2017 Clinical Quality and Patient Safety Performance Improvement Plan
Department of Medicine
Mount Sinai Health System
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   A. Quality Structure
I. OVERVIEW

The Department of Medicine for Mount Sinai Health System is committed to excellence, innovation and leadership in patient care, in the education of our physicians and scientists, in research and in anticipating the changing needs of our community all within a supportive environment that fosters creativity and personal career development.

The purpose of this document is to specify the 2017 quality and safety goals for The Department of Medicine for the Mount Sinai Health System, and to outline the principles and processes guiding the commitment to quality and safety. This document pertains to the following hospitals: Mount Sinai Hospital (MSH), Mount Sinai Beth Israel (MSBI), Mount Sinai St. Luke’s (MSSL), and Mount Sinai West (MSW), Mount Sinai Queens (MSQ), and Mount Sinai Brooklyn (MSB).

The goals, objectives and scope of the Quality and Patient Safety Performance Improvement Plan are supported and approved by department and hospital leadership. The Plan builds upon the strategic initiatives of each hospital and the systems that are designed to achieve excellence in the delivery of patient care.

II. QUALITY AND SAFETY ORGANIZATIONAL FRAMEWORK

A. Scope and Structure

The scope of the Quality Performance Improvement Program for the Department of Medicine is based on the patient and organization focused functions that are aligned with the strategic mission and vision of each hospital. The structure provides a streamlined approach to quality improvement activities. (See QI Structure Appendix A). This approach to quality and performance improvement identifies opportunities for improvement throughout the hospitals.

Until such a time that the Hospitals of the MSHS become a single Article 28 organization, the department-wide Quality Committee of each hospital is responsible for setting, approving and monitoring the quality agendas for the Department of Medicine and reporting its activities to the respective Hospital-wide Quality Committee. In addition, relevant issues/patient focused functions discussed by patient safety and risk management leaders are brought to the Quality Committees and vice versa as appropriate.

Membership on the Department Quality Committees reflects the diversity of the Divisions and Institutes within the Department as appropriate for the processes being monitored. Quality champions are selected by the Division Chiefs of each division at each site and are standing members of the committee.

The core membership of the Quality Committees in the Department of Medicine Quality is as follows, but is not limited to:

2017 Department of Medicine Quality Improvement Committees Membership
Chairs, Department of Medicine
Chief of Quality, Department of Medicine
Each division of the Department of Medicine is responsible for maintaining an internal quality structure to monitor quality within the division. As part of this responsibility each division will pick at least three metrics which it will monitor throughout the year and report on a regular basis to the Department as well as to the institution both through the institutional reporting and meeting structure and through a web-based confidential reporting tool which makes these measures available throughout the institution. Each division is also responsible for the implementation and monitoring of meaningful use and value based purchasing initiatives.

The Morbidity and Mortality Committees monitor deaths of inpatients who were admitted to the Medicine service and cases referred by other services. Cases are assigned to hospitalists or subspecialists who review the quality of medical care rendered during the admission and determine if there were any deviations from the standard of care and opportunities for improvement. The reviewer then presents the findings to the M&M Committee. In the teaching hospitals, senior residents participate in mortality reviews and present their findings at the mortality committee meeting. Residents are supervised and mentored in this activity.

In addition, at MSSL/MSW the Department of Medicine facilitates an attending supervised weekly house staff Morbidity and Mortality Conference at which house staff present cases using QI methodology to identify and address possible deviations from the standard of care and/or opportunities for improvement in the care that was provided. Relevant cases are brought to the Mortality and Morbidity Committee for additional attending review.

The Resident Quality Improvement Conference (RQIC) at MSH serves to coordinate house staff education and efforts around quality initiatives and performance measures. Division of Hospital Medicine Attending Mentors provide supervision and guidance as appropriate for each house staff level. Residents are expected to investigate and present findings of cases referred to...
them by M&M, Risk Management (MERS), and other sources. A review of the literature and best practice guidelines as they pertain to a particular case are presented along with an analysis of the findings.

The High Value Care Committees (HVC) at each hospital seeks to help physicians provide the best possible care while simultaneously reducing unnecessary tests and health care costs to the hospital and healthcare system. Evidence-based education and projects are directed toward reducing overuse and misuse of medical interventions that do not directly improve a patient’s health. The Chair of each HVC Committee periodically shares ongoing projects and findings with the Vice Chair for Quality and the DOM QIC. A system-wide DOM HVC Committee is being formed in 2017 under the leadership of Harry Cho, M.D. a recognized leader in Choosing Wisely and HVC.

It is anticipated that guests will frequently be invited to help the committees develop programs to obtain the objectives set forth by the Clinical Quality and Patient Safety Performance Improvement Plan.

B. Methodology

Problem Solving Methodology
The Department of Medicine utilizes a problem solving methodology, which employs the use of QI tools, and techniques in the design, data collection, data aggregation and analysis to improve the performance of processes and outcomes. The methodology is as follows:

Plan
Do
Study
Act

Establishing Performance Improvement Priorities
Setting priorities for Performance Improvement is a collaborative process of the Board of Trustees, Medical Staff, Administrative Leadership and Hospital Staff. The following criteria shall be considered in establishing priorities:

- Mission, vision, and values
- Patient Safety
- National Patient Safety Goals
- Strategic Plan
- Community needs
- Needs/expectations of patients and families via our customer/patient satisfaction program
- Input from medical and hospital staff
- High volume/High risk diagnoses/procedures/processes
- Problem prone procedures/processes
- Input from external sources (licensing, regulatory agencies, professional groups and benchmarking information)
- Overuse/misuse (high-value care, Choosing Wisely)
- Clinical competency and training needs
- Best practices
- Current Performance (results on ongoing QI activities)
- Key Publicly Reported Indicators
- Consistency with the Mount Sinai Health System Quality and Patient Safety Priorities
  - Reduce Harm to Patients
  - Reduce Avoidable Readmissions
  - Reduce Risk Adjusted Mortality
  - Improve Patient Satisfaction

### III. DEPARTMENT OF MEDICINE QUALITY AND SAFETY GOALS FOR 2017

The 2017 quality and safety goals are established in accordance with the principles outlined in this plan, with collaboration from Hospital Leadership, the Committee on Quality of the Board of Trustees, and the Quality Performance Improvement Committee.

#### A. 2017 MSHS Goals and Targets:

1. Improve Patient Satisfaction scores, as measured by the HCAHPS survey

<table>
<thead>
<tr>
<th>Metric</th>
<th>MSSL Target</th>
<th>MSW Target</th>
<th>MSH Target</th>
<th>MSBI Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would Recommend Hospital</td>
<td>73.7% 50th Percentile</td>
<td>73.7% 50th Percentile</td>
<td>76.0% 50th Percentile</td>
<td><strong>73.7% 30th Percentile</strong></td>
</tr>
</tbody>
</table>

2. Decrease Mortality and Readmissions

<table>
<thead>
<tr>
<th>Metric</th>
<th>MSSL Target</th>
<th>MSW Target</th>
<th>MSH Target</th>
<th>MSBI Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Mortality O/E Ratio</td>
<td>0.75</td>
<td>0.54</td>
<td>0.80</td>
<td>0.60</td>
</tr>
<tr>
<td>Global Readmission O/E Ratio</td>
<td>0.99</td>
<td>0.95</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Sepsis O/E Ratio</td>
<td>0.87</td>
<td>0.70</td>
<td></td>
<td>0.83</td>
</tr>
<tr>
<td>Sepsis Mortality Rate</td>
<td>14%</td>
<td>10%</td>
<td>12%</td>
<td>9.72</td>
</tr>
<tr>
<td>COPD Mortality O/E Ratio</td>
<td>0.48</td>
<td>0.25</td>
<td>0.36</td>
<td>0.33</td>
</tr>
</tbody>
</table>

3. Improve Patient Safety/Decrease Patient Harm

<table>
<thead>
<tr>
<th>Metric</th>
<th>MSSL Target</th>
<th>MSW Target</th>
<th>MSH Target</th>
<th>MSBI Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI 90</td>
<td>0.45</td>
<td>0.45</td>
<td>0.49</td>
<td>0.51</td>
</tr>
<tr>
<td>CLABSI (ICU &amp;</td>
<td>0.40</td>
<td>0.30</td>
<td>0.90</td>
<td>0.7</td>
</tr>
<tr>
<td>Metric</td>
<td>MSSL Target</td>
<td>MSW Target</td>
<td>MSH Target</td>
<td>MSBI Target</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------</td>
<td>------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>VTE-5 (VTE Warfarin Therapy Discharge Instructions)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>97.9%</td>
</tr>
<tr>
<td>VTE-6 (Hospital Acquired Potentially Preventable VTE)</td>
<td>3%</td>
<td>3%</td>
<td>1.4%</td>
<td>2.6%</td>
</tr>
<tr>
<td>IMM-2 (Influenza Immunization)</td>
<td>95%</td>
<td>95%</td>
<td>100%</td>
<td>98.4%</td>
</tr>
</tbody>
</table>

5. Improve Nursing Sensitive Indicators – Although these are nursing indicators, the Department of Medicine is committed to assisting in this initiative.

<table>
<thead>
<tr>
<th>Metric</th>
<th>MSSL Target</th>
<th>MSW Target</th>
<th>MSH Target</th>
<th>MSBI Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ulcers Rate</td>
<td>0.27</td>
<td>0.12</td>
<td>0.25</td>
<td>0.22</td>
</tr>
<tr>
<td>Patient Falls Rate</td>
<td>2.45</td>
<td>2.00</td>
<td>1.78</td>
<td>1.73</td>
</tr>
<tr>
<td>Patient Falls with Injury Rate</td>
<td>0.35</td>
<td>0.30</td>
<td>0.10</td>
<td>0.16</td>
</tr>
<tr>
<td>Restraint Use Prevalence</td>
<td>0.32%</td>
<td>0.14%</td>
<td>0.50%</td>
<td>0.35%</td>
</tr>
</tbody>
</table>

All of the above mentioned goals are key priority areas for the Department of Medicine and will receive attention at the level of the patient care unit. The following goals have been identified as the key priority areas for Mount Sinai Health System: 1) improving the HCAHPS score for “Overall Rating of the Hospital”; and 2) improving teamwork. Progress toward these quality and
safety goals will be reported to the hospitalwide quality committees through the Department of Medicine quality committees.

B. **Hospital Specific Initiatives**

- PE/DVT Prevention
- Sepsis bundle compliance
- Prevention of avoidable readmissions
- Hand Hygiene Targeted Solutions implementation
- Implementation of communication strategies to improve inter-departmental/unit collaboration
- Implementation of activities to improve the patient experience
- Prevention of hospital acquired conditions/ infections
- Patient incident report review
- Discharge before noon
- Reduce Excess Days (decrease length of stay)
- Lab and radiology utilization

C. **Department of Medicine Specific Initiatives**

**Hospital Medicine**

**MSH**
- Decrease amylase and repeat lipase orders
- Decrease use of docusate sodium
- Decrease falls and increase mobility

**MSBI**
- Decrease inpatient length of stay (LOS) for hospital medicine by 10%
- Decrease the number of excess hospital days by 15%
- Increase patient satisfaction scores for Communication with Physicians to > 60th percentile

**MSSL**
- Improve patient satisfaction scores for Communication with Physicians
- Add to the Laboratory Utilization Project by decreasing the number of CBC and BMP draws on the day of discharge
- Reduce inappropriate telemetry usage days (Telemetry Utilization Project)
- Decrease length of stay and readmissions related to diagnosis of chest pain (Chest Pain in Short Stay Observation Unit Project)

**MSW**
- Improve patient satisfaction scores for “Communication with Physicians” metric
- Add to the Laboratory Utilization Project by decreasing the number of Folate draws
- Reduce readmission rate from Skilled Nursing Facilities by increasing warm handoffs
Nephrology

MSH
- Improve timeliness and accuracy of inpatient clinical documentation
- Improve documentation of Acute Tubular Necrosis in Acute Kidney Injury cases
- Increase rate of identification and referral for Hepatitis C Viral (HCV) infection cases in the dialysis unit

MSBI
- Decrease number of patients with Hemodialysis catheter > 90, 180, 365 days.
- Increase percentage of eligible patients that receive Hepatitis B Vaccine
- Decrease hospital days/30 day readmission rate for Upper East Side Dialysis patients

MSSL/MSW
- Increase percentage of new start dialysis patients who have placement of permanent access (graft, fistula) within 30 days
- Improve education of Chronic Kidney Disease (CKD) patients with eGFR<20ml/min about the different options of RRT
- Increase rate of referral for treatment at the liver clinic for Hepatitis C positive patients with CKD

Rheumatology

MSH
- Improve rates of Tuberculosis (TB) screening for patients on biologics
- Improve rate of ophthalmology screening for patients on plaquenil
- Improve patient satisfaction score from Press Ganey surveys “Likelihood to Recommend”

MSBI
- Improve rates of Hepatitis B and C screening prior to initiation of methotrexate for Rheumatoid Arthritis (RA) patients
- Improve rates of serum albumin screening prior to initiation of methotrexate for RA patients
- Improve documentation of written informed consent in EPIC for monoclonal antibodies and biologics given at infusion center.
- Increase patient satisfaction scores for Communication: “Did provider explain things in a way you understand?”
- Increase patient satisfaction scores for Communication: “Did the provider listen to you carefully?”

MSSL/MSW
- Improve rates of Hepatitis B and C screening prior to initiation of methotrexate for RA patients
- Improve rates of serum albumin screening prior to initiation of methotrexate for RA patients
- Improve rates of CBC, Creatinine and Liver Function Test screening within 3 months for RA patients who were started on methotrexate.
- Increase percentage of pre-menopausal patients who were educated to avoid pregnancy while taking methotrexate

**Infectious Diseases**

**MSHS**
- Improve Human Immunodeficiency Virus (HIV) viral load suppression in ambulatory HIV clinic

**MSH**
- Improve retention rate among ambulatory HIV clinic patients
- Decrease inpatient LOS for HIV patients
- Consider goal for HIV screening versus goal for appropriate pneumococcal vaccination for inpatients

**MSBI**
- Decrease 30 day readmission rate for HIV patients
- Decrease mean duration of antibiotic treatment for lower respiratory tract infection via procalcitonin testing on admission and q 24-48 hours
- Increase rate of Sexually Transmitted Infection (Gonorrhea and Chlamydia) testing among patients in the ID outpatient clinic.

**MSSL/MSW**
- Improve retention in ambulatory HIV clinic patients
- Decrease 30 day readmission rate for HIV patients
- Improve the usage of vancomycin through a vancomycin protocol and education for a decreased Time to Adequate Vanc Trough

**Endocrinology**

**MSH**
- Increase rate of diabetes evaluation for patients undergoing living donor renal transplants
- Reduce “no-show” rate at diabetes clinic
- Improve access to Hospital Diabetes Clinic, 2nd Available New and Follow-up Appointment

**MSBI**
- Increase number of diabetic patients with HbA1C checked within past 6 months
- Increase number of diabetic patients with LDL checked within past year
- Increase number of diabetic patients with urine microalbumin checked within past year
- Increase number of diabetic patients on ACE inhibitors or ARBs who have microalbuminuria
- Increase number of diabetic patients with BP checked at each visit

**MSSL/MSW**

- Improve thyroid FNA adequacy
- Decrease use of mixed insulin in the hospital setting
- Decrease incidence of hypoglycemia in the hospital setting
- Improve outcomes for DSME Program

**General Internal Medicine**

**MSH**

- Improve PQRS/ MACRA/ MIPS metrics
- Increase screening for clinical depression and follow-up plan, when appropriate
- Improve medication adherence for oral prescriptions for hypertension, diabetes and hyperlipidemia
- Improve influenza vaccination rates
- Increase screening for future fall risk, when appropriate

**MSBI**

- Increase screening for clinical depression and documentation of a follow-up plan
- Increase screening for tobacco use and cessation counseling
- Increase the rate of annual nephropathy screening for diabetic patients
- Increase the rate of annual ophthalmology screening for diabetic patients

**MSSL/MSW**

- Increase the percentage of patients aged 18 years and older screened for clinical depression within 12 months using an age appropriate standardized depression screening tool and if positive, a follow-up plan is documented on the date of the positive screen
- Increase the percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months and who received cessation counseling intervention if identified as a tobacco user
- Increase the percentage of diabetic patients 18 to 75 years of age who had a Nephropathy Screening Test within the last 12 months
- Decrease the percentage of diabetic patients 18 to 75 years of age who had an HbA1c > 9% at last check
- Increase the percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine

**Gastroenterology**

**MSH**

- Adherence to appropriate follow-up interval for colonoscopy in average risk patients (OP-29)
- Adherence to appropriate follow-up interval for patients with a history of adenomas (OP-30)
- Improve adenoma detection rate
- IBD quality indicator to be implemented

**MSBI**
- Improve adherence to appropriate follow-up interval for colonoscopy in average risk patients (Core Measure: OP-29)
- Improve adherence to appropriate follow-up interval for patients with a history of adenomas (Core Measure: OP-30)
- Increase percentage of colonoscopies with adequate bowel preparation
- Improve medication reconciliation documentation

**MSSL/MSW**
- Improve adherence to appropriate colonoscopy follow-up interval for average risk patients (OP-29)
- Improve adherence to appropriate colonoscopy follow-up interval for patients with a history of adenomas (OP-30)
- Improve adenoma detection rate
- Increase percentage of colonoscopies with adequate bowel preparation
- Increase use of prophylactic antibiotics for advanced endoscopic procedures

**Liver Disease**

**MSH**
- Increase outpatient primary care HCV screening in persons born 1945-1965 and improve inpatient HCV screening
- Increase confirmatory HCV RNA PCR testing in all HCV Ab+ persons born 1945-1965
- Improve link to care for all HCV infected persons born 1945-1965

**Allergy & Immunology**

**MSH**
- Epinephrine autoinjector patient education
- Provision of Asthma Action Plans in Fellow’s Clinic
- Improve patient satisfaction: “Likelihood to recommend,” “provider explained in a way you understand,” “provider listened carefully to you”
- Optimal Asthma Control, using a validated asthma control assessment tool
Pulmonary/Critical Care and Sleep Medicine

MSH
- Improve COPD disease management (readmission rates, complications, adverse events)
- Decrease Chest Clinic new patient appointment wait time
- Improve outcomes in ASA 3 and 4 in patients undergoing bronchoscopy
- Undefined goal related to US News and World Report Rankings

MSBI
- Reduce number of COPD readmissions
- Reduce rate of hospital acquired VTE
- Decrease sepsis mortality rate
- Improve adherence to sepsis mgt. protocol: 3-hour and 6-hour bundles

MSSL/MSW
- Establish practice criteria for use of routine chest radiographs in the MICU
- Maintenance of the Difficult/High Risk Airway in the MICU
- Implement and increase use of standardized MICU Transfer Note
- New Pulmonary Clinic Project TBD (Pulmonary Fellow’s Quality Project)

IV. CONFIDENTIALITY

All quality related information including data; committee minutes, reports, and recommendations shall be maintained by the Quality Performance Improvement Program for the Department of Medicine and/or the Quality Improvement Department. Copies shall be made and distributed as necessary to meet the objectives of the Clinical Quality and Patient Safety Performance Improvement Program. The Program shall be in compliance with HIPAA requirements.

All quality related information will be labeled “Privileged and Confidential. Prepared in accordance with New York State Public Health Law 2805; through m, and New York State Education Law 6527; and Federal Law 109-41.
Appendix
Department of Medicine Quality Structure

Medical Boards & BOT

Hospital-wide Quality Committees

Quality Council

MSL & MSW
Quality Lead
Amy Rosenberg

Quality Improvement Committee

MSH
Quality Co-Leads
Vinh Nguyen
Mauli Desai

Quality Improvement Committee

MSBI
Quality Lead
Glenn Kashani

Office of Vice Chair
Quality & Clinical Affairs
Beth Raucher
Quality Analyst
Quality Coordinator

MSQ

MS Brooklyn