problem Prone</th>
<th>Important to Mission</th>
<th>Customer Satisfaction</th>
<th>Staff Satisfaction</th>
<th>Physician Satisfaction</th>
<th>Clinical Outcome</th>
<th>Safety</th>
<th>Regulatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Acquired Conditions</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Patient Safety Events</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pain Management – Safe opioid use</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Improve Resource Utilization

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>High Risk</th>
<th>High Volume</th>
<th>Problem Prone</th>
<th>Important to Mission</th>
<th>Customer Satisfaction</th>
<th>Staff Satisfaction</th>
<th>Physician Satisfaction</th>
<th>Clinical Outcome</th>
<th>Safety</th>
<th>Regulatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Readmission</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Improve Satisfaction

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>High Risk</th>
<th>High Volume</th>
<th>Problem Prone</th>
<th>Important to Mission</th>
<th>Customer Satisfaction</th>
<th>Staff Satisfaction</th>
<th>Physician Satisfaction</th>
<th>Clinical Outcome</th>
<th>Safety</th>
<th>Regulatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Satisfaction</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Complaint Management</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Reduce Infection Rates

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>High Risk</th>
<th>High Volume</th>
<th>Problem Prone</th>
<th>Important to Mission</th>
<th>Customer Satisfaction</th>
<th>Staff Satisfaction</th>
<th>Physician Satisfaction</th>
<th>Clinical Outcome</th>
<th>Safety</th>
<th>Regulatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium Difficile</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Blood Stream Infections</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hand Hygiene</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Surgical Site Infections</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>UTI</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Monitor External Regulatory Compliance Indicators

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>High Risk</th>
<th>High Volume</th>
<th>Problem Prone</th>
<th>Important to Mission</th>
<th>Customer Satisfaction</th>
<th>Staff Satisfaction</th>
<th>Physician Satisfaction</th>
<th>Clinical Outcome</th>
<th>Safety</th>
<th>Regulatory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resuscitation</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sedation/Analgesia</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pain</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Resource Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CORE Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Adverse Drug Reaction</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Organ Conversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Restraints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Blood Utilization</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Operative/Invasive procedures</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Behavioral Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mortality/Autopsy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hazard Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operative Diagnosis</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concurrency</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPSG</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT Radiology indicators</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide Risk</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falls</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medication Errors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Throughput</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antimicrobial Stewardship</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4

Plan, Measure, Analyze, Act, and Review Quality Cycle
**PMAAR**

**Quality & Patient Safety Cycle**

- **Plan**
  - Define opportunities
  - Determine what is to be accomplished
  - Identify performance indicators, how they will be obtained, how frequently they will be measured, what comparison values will be used
  - Identify responsible parties

- **Measure**
  - Collect measurement data
  - Display data over time on a "run chart"
  - Comparative data displayed simultaneously

- **Analyze**
  - Conduct quantitative analysis
    - How much - which direction?
    - How does this compare to benchmark?
    - Is the process in control or is variation excessive?
  - Conduct qualitative analysis
    - Why is this happening?
    - What are contributing factors?
    - What does this mean?

- **Act**
  - Determine an action that will impact the trend in the desired direction
  - Plan for actions to be executed appropriately
  - Communicate, initiate

- **Review**
  - Did actions produce desired results?
  - Why or why not?
  - Are additional actions necessary?
  - Is the "right" thing being measured?
  - What has been learned?
  - Continue the cycle, modify based on findings
QUALITY PERFORMANCE IMPROVEMENT QUARTERLY REPORT
THE PMAAR QUALITY CYCLE

Plan: (Define your work using priorities from the Quality and Patient Safety Annual Plan or issues identified as impacting important outcomes of care, treatment or service. Determine what is to be accomplished, what indicators will be used, how they will be obtained, where the benchmarks and other comparative data will come from, how frequently monitoring will occur and who are the responsible parties.)

Measure: (Use existing data where possible. Indicators should reflect the issue at hand. Display the data over time, on a “run chart” and against a comparative, an internal or external goal or benchmark.)

Analyze: (Conduct quantitative and qualitative analysis. Quantitative: Which way is the experience moving - up down or static over time? Is this desirable or undesirable? Is the process in control, or does it have lots of variation? Is this special cause variation? How does the experience compare to the Goal or Benchmark. Qualitative: Why is this happening? (Consider all reasons) How do I know for sure? What are the contributing factors? What does this mean?)

Act: (Determine an action or actions that will impact the trend in the desirable direction. Invent, brainstorm, and cogitate. Plan for the actions to be carried out appropriately; communicate, assign responsibility and effective dates)

Review: (A successful intervention should cause a noticeable change in the experience within a reasonable period of time. Are the actions attaining the desired results? If yes, are additional actions needed? What will it take to sustain improvements? If no, was enough time allowed? Are additional actions necessary? Is the “right” thing being measured? Should this continue to be measured? Should another indicator be introduced? What has been learned? Continue and or modify based on how these questions have been answered)

Contact Person Completing Form: __________________ Dept. __________

Return completed form to Quality and Patient Safety, Room 2240, Dowling Hall.

These documents, records, or information contained herein is a confidential professional peer review, quality assurance or incident and risk management reporting documents of UTMC. It is protected from disclosure pursuant to Ohio law and Ohio Revised Code Sections 2305.24 through 2305.253. Unauthorized disclosure or duplication is absolutely prohibited.