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Greenwich Hospital
Annual Performance Improvement Plan
FY 2020

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EXECUTIVE SUMMARY

Greenwich Hospital's FY 2020 Performance Improvement Plan (QA/PI) continues a tradition of commitment to exceptional care. It reaffirms our definition of quality, our commitment to safety, and is intended to demonstrate organizational accountability.

The organizational strategy for Greenwich Hospital's (GH) multi-year business plan is to provide unparalleled value to those we are privileged to serve. Fundamental to this strategy is an unwavering commitment to deliver safe, highest quality care based upon best clinical evidence, sound clinical judgment and joint decision-making with patients and their families. We wish to provide a patient- and family-centered experience and intend to comply with all local, state, federal and professional standards, rules and regulations. The Performance Improvement (PI) Plan for GH provides an overview of these objectives, referenced in Addendum 8, and outlines specific top priorities and measures for performance improvement. Each year the medical, nursing and administrative leadership jointly identify key performance improvement (PI) objectives based on a comprehensive environmental scan that identifies the impact and feasibility of each improvement effort. These improvement efforts are coordinated wherever feasible with each Delivery Network within Yale New Haven Health System (YNHHS) (Bridgeport Hospital, Greenwich Hospital, Lawrence and Memorial Hospital, Westerly Hospital, Northeast Medical Group and Yale-New Haven Hospital) and Yale University (Yale Medicine).

GH Office of the Chief Medical Officer and Patient Experience divisions provide leadership, coordination and support to organization-wide efforts to improve clinical quality, patient safety, patient experience, and the engagement of staff and providers. The GH efforts are coordinated with the system specific support of YNHHS departments which provides resources including data abstraction, data analytics from the Joint Data Analytic Team (JDAT) and project management.

In FY 2020, we again construct the PI Plan around the strategic framework of the Triple Aim first proposed by the Institute for Healthcare Improvement with the knowledge that there has been a movement to include a fourth (quadruple) aim to this model to account for the health of the workforce. We have attempted to address this within the body of the document under the workforce engagement section without changing the framework this fiscal year. We have adopted this framework below and referenced in Addendum 1 as:

- **Population Health (Better Health):** Promoting healthy people and healthy communities
- **Enhancing the Experience and Outcomes of Patients (Better Healthcare)**: Improving the patient experience of care by providing safe, effective, patient- and family-centered care
- **Reducing per Capita Cost (Better Value):** Providing affordable care

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We have defined the top priorities for FY 2020, consistent with the framework of the Triple Aim. These priorities are set in each of the 4 pillars of our organization – safety and quality, patient experience, engagement (provider and staff), and clinical redesign which are threaded throughout this document. At a high level, these priorities are:

Quality and Safety	• Commitment to establishing, promoting, and sustaining the HRO model; High Reliability Organization (HRO) Practices. • Continue efforts to eliminate hospital-acquired infections and conditions (HAIs/HACs) in partnership with Infection Prevention. • Embed IHI Methodologies to reduce Readmissions, Mortality. • Through Accreditation and Regulatory, continue efforts for Opioid Stewardship. • YNHHS hospitals are proactively dynamic with the changing regulatory landscape and sustain hospital accreditation, licensure and CMS certification. • Public reporting synchronization to ensure system-wide alignment in the reporting processes of adverse events but also in implementing improvement strategies when appropriate.
Patient Experience	• **Communication Training**: building an infrastructure to support this work across YNHHS and will include a focus on sustainment and reinforcement of Enhancing Relationship-Based Communication Training; in efforts to increase staff and provider engagement; increase in Communication with Nurses and Doctors HCAHPS domains; and increase in overall patient satisfaction. • **Responsiveness**: Rounding with Purpose; enhance existing leader rounding programs across the system. The goal is to develop a sustainable leader program that facilitates leaders connecting with staff in their unit, department, or delivery network to understand what matters most to them and work towards removing barriers to achieve excellence. • **Coordination of Care**: The work will be focused on patient experience across the continuum of care; drafting solutions to leverage and coordinate access to ensure improved patient experience; and ensuring alignment and efficient use of resources to deliver a consistent signature of care.
Staff Engagement	• Focus on reducing the number of preventable injuries through education and resource alignment. • Establish an open culture of enhanced reporting. • Establish a new safety event-reporting tool for employees to utilize when they experience an event that did not cause injury or illness, but had the potential to do so (near miss events, instances of workplace violence). • Partner with Human Resources to develop a process for implementation of Fair and Just Accountability (Just Culture). • HPI based learning on how to apply causal analysis to employee events of harm. • Diagnostic Assessment through common cause analysis of employee serious safety events.

Provider Engagement	• Continue to promote mutual respect and cross talk in the health care system • Enhance communication across all practice groups • Encourage increased visibility and communication with administrative leaders • Implement strategies to address employee and medical staff wellness, resilience and professional fulfillment.
Clinical Redesign	• **Inspire others to live our mission:** Establish active bidirectional communication with frontline staff for the solicitation of new ways to improve value for our patients. In addition, we will promote our work by presenting at national conferences and by creating an active publication pipeline. • **Forge new partnerships across our organization:** To drive innovative solutions for these new challenges, we will increase engagement with local centers for innovation. To expand our footprint across the health system, we will engage with internal groups that have missions similar to ours, such as Population Health. We will also actively engage with patients/family advisors, residents, fellows, APRN/PAs and community providers. • **Scale our capabilities across and through the health system:** We will actively teach our project and portfolio management methodologies and disseminate the tools we use to manage our projects. By teaching others our approach, we will catalyze Clinical Redesign efforts both locally and across the health system. • **Engage in highest value opportunities:** In addition to enabling others to execute local Clinical Redesign efforts, our team will focus on more complex, higher-value projects. We will engage with senior leadership on initiatives that directly impact the cost per case and reduce clinical variation.

We have aligned the FY 2020 Corporate Objectives with the performance improvement opportunities identified above Addendum 6.
In summary, the PI Plan provides a comprehensive look at the identified performance improvement opportunities and details our strategies to provide safe, high quality, high value care and unparalleled experience for our patients and their families.

We adopt the definition of quality published by the Institute of Medicine (IOM) in *Crossing the Quality Chasm (2001):* "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." Good quality means providing patients with appropriate services in a technically competent manner, with good communication, shared decision making, and cultural sensitivity.
To assure that the appropriate approach to assessing performance is systematic and that setting priorities, planning and implementing improvement activities achieve and maintain improvement, the Performance Improvement Plan is evaluated for effectiveness annually. Individual initiatives within the Plan are reviewed and reported on regularly throughout the organization. The Plan provides the Board with the requisite information to fulfill its responsibility to oversee the quality of care provided.

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I. VISION

Greenwich Hospital will enhance the lives of the people we serve by providing access to high value, patient-centered care in collaboration with those who share our values of:

- Putting patients and families first
- Valuing all people
- Being empathetic
- Doing the right thing
- Being responsible and taking action

Additionally, Greenwich Hospital will ensure safe patient care, high clinical quality, and operations improvement. Our efforts will be focused on:

- Setting specific system-level aims and overseeing their achievement at the highest levels of governance
- Building an executable strategy to achieve the aims
- Building the improvement capability necessary to achieve the aims

II. PURPOSE

- The Plan is designed to assure success in achieving Greenwich Hospital's mission and vision to:
    - Continuously and systematically plan, design, measure and assess hospital wide functions and processes related to patient care and to patient and staff safety.
    - Support a multidisciplinary approach to improving processes and systems involved in caring for our patients.
    - Support systems which identify errors and potential errors and prevent the occurrence or repetition of errors, through committed resource allocation and expertise.
    - Create a pervasive culture of safety.
    - Assure that staff (medical and hospital) demonstrate competency in performance of their duties.
    - Evaluate and address the needs and expectations of our patients and their families, our staff and the community, engage patients and family members with all members of the care delivery team.
    - Maintain and improve existing activities to comply with regulatory requirements.

III. GOALS

Culture of Safety: a culture of safety is a just culture where there exists "an atmosphere of mutual trust in which all staff members can and do talk freely about safety problems and how to solve them, without fear of blame or punishment" (Institute for Healthcare Improvement).

Culture of Continuous Improvement (Clinical and Operational Effectiveness): a culture wherein everyone is continually looking to improve practices and be involved in an ongoing series of Plan Do

Check Act cycles. It is a high reliability organizational culture that searches for defects, where staff continually seeks to improve our systems in the areas of both clinical and operational effectiveness.

Engagement: meaning everyone (leaders, staff, physicians, nurses, patients, families, Board members) understands the principles of quality and safety, knows the performance of Greenwich Hospital with regards to quality and safety, knows their role in promoting quality and safety and in holding others accountable.

Data Driven and Transparent: this is essential to help drive improvements, set priorities, build trust and manage risk. It includes measuring metrics of improvement, effectively communicating the results to all levels of the organization, when possible comparing results to internal and external benchmarks, and managing an effective standard process for disclosure of adverse events that involve patients, family and staff.

Process for Prioritization: global improvement targets have been established by YNHHS senior leadership, our Board, in concert with senior leadership at Greenwich Hospital and our Quality Council.

PERFORMANCE IMPROVEMENT STRATEGY

GH as part of the YNHHS, aspires to deliver safe, high quality care[1] based upon best clinical evidence, sound clinical judgment and joint decision-making with patients. This aspiration is guided by objectives set forth by the best industry standards for exceptional care. Over the past several years, YNHHS has worked to refine and simplify the mission, vision and value statement as seen below which embodies why and how we work together to provide exceptional patient experiences across the care continuum.

1. *Definition of Quality Care: In 2001, Institute of Medicine (IOM) published Crossing the Quality Chasm and defined quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Good quality means providing patients with appropriate services in a technically competent manner, with good communication, shared decision making and cultural sensitivity". The IOM report further outlines 6 domains of quality care: safe, timely, effective, efficient, equitable, and patient-centered. We use this definition and these 6 domains to drive our approach to quality.*

Success in this long term strategy will be determined by:

1. Zero preventable serious safety events;
2. Top quartile performance in provider and staff engagement;
3. Increased number of patients cared for in core and niche programs (local, regional, national and international); and
4. Top decile performance on publicly available quality, safety and patient satisfaction measures.

In order to execute this strategy, GH utilizes four-pillars to guide our performance improvement work. The 4 pillars are safety and quality, patient experience, engagement and clinical redesign. For all of the work that we do, we divide outcomes in this manner to help staff understand how our strategy aligns with our mission, vision and values.

ORGANIZATIONAL STRUCTURE AND PRIORITY SETTING

Historically, all decisions regarding quality, safety, patient experience, engagement and clinical redesign were decentralized to separate committees. Significant gaps existed between medical staff, nurses and administrators in their communication and decision making.

GH operationalizes PI work into measurable change through a triad of:

- A culture of high reliability and continuous quality improvement;
- A centralized measurement, analytics, education, and coaching core (in the Office of the Chief Medical Officer, Patient Experience, Engagement and Clinical Redesign); and
- A decentralized approach to change, led by a local infrastructure in each service line and on each clinical unit.

In this way we can provide resources, guidance, assistance and leadership while still ensuring that front-line staff, who are best equipped to recognize problems, innovate solutions and maintain practice, are empowered as improvement leaders.

For the safety and quality agenda, we create chartered performance improvement teams to tackle quality improvement problems that span departmental or unit lines. Each year, based on the previous year's performance, YNHHS reprioritizes these quality and safety performance improvement teams. Teams that previously demonstrated sustainable improvement are moved to a sustainability phase which could take the form of a committee or a standing report. In FY 2020, Yale New Haven Health System formalized a number of performance improvement teams to address a range of issues that affect the overall quality of care and treatment we provide to our patients. A complete list of FY 2020 Performance Improvement Teams inclusive of GH is located in Addendum 2.

The patient experience agenda is managed by an interdisciplinary Patient Experience Steering Committee. This group follows a similar process as quality and safety for annually reprioritizing the key interventions needed to demonstrate excellent, compassionate patient care. This group uses a set of guiding principles to focus its strategic work plan:

- Focus on experience of the patients and families, to positively effectuate the scores
- Align the patient experience efforts with quality and safety system initiatives
- Assure consistent leadership and follow through on commitments
- Engage our Physicians and employees to live and abide by the Standards of Professional Behavior
- Celebrate the people doing the work using high reliability practices, and offer praise and acknowledgement with great catches and raising concerns to keep patients safety at the forefront of the work we do.

We want our staff to have equally exceptional experiences where they are engaged in continuous improvement of the care, treatment and services they provide to patients throughout all care settings both clinically and administratively. This year, the employee engagement survey and physician engagement survey were analyzed (after completing a second, comparative physician engagement survey and the annual employee engagement survey) by a team for formal establishment of a priority improvement list which includes disaster preparedness, employee injuries and continued work on provider engagement.

By making it easier to do the right thing for patients, thereby reducing unnecessary clinical variation Clinical Redesign supports better outcomes for patients, providers and the health system, Though not simple or straightforward to accomplish, this process, known as Clinical Redesign has been in place for the past four years. The aim of this program is to complete 90-day rapid-cycle improvements where clinical or operational efficiencies can be realized.

Each year, GH establishes a specific and sensitive list of performance indicators that align with the mission, vision, values, Office of the Chief Medical Officer, Patient Experience and other key leadership groups. To accomplish this, GH completes an environmental scan across the organization to identify a distinct list of priorities. This includes review of datasets, interviews and focus groups with staff, leadership interests and YNHHS identified priorities. From that scan, a grid of strategic priorities is constructed as seen in Addendum 4. This crosswalk of listed strategic priorities is threaded through multiple venues as identified in the organizational structure above for discussion and approval. At these forums, the groups caucus on the impact and feasibility of each of the priorities. Once the priorities are set, interdisciplinary teams are established to work on the designated areas of focus. Each team has a charter document that defines the team membership with corresponding roles, the scope of the team as well as the measurements that will define their ultimate success as a team. Although this process is sensitive to the key indicators of the organization, this process is not designed to outline all PI activities or innovations throughout the organization. See Addendum 7 to review the YNHHS Performance Improvement Plan.

AUTHORITY AND RESPONSIBILITIES

QUALITY/SAFETY COMMITTEE OF THE BOARD OF TRUSTEES

The Quality/Safety Committee of the Board of Trustees has the responsibility to review the Plan's activities and report to the full Board.

QUALITY COUNCIL

The Quality Council is a working group of clinical and ancillary support leaders intended to support our Administrative team, our organization's departments and our medical staff in their oversight of quality and safety.

MEDICAL EXECUTIVE COMMITTEE

The Medical Executive Committee is responsible to the Board of Trustees for oversight of the quality of the medical staff's clinical work in the hospital. The Medical Executive Committee reviews safety and quality issues, and identifies clinical areas requiring evaluation.

MEDICAL STAFF

The functions of the Medical Staff are carried out through the various committees of the Medical Staff:

- Use of blood and blood components.
- Invasive and non-invasive procedure review.
- Use of clinical practice guidelines.
- Pain management.
- Use of medications.
- Utilization management activity and the efficiency of clinical practices.
- Medical peer review.
- Review of sentinel events, root cause analyses and other patient safety issues.
- Infection control.
- Management of information (medical record review).

In addition to promoting and supporting many independent clinical initiatives, it is the Medical Staff Committees' responsibility to satisfy The Joint Commission and Connecticut Department of Public Health requirements for review of clinical processes of care and oversight of physician performance.

ADMINISTRATIVE COUNCIL

With authority delegated by the Board of Trustees, the Administrative Council is charged with allocating the resources to assure that the goals of the Quality Assurance/Performance Improvement Plan were achieved in an efficient and effective manner. The Administrative Council provided resources through budgetary allowances, staff deployment, sponsorships of local clinical improvement teams, and personal participation in task forces or committees.

NURSING LEADERSHIP

Nursing participates in the performance improvement process through clinical service lines, departmental plans and initiatives, interdepartmental projects and Shared Governance councils, and nursing performance indicators. Improvement team efforts focus on improving patient outcomes, employee safety, hospital throughput, nursing documentation, medication safety and nursing retention and education.

Greenwich Hospital's distinguished recognition as a Magnet hospital is the highest honor of nursing excellence that any hospital can achieve and this affords us the opportunity to share best practices with colleagues. The journey continues as we prepare for our Magnet Re-designation.

DEPARTMENTAL PERFORMANCE IMPROVEMENT

All administrative staff and department directors participate in organization-wide as well as local improvement strategies, and routinely reported on progress and results to Quality Council or other supervising staff.

SERVICE EXCELLENCE STEERING COMMITTEE

The mission of the Service Excellence Steering Committee is to champion the voice of the patient as it relates to quality, service and satisfaction and to initiate improvements at all levels of the organization based upon that feedback.

The Service Excellence Steering Committee is responsible to:

- Conduct weekly evaluation of patient and family feedback.
- Initiate immediate improvements and process improvement teams based upon patient and family feedback.
- Communicate patient feedback and service excellence initiatives to all levels of the organization.

The Board of Trustees has the final authority and responsibility for the overall administration of a comprehensive and integrated PI Program. This body is ultimately responsible for not only communicating safety and quality, patient experience, provider/staff engagement and clinical redesign practices and providing adequate resources, but to ensure that actions are taken to correct identified problems and address all opportunities to improve patient care, treatment and services in a timely manner. The Board of Trustees has final authority and responsibility for the assurance of a flexible, comprehensive and integrated quality assessment and performance improvement program.

The Board of Trustees, Hospital Administration and the Medical Executive Committee have the duty and responsibility to establish a plan consistent with the mission, vision and strategic plans of Greenwich Hospital and the Yale New Haven Health System. The Administrative Council, Medical Executive Committee and Quality Council will determine the priorities for improvement. The Administration will allocate the required resources.

The Board of Trustees delegates accountability for review of the program to the Quality/Safety Committee of the Board of Trustees that regularly reports to the Board. The CEO of Greenwich Hospital will ultimately be responsible to ensure successful execution of the PI plan.

The GH Chief Medical Officer has the delegated overall responsibility for maintaining quality of clinical medical practices/patient care throughout the organization. He/she is responsible for the effective implementation of the PI Plan elements related to services & programs under his/her direction. He/she

is responsible for review, revision and implementation of the medical staff bylaws and the credentialing/privileging processes related to medical staff & independently functioning nursing and clinical support staff under his/her direction. He/she is responsible for the oversight of medical staff monitoring and evaluation functions, for resolution of safety and quality, patient experience, provider/staff engagement and clinical redesign issues appropriate to that level and for formulating recommendations to the Board.

The GH Chief Nursing Officer is responsible for the effective implementation of the PI Plan elements in those programs and services under his/her direction. He/she is responsible for oversight of support service monitoring and evaluation, and for the resolution of safety and quality, patient experience, clinical redesign and provider/staff engagement issues appropriate to that level and for formulating subsequent recommendations to the GH Chief Medical Officer or GH Medical Executive Committee.

The System Chief Nursing Executive (CNE) is responsible for the effective implementation of the PI Plan elements in those programs and services under his/her direction. He/she is responsible for oversight of support service monitoring and evaluation, and for the resolution of patient safety and quality, patient experience and clinical redesign issues appropriate to that level and for formulating subsequent recommendations to the Chief Medical Officer or MEC.

The System Chief Quality Officer is responsible for developing and overseeing the implementation of a common safety and quality agenda across all inpatient and ambulatory Yale Medicine and Yale New Haven Health practice sites. The CQO is responsible for the oversight of performance improvement work against publicly reported quality indicators as well as chartered performance improvement teams.

The System Executive Director/ Director(s) of the Office of the Chief Medical Officer are responsible for the overall coordination and integration of the PI Plan and Office of the Chief Medical Officer program staff, including safety, provider/staff engagement and clinical redesign. They are collectively responsible for developing and maintaining a program that encompasses the following goals: analyzing service delivery systems before adverse events occur to identify clinical redesigns that will reduce the likelihood of error; expedient identification and reporting of adverse events; reviewing and analyzing adverse events to identify root cause and system changes needed to reduce the likelihood of recurrence; and, disseminating information so that lessons can be learned and appropriate actions taken to minimize risk. They oversee the ongoing analysis of facility specific data, review of current patient safety goals, and safety events. This will provide the framework for the ongoing work of being a comprehensive high reliability organization. They serve as consultant(s) to the Chief Medical Officer, Chief Nursing Officer and all other executive-level individuals or groups on all matters related to the Office of the Chief Medical Officer and are the liaison for accreditation surveys and external reviews. They oversee the Clinical Redesign program, establishing goals and objectives for the teams that are aligned with quality priorities within the organization. They oversee the completion of the all Joint Commission, Department of Public Health and the Center for Medicare and Medicaid Services (CMS)

required activities. They maintain the confidentiality of all organizational performance improvement processes and reports PI improvement results to the quality subcommittee of the Board of Trustees.

The Office of the System Chief Medical Officer Staff, including CMO Medical Directors provide technical consultation and facilitation to committees, services and service lines; participate in the development of performance measures, data collection and aggregation; conduct periodic reviews of committees, programs and services to evaluate compliance with accreditation standards; participate as working members of committees and serve as facilitators for all quality, safety, patient experience, provider/staff engagement and clinical redesign processes including, but not limited to performance improvement, Root Cause Analysis and Healthcare Failure Mode Effects Analysis teams. They track and trend all required and organizationally selected data, providing it to various Councils and other bodies to facilitate cost effective, efficient, and appropriate care delivery systems. They provide consultation to the Chief Medical Officer, Chief Nursing Officer and all other executive-level individuals or groups on all matters related to implementing this plan and interpret applicable standards and regulations.

The System Chief Patient Experience Officer and Chief Medical Experience Officer are collectively responsible for coordinating, monitoring and evaluating patient experience information including patient satisfaction data by collaborating with both the Patient Relations staff and the clinical leadership. This includes tracking all registered patient compliments and complaints, comments regarding inpatient care through inpatient visits and providing aggregate data with analysis of trends and patterns to the Patient Experience Steering Committee, and Service Lines/Departments/Services as applicable. Analyzing and reporting on patient satisfaction survey findings, and regularly reporting to managerial and governance groups which will the help inform the plan, interventions and evaluations of the program.

Each Service Line and Department is responsible for assuring that a system is in place to measure and improve safety and quality, patient experience, provider/staff engagement and clinical redesign processes related to care, treatment or service specific to the patient population, staff and programs under his/her direction. Each leader is responsible for:

- Promoting staff involvement and participation in PI activities and a culture of high reliability through utilization of the CHAMP behaviors;
- Reviewing all service line or service level PI reports and make decisions based upon thorough analysis of data and the recommendations of staff;
- Ensuring that when a problem or an important opportunity to improve care or service is identified, action is taken to improve that care/service or to correct the problem;
- Assessing the effectiveness of the action taken through continued monitoring;
- Incorporating findings from PI activities into the privileging/re-privileging process (where applicable);
- Assuring that staff/performance improvement meeting minutes include analysis, planned actions, timeframes and staff assigned and are shared with those staff under his/ her direction;
- Utilizing findings from PI activities in the continuing education process, as appropriate;
- Reporting PI findings to leadership as appropriate, via their service minutes;

- Performing an annual appraisal of their PI activities and update/revise their goals annually based upon the results of the annual appraisal;
- Analyzing the data for performance measures of his/her service line at staff meetings and planning and testing changes to improve performance; and
- Reporting performance at least annually to the designated leadership group that reaches the level of the Board.

All GH Staff are responsible for practicing HRO behaviors while providing care, treatment or service in accordance with accepted evidence-based standards of practice for his/her service line or service, for actively participating in activities which are designed to improve patient care and for identifying and reporting near misses and serious safety events and participating in the efforts to learn from them and change systems to enhance safety. Safety and quality practices and activities; staff are responsible to seek consult from an external body if they feel that concerns do not result in timely response by contacting The Joint Commission at https://www.jointcommission.org/report_a_complaint.aspx or by fax to: 630-792-5636.

Global improvement targets (corporate objectives) are established by both GH and YNHHS Board of Trustees structure as referred to (Addendum 3), in concert with the governance and management structures. Several interdisciplinary groups of senior managers and clinicians are charged with contemporaneous monitoring and achievement of improvement targets. Over the past few years, GH has developed population-specific or clinical practice-specific Quality Councils in most clinical areas, as well as enhanced unit-level and multidisciplinary quality improvement activities through the leadership of unit based Medical Directors, Advance Practice Providers and Patient Service Managers. These clinical leadership teams will then, in turn, develop operational and tactical strategies for adoption. This structure will work on a balanced agenda of the four areas listed above. The Joint Leadership Committee is designed to provide rigor to multidisciplinary priorities of the organization and ensured consistent reporting and management oversight.

DATA MANAGEMENT ASSOCIATED WITH PERFORMANCE IMPROVEMENT

GH continues to extensively utilize and improve data monitoring and reporting functionality in the Epic-based platform that links providers within the health system. This allows all staff, whether a frontline staff person or senior hospital executive, easy access to hospital performance metrics. YNHHS Joint Leadership Committee will sponsor Clinical Redesign and Joint Data Analytics Team projects to develop accurate, timely, and operationally relevant dashboards on key metrics for nurse managers, physician leaders, and all staff. This will make a substantial contribution to our vision of being data-driven and transparent, and enhance our ability to intervene when problems arise. GH utilizes Helix, which enables us to include external data (e.g. Press Ganey scores) on Epic-based dashboards enabling us better analysis of our performance. GH utilizes both event reporting and internal surveillance methods to prioritize our work and identify gaps in safe and compassionate patient experiences. In addition to understanding our internal performance, GH participates in regional and national initiatives, comparing our performance to nationwide standards.

In FY 2020, GH will participate in the following benchmarking databases:

- Vizient: Clinical Database Resource Manager (CDB/RM), Operational Database (ODB), and Nursing Quality Database (NQDB)
- National Database for Nursing Quality Indicators (NDNQI)
- Connecticut Hospital Association, CHIME Database
- Premier
- CMS National publicly reported metrics (Hospital Quality Alliance)
- Press Ganey and HCAHPS

Additional registries include, Get with the Guidelines-Resuscitation, Get with the Guidelines-Stroke (a Joint Commission Certification), CATH PCI (NCDR) and others internal metrics such as D2B (Door two Balloon). Addendum 5 displays the chart abstraction measures and registries GH participates in with a detailed list by definition.

Participation in these databases allows GH staff to compare our performance and share best practices with other organizations. Continual adoption of best practices and evaluation of gaps in our performance utilizing transparent data promote a culture of safety, quality monitoring, quality improvements and enhancements in patient experience.

Additionally, in FY 2020, GH will monitor and evaluate the following to assure quality of care, treatment and services and act as needed for improvement. These have been selected to proactively and reactively manage findings from accrediting bodies and root cause analyses:

(Monitoring and Evaluation Activities)

• CMS performance measures
• patient safety and clinical risk monitoring (near miss/precursor/serious safety events)
• clinical services committee monitoring functions per Bylaws
• intra- and/or inter-service line key functions
• moderate and deep sedation
• use of restraints and seclusion
• medication management
• patient/family education and patient/family satisfaction
• use of blood and blood components
• alarm fatigue
• morbidity and mortality reviews

• protected peer reviews
• environmental safety program findings, including safe medical device reporting, positive findings from alerts and recalls, disaster planning issues, etc.
• utilization review reports
• infection control reports
• ethical practice in the care and treatment of patients
• outcomes of resuscitations
• tumor case registry
• disruptive behavior
• clinical redesign initiatives
• employee injuries and exposures
• unsigned verbal medication orders

COMMUNICATION

The communication of information to necessary individuals and forums is essential. Reporting of monitoring and evaluation activities is accomplished by their inclusion in staff and committee meetings. Integration of organizational PI information occurs through the sharing of relevant information between committees/service lines/services/sections, through referrals from Office of the GH Chief Medical Officer and through regular service and committee reporting to the Administrative Council and relevant GH managerial and governance structures, which, in turn, bring information forward to the Medical Executive Committee and Board of Trustees. Communication occurs horizontally, vertically and laterally, with information and feedback continually flowing in one or more directions.

The monitoring and evaluation activities are continuous, comprehensive, planned and systematic; developed collaboratively among various disciplines, when appropriate; use measures and targets which are developed, approved and analyzed by the staff; are accomplished by the collection of provider specific data, trending and comparison of cumulative results and an in-depth review of any measures which deviate from the norm or are out of statistical control; result in effective actions to resolve problems; are continual, in an effort to ensure that improvements in care, treatment and service and subsequent performance are sustained; and integrated to assure that information derived from service line/service/committee monitoring and evaluation activities is shared with other service lines/services/committees and is merged, as appropriate, with information obtained from other quality activities.

All Service-line representatives or their designees will take minutes where performance improvement activity is discussed for memorializing purposes and circulate as appropriate in a timely manner. Hospital-wide functions, including, Patient Experience Steering, etc. will forward their minutes for cataloging with Accreditation and Regulatory Affairs (ARA). Minutes will identify items for Information and/or Items for action as applicable.

In addition to these methods of communication, GH has a concentrated and purposeful media strategy to keep the employees, medical staff and patients apprised of performance improvement efforts. GH has recognition programs for employees regarding patient safety (Great Catch), patient experience (HEROES, Peace Award, and $2 bill), employee engagement and clinical redesign (WorkSmart). These programs are in place to not only recognize staff but communicate to the larger community about our efforts to continuously improve. GH also have video series' on various topics, monthly management meetings, quarterly open forums and also regular print/web publications.

Appraisal of this PI plan is completed annually by the Chief Medical Officer staff as a draft in the first quarter of the fiscal year. Service Lines/ Departments will be provided an opportunity for comment and correction. Following a review of these evaluations, the CMO office will finalize the plan which will be presented to the Quality Council and Medical Executive Committee for endorsement, signed by clinical and administrative leadership, and forwarded to the Board of Trustees for approval.

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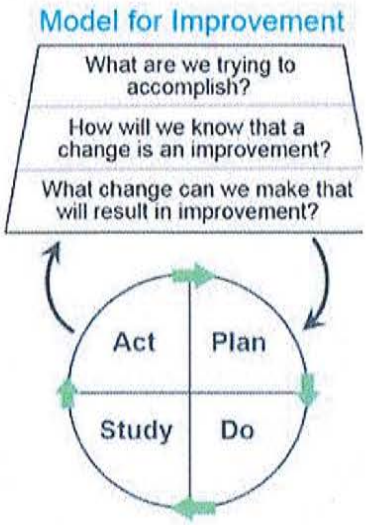
PERFORMANCE IMPROVEMENT PRIORITIES

With the completion of the priority setting method and data management process defined above, GH has defined priorities for FY 2020 with corresponding measurements that outline what will define success of the priority. These priorities will be systematically targeted for outcome improvement over the fiscal year. In FY 2019, GH solidified its commitment to embody and subscribe to one performance improvement methodology. The enterprise has adopted the Institute for Healthcare Improvement's Model for Improvement. The model for Improvement is a simple yet powerful and effective method for accelerating improvement in healthcare. This model has successfully been adopted world-wide as the standard for healthcare delivery improvement.



The model has 2 major components (depicted here):

- Three fundamental questions (representing the aim statements, measures, and change concepts.)
- The Plan Do Study Act (PDSA) cycle to test changes in real work settings. The PDSA cycle is also the foundation associated with the Magnet journey that several of the delivery networks has chosen to participate.

Although historically many components of the IHI Model for Improvement may be in place, GH is on a journey to systematically embed this process across the enterprise. When GH identifies opportunities for improvement, leaders will set priorities for further evaluation. The IHI model promotes the creation of a multidisciplinary team (preferably led by an MD/RN dyad), setting a SMART aim statement, establishing a battery of metrics, developing innovative changes/interventions, structured test (pilot) of these changes, implementing changes when appropriate, and then rapid, wide-spread scaling of successful changes. This methodology incorporates all the traditional quality improvement tools as well as those from other improvement methods such as Lean (Toyota Production System) and Six Sigma:

- Cause and Effect Diagram: Also known as the Ishikawa or fishbone diagram which helps analysis of root causes contributing to a problem
- Key Driver Diagram: Intuitive display to understand where we're going with our work
- Failure Mode and Effects Analysis: Also used in Lean Management and Six Sigma, FMEA is a systematic, proactive method for identifying potential risks and their impact

- Run Charts/Control Charts: These charts help to monitor performance of both processes and outcomes; also for visualize of common cause and special cause variation
- PDSA Worksheet: PDSA rapid-cycle testing helps teams assess whether a change leads to improvement using a scientific method

This improvement method can be adopted for use by various task forces and/or performance improvement teams across the healthcare delivery system. Regardless of specific improvement vehicle, YNHHS intends to utilize this systematic approach for all organized efforts over time. These teams are governed by the respective committee of the System Quality Committee (SQC) and the efforts of these teams are regularly presented to the SQC or the appropriate committee.

In addition to the IHI Model for Improvement, Yale New Haven Health has sponsored a program termed Clinical Redesign for the past several years. Clinical redesign program employs a rigorous process of identifying an appropriate project, identifying an executive sponsor, clinical and operational leaders, (usually) a physician champion, and a multidisciplinary team which must include a project manager. Projects are organized around a strict 90-day timeline, and project managers convene meetings, usually on a weekly basis, following a kickoff with a charter. The project manager ensures that the team is well supported with data analytics to ensure that the key performance metrics are available on a regular basis and to ensure that improvements that arise from the clinical redesign can be tracked and reported through the analytic platform—often using a 'dashboard.'

Before a Clinical Redesign begins, it must be carefully reviewed to ensure it meets a number of "Elements of Success." Projects without full engagement, available and measurable data, or evidence of ability to address "pain points" are less likely to succeed and may not be considered. Once begun, rigorous adherence to milestones and deadlines ensures most efficient use of the team's time and improves likelihood of achieving a result. Project managers help to remove bottlenecks—such as data needs, interface design within the electronic record, or disagreement among clinicians about how to change process. Clinical Redesign work is overseen by a System leader and a steering committee charged with ensuring the resources of the project management team coupled with analytic and clinical resources are engaged to maximize value added. Outcomes of change must be measured throughout the process, and metrics must continue to be reviewed long after the Clinical Redesign is complete to ensure the benefits are sustained. Clinical Redesign projects intended for System wide implementation will be evaluated by SQC for approval and allocation of resources.

Quality and Safety

High reliability organizations are marked by the following characteristics:

- Preoccupation with failure

- Reluctance to simplify interpretations
- Sensitivity to operations
- Commitment to resilience
- Deference to expertise

The GH commitment to establishing, promoting, and sustaining the HRO model includes the following:

a. Training:
   - Since 2012, all YNHHS employees have been required to receive basic HRO training
   - In FY2019, HRO training was included in an updated new employee orientation (NEO) program across YNHHS
   - Leadership has been expected to attend an additional 4 hour formal classroom training on the science and utilization of HRO tools
   - Formal in classroom Just Culture training for 1,500+ YNHHS directors/managers is being provided
   - On-going training is offered at the Institute for Excellence at 300 George Street and also offered at all delivery network sites
   - There are presently 8 certified Just Culture trainers who serve as instructors and stewards of the Just Culture education program
   - Specialized training associated with RCA, HFMEA and other event management processes,
   - Safety Coach training,
   - Disclosure training (CLEAR)

b. Leadership methods:
   - Safety Stories,
   - "Rounding to Influence"
   - All YNHHS delivery networks participate in a morning safety huddle each day including all weekends and holidays
   - Each delivery network follows a SOP focusing on:
     - Daily operational status including census and bed flow
     - Look back at the prior 24 hours for any significant issues to be shared
     - Look ahead to the next 24 hours for concerns
     - Reporting of Good Catches by staff in preventing harm
     - Identifying potential issues to be shared across YNHHS

c. Staff methods:
   - Adoption and continued use of a common set of statewide-approved (in collaboration with the Connecticut Hospital Association (CHA) expected safety behaviors for employees

known as "CHAMP" behaviors (Addendum 9) that all staff are expected to employ as part of their daily work,

- Implement clinical unit based trained HRO safety coaches that are available as cultural supports regarding the CHAMP safety behaviors,
- Implementation of a Great Catch Program to foster a culture of safety at GH through recognition of staff who successfully prevent patient harm by using high reliability behaviors and to share these stories throughout the organization.

d. Structural/operational program support:
   - Administration and evaluation of the Safety Culture was performed as part of the Employee Engagement Survey, as required by The Joint Commission, during the fiscal year to assess culture of safety and develop and implement strategies to sustain HRO efforts. The 2018 full survey showed significant positive process across the organization with opportunities for improvements around resources for safety, prevention and safety event reporting. The most recent 2019 "pulse" survey showed consistent measures. A full Employee Engagement Survey is scheduled to be conducted in 2020.

e. Clinical event management:
   1. The electronic platform for event reporting that the YNHHS presently utilizes is called RL Solutions and will see a system-wide upgrade in FY 2020.
   2. Using the Healthcare Performance Improvement (HPI) classification for all reported events which includes near misses, precursor and serious safety events (depicted in Diagram 1 below).
   3. Using Healthcare Performance Improvement methodology, systematically completing root cause analysis on all serious safety events, all Department of Public Health reportable events, and high risk pre-cursor safety events to understand the individual and system failures that led to patient harm and implement appropriate action plans based on the understanding of the causal factors leading to the error.
      - Using Apparent Cause Analysis for significant precursor or near miss events in order to remediate conditions adverse to quality and support future trending and monitoring efforts.
      - Systematically analyzing events within a delivery network to identify causal factors and common causes as an annual expectation that can lead to a structured process improvement.
      - Support for disclosure throughout a clinical event

   4. The CLEAR Disclosure program (**C**ommunication **L**eads to **EA**rly **R**esolution) was established to provide support, training and tools for providers and patients for these critical conversations. CLEAR has trained physician peer-coaches throughout the health system who are available to

help plan and organize disclosure conversations, participate in those conversations if requested by the attending and assist in appropriate follow-up discussion planning. Experience in many other academic health centers shows that such effective conversations create a healthy and more transparent environment in sometimes difficult situations and often reduce the number of new liability claims and total liability costs.

Diagram 1 – HPI Safety Event Classification

Through this comprehensive programming that began in 2012 to classify events, Yale New Haven Health has since achieved 80% reduction in serious safety events. Currently, Greenwich Hospital has had an 84% reduction in SSEs (as of FY 2019 quarter 4). We aspire to have a safety culture transformation that will maintain our efforts and continue to set forth high reliability techniques and workforce engagement to reduce serious safety events.

1. <u>Reducing Hospital-Acquired Infections</u>

Healthcare-associated infections (HAI) continue to adversely affect the health of patients and are associated with high costs to the healthcare system. Accordingly, healthcare systems must continue their efforts to eliminate these hospital-acquired infections.

In FY 2019, YNHHS continued to monitor infection rates across all Delivery Networks for the prioritized HAIs which include central line associated bloodstream infections (CLABSIs), catheter associated urinary tract infections (CAUTIs), colon and abdominal hysterectomy surgical site infections (SSIs) and infections with organisms commonly acquired in hospitals: *C. difficile*, methicillin-resistant

Staphylococcus aureus (MRSA) bacteremias. In FY 2020, prevention strategies will continue to be developed and implemented for these prioritized HAIs. Specifically, the metrics in this area are:

- **CLABSI**: The number of infections in accordance with Corporate Objectives.
- **CAUTI**: The number of infections in accordance with Corporate Objectives.
- ***C. difficile* LabID events**: The number of infections in accordance with Corporate Objectives.
- **SSI for colon and abdominal hysterectomy surgeries**: The number of infections in accordance with Corporate Objectives.

2. Reducing Hospital Acquired Conditions

In FY 2019, efforts related to reduce all PSI events was the overall focus. In FY 2020, efforts related to the reduction of peri-operative pulmonary embolism/ deep vein thrombosis (PE/DVT), will be coordinated through the System PE/DVT Performance Improvement Team. In FY 2020, strategies will be developed to reduce the incidence of this patient safety indicator.

Specifically the goals in this area are:
Significantly reduce Hospital-Acquired Conditions through the work of the established FY 2020 Team(s): System (PE/DVT) PI Team to reduce PSI12 events.

Patient Safety and Adverse Events Composite (PSIs)

• PSI15 Accidental puncture/laceration
• PSI12 Perioperative PE/DVT
• PSI06 Iatrogenic pneumothorax
• PSI03 Pressure Ulcer
• PSI08 In hospital fall with hip fracture
• PSI10 Post-operative acute kidney injury/dialysis
• PSI11 Post-operative respiratory failure

• PSI14 Post-operative wound dehiscence
• PSI13 Post-operative Sepsis
• PSI09 Perioperative hemorrhage or hematoma
• *PSI04 Death among Surgical Inpatients*
• *PSI12 (PE/ DVT) Pulmonary Embolism/Deep Vein Thrombosis*

Patient Experience

In FY 2020, the strategic objectives of the patient experience domain are aligned with the system priorities, which include to:

- Structurally align the organization around patient experience
- Continue commitment with weekly patient experience report outs, facilitated by CEO

- Build YNHHS cohesive patient experience strategy with focus on key priorities based on feedback from our patients and families:
  1) Communication: Reigniting the spirit of caring.
  2) Responsiveness: Rounding with Purpose

Staff Engagement

The Staff Engagement initiatives for FY 2020 will continue to focus on employee health and safety using data from the 2018 Employee Engagement Survey to set goals.

The 2018 survey reflected improvement in staff perception of efforts to improve workplace safety, but there is still work to be done to effectively communicate current initiatives and their impact on the environment. A goal for 2020 will be to enhance an open culture of reporting, while fostering a collaborative learning environment to drive improvement.

Priorities endorsed for FY 2020:

Data Management – Employee Injury Data

The first step in the creation of The Injury Dashboard was proper identification and classification of injuries, which was completed in early 2017. This standardization of process will make it possible to benchmark and set internal goals by injury type and job family.

Managers will be re-educated on the use of the dashboard concurrent with a renewed effort for timely management investigation and reporting of workplace injuries. The re-education supports strategic alignment with the corporate objective to improve time lag of manager completion rates of injury reports. Utilize central repository of data to allow a focused approach to action planning for employee injuries.

- Updates to the Employee Injury / Exposure Report will allow the team to classify and quantify measures taken to correct hazards and mitigate future risk
  - This information will be used to set baseline metrics for future years
- SSE classification system
  - All SSE's will receive Root Cause Analysis (RCA).
  - All PSE and NME will be tracked and trended and may be subject to an RCA.
- Top three injury types and top three injury departments will require action plans. Action plans will be a collaborative effort between service line leaders and employee safety team.

Culture – Employee Safety

- Establish an open culture of enhanced reporting.

- Establish a new safety event reporting tool for employees to utilize when they experience an event that did not cause injury or illness, but had the potential to do so (near miss events, instances of workplace violence).
- Partner with Human Resources to develop a process for implementation of Fair and Just Accountability (Just Culture).

Blood and Body Fluid Exposures

- Utilize central database to identify top 3 exposure types.
- Develop action plans as appropriate; track and trend.
- Continue unit-based initiatives to reduce needle stick injuries and splash exposures.

Aggressive Behavior:

Renewed efforts will focus on the reduction of assaults and aggressive behaviors. The creation of the Workplace Violence Prevention System Committee and governance will support initiatives across the health system and ensure appropriate education and communication. Tools such as a flag in the EMR to alert caregivers to potentially aggressive behaviors will be monitored by a sub-set of this committee on a regular basis to ensure no adverse impact on patient care. In addition, areas that have the most frequent occurrence of injuries from aggressive behavior will receive focused in-service training on identification and de-escalation techniques. Alignment with the BIT (Behavioral Intervention Team) and CISM (Critical Incident Stress Management Team), among others, will ensure appropriate resources are engaged and deployed.

The committee will include the identification of the best practices internal to the Health System as well as those coming out of CHA recommendations. Subcommittees of system wide under task force will address:

- Training and education
- Documentation
- Data management
- Communication

Communication of these initiatives will be key to increasing engagement scores in this area.

Other safety specific initiatives in 2020 expanding Environment of Care rounds to include identification and correction of potential hazards to employees:

- HPI based learning on how to apply causal analysis to employee events of harm.
- Diagnostic Assessment through common cause analysis of employee serious safety events.
- Partnership with Patient Safety and Joint Data Analytics to research future state of safety event reporting.

- Expansion and re-chartering of Employee Safety Committees by delivery network and at the system leadership level.
    - Governance structure of Workplace Violence Committees will drive systematic efforts around WPV prevention programs.

Provider Engagement

Medical Staff Engagement- Improving engagement and well-being of our Medical Staff continues to be a priority at YNHHS. In 2017 the first System wide Medical Staff Engagement Survey was launched. Each Delivery Network developed initiatives to address the concerns raised locally. Medical staff members that were also on faculty at the Yale School of Medicine raised a concern that they were not clear as to whom the questions were relative to, their Delivery Network Hospital or the School. The first joint engagement survey of Yale New Haven Health System and Yale School of Medicine was launched in the spring of 2019 to address this concern and to work jointly on addressing issues with engagement. There were many common themes. Addressing these concerns will continue to be a major focus of our engagement efforts and we plan to address these collaboratively with all the System Delivery Network Hospitals and Yale School of Medicine. Major themes to improve engagement have been identified and set the priorities to be addressed.

- **Continue to promote mutual respect and cross talk in the health care system**
    - Promote social activities to bring the medical staff and faculty together
- **Enhance communication**
    - Redesign the Medical Staff Portal and improve functionality
    - Develop a standardized process for the cascade of information
- **Encourage increased visibility and communication with administrative leaders**
    - Redesign the Medical Staff Portal and improve functionality
    - Empower Leadership (which also includes Department Chairs and Section Chiefs) to address specific issues raised by their medical staff and faculty Foster regular two way communication such that the medical staff and faculty feel that have a voice and that their input is important.
- **Address Work place issues**
    - Medical Staff and Faulty Wellness and addressing burnout
        - Establish a Wellness program with leadership, infrastructure and dedicated resources
    - Decrease the burden the EMR has on clinical practice
    - Continue to support the Virtual Scribes for physicians
- **Valuing our medical staff/faculty**
    - Involve medical staff and faculty in decision making process
    - Place value on the clinical and non-clinical services that our medical staff provide

- Work with our trainees and APP's to promote and foster unity and collaborative work

Clinical Redesign

The Clinical Redesign methodology focuses on: 90 day rapid cycle projects, aggressive and dedicated project management, tight relationships with Epic data acquisition and JDAT leadership, a heavy reliance on data acquisition and aggregation, and a structure that emphasizes decision making and execution of operational changes. The priority projects for Clinical Redesign include those that improve patient-centered outcomes, increase efficiency, decrease adverse events, and optimize utilization of resources. The critical leadership for these projects occurs locally with dedicated physician team leads and an integrated and supported clinical redesign team at the service line/clinical service levels. These teams help formulate the priorities, identify key interventions and assume accountability to ensure these changes are sustained. Each team has a dashboard to monitor clinical improvements in the care.

Trauma Level III

'In 2020, preparation and implementation will continue for a site visit and future certification of Greenwich Hospital becoming a Level III Trauma Center. Performance metrics, care evaluation and case review will be major initiatives in this program.

SUMMARY

This GH PI plan for FY 2020 outlines the priority efforts to improve our performance in each of the "Triple Aim" objectives, using our 4-pillars. As we continuously improve and refine our systems of safety and quality, patient experience, employee engagement and clinical redesign, we can develop standards of patient care and experiences that will distinguish us as providing unparalleled value.

We have set forth an aggressive agenda to systematically improve all four of these pillars using evidence based practices that are benchmarked against appropriate peer groups. The priorities that have been set are done so in an interdisciplinary manner with careful consideration to impact and feasibility as well as overall organizational prioritization with the ultimate goal of providing a highly reliable patient experience.

Throughout this document, we have described our organizational structure and communication methods that will foster our ability to move this plan forward as well as our plan for measurement of our success in these pillars which are italicized in blue. As the year progresses, we must keep a careful eye on our value equation; by increasing the quality and decreasing the cost. Clinical redesign, using

clinical and financial data, quality variation indicators, EPIC generated data and individual physician dashboards, provides powerful tools and quality improvement processes for clinical teams to utilize. As we improve quality variables and reduce cost, we will broaden our commitment to these efforts.

Yale NewHaven Health Greenwich Hospital

SIGNATURES

Norman G. Roth
President

3/6/20
Date

James R. Sabetta, M.D.
Chief of Staff

3/6/20
Date

Mark Chrostowski, M.D.
Chairman, Medical Executive Committee

3/6/20
Date

Felice R. Zwas, M.D.
Chair, Quality/Safety Committee of the Board

3/6/20
Date

Arthur Martinez
Chairman, Board of Trustees

3/25/20
Date

Spike Lipschutz, M.D.
SVP Medical Services

3/5/20
Date

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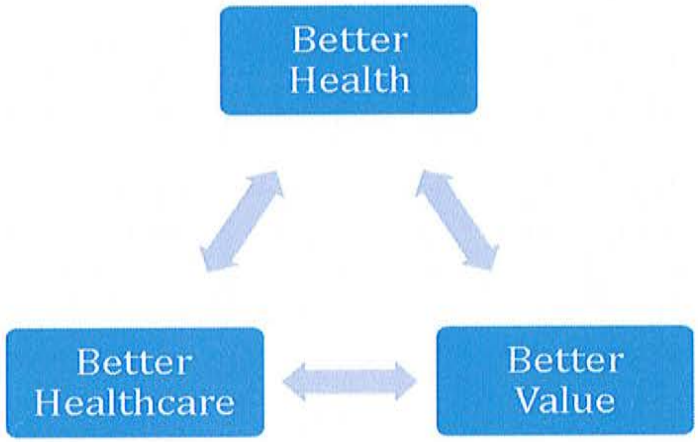
ADDENDUM 1

THE TRIPLE AIM

In 2008 the Institute for Healthcare Improvement proposed a framework for improving quality of care that has come to be called the Triple Aim: "improving the individual experience of care; improving the health of populations; and reducing the per capita costs of care for populations." (Berwick DM, Nolan TW, Whittington J. Health Aff May 2008 vol. 27 no. 3 759-769)

In 2011 the US Department of Health and Human Services adapted this framework in writing the first US National Quality Strategy, mandated by the Affordable Care Act, and it has since been adopted as the organizing strategy for numerous public and private health organizations. YNHHS has adopted the Triple Aim as an overarching strategic framework for our performance improvement work, which we have characterized as:



In our previous hospital-centric care model, YNHHS focused primarily on improving quality and safety (Better Healthcare). We now continue our expanded vision to encompass population health (Better Health) and value (Better Value). It is no longer sufficient to focus entirely on activity within the walls of the hospital or in physicians' offices. We are now part of a larger, nation-wide re-structuring of health care focused on keeping populations of patients healthy, avoiding unnecessary procedures and hospitalizations, and managing patients across the full continuum of care. As payment models change to encompass all aspects of the "triple aim," the Office of the Chief Medical Officer must support systems of care that improve the value of the healthcare we provide. Improving value (Value = Quality/Cost) requires that we develop strategies and processes to measure and improve both the numerator (quality) and the denominator (cost) of the value equation.

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ADDENDUM 2

FY 2020 Performance Improvement Teams
CAUTI & CLABSI Performance Improvement Team_System
C. *difficile* Performance Improvement Team_System
Pneumonia Readmissions Performance Improvement Team_BH, GH, YNHH
PSI: PE/DVT Performance Improvement Team _System
Mortality_System

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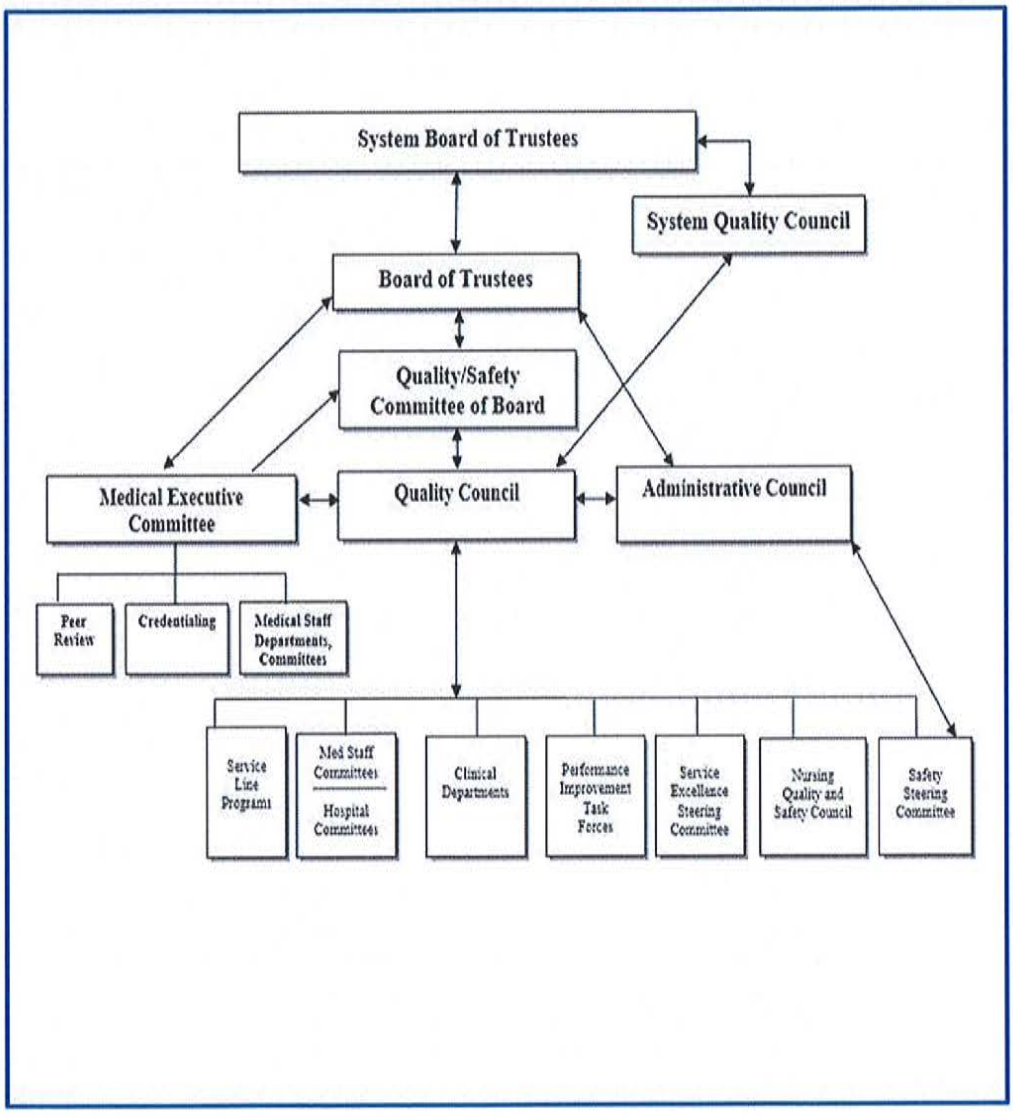
ADDENDUM 3

Quality & Safety Reporting Algorithm

(excerpt from the 2019 PI Plan, page 3)



Quality Reporting Algorithm.pptx
9/6/19

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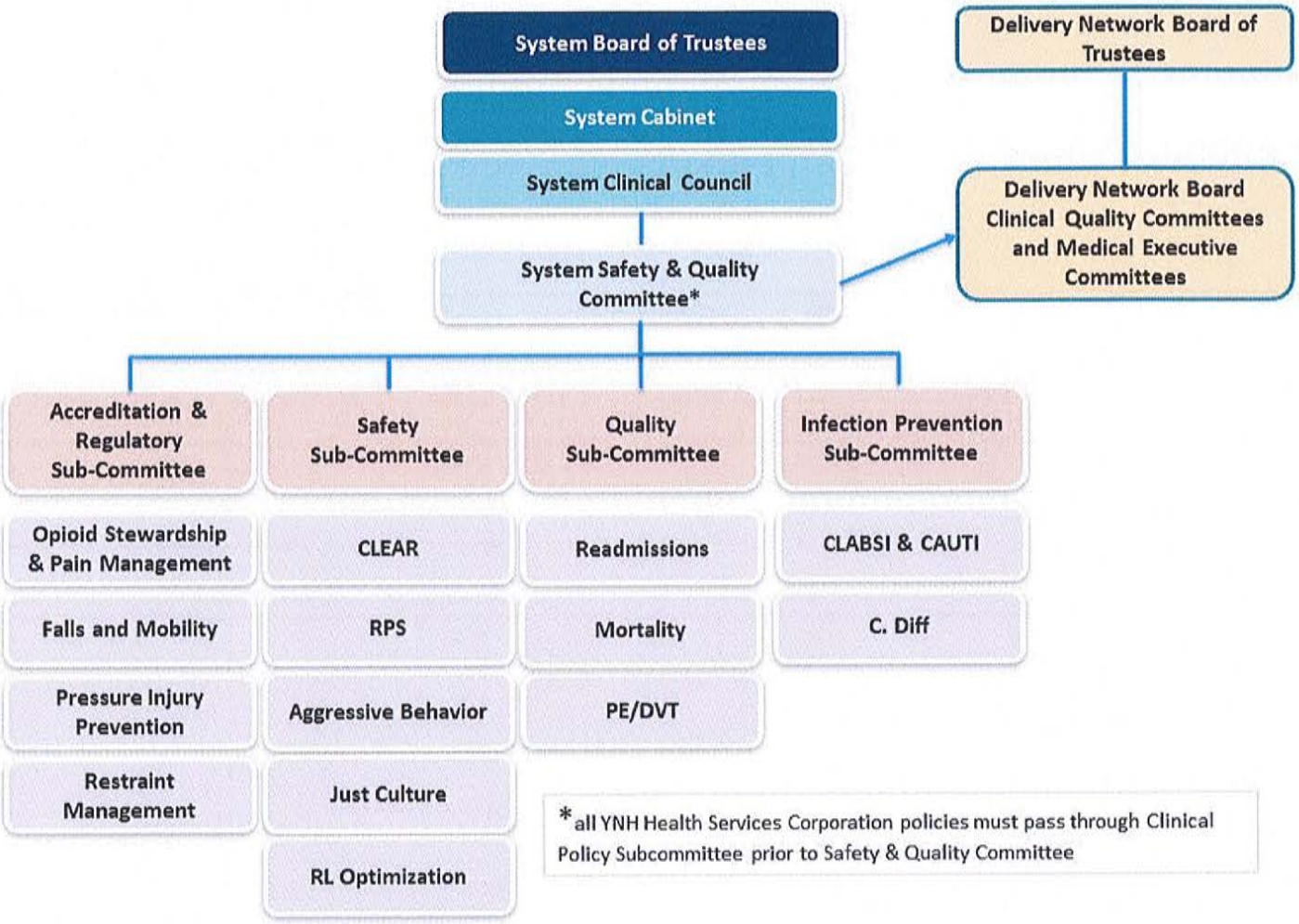
ADDENDUM 3 Continued



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ADDENDUM 4

FY 2020 YNHHS Crosswalk of Measures by Reporting Program									
Measure	# of Reports Measure is Present	*FY20 CMS VBP*	*FY20 CMS HAC Penalty*	*Delayed: CMS Star Rating (Dec '18)*	*FY19 CMS HRRP*	*News & World Report (7/24/18)*	*2019 Vizient*	*Spring 2019 Leapfrog*	*2019 Health Grades*
CLABSI	6	X	X	X			X	X	X
HCAHPS (Patient Experience)	6	X		X		X	X	X	X
PSI-11 Postoperative Respiratory Failure	5		X	X			X	X	X
Mortality	5	X		X		X	X		X
PSI-06 Iatrogenic Pneumothorax	5		X	X			X	X	X
CAUTI	5	X	X	X			X	X	
C-difficile	5	X	X	X			X	X	
SSI-Colon	5	X	X	X			X	X	
PSI-03 Pressure Ulcer	5		X	X			X	X	X
PSI-15 Accidental Puncture/Laceration	4		X	X				X	X
PSI-09 Postoperative Hemorrhage & Hematoma	4		X	X			X		X
PSI-12 Postoperative DVT/PE	4		X	X				X	X
PSI-13 Postoperative Sepsis Rate	4		X	X			X		X
SSI- Abdominal Hysterectomy	4	X	X	X			X		
PSI-14 Postoperative Wound Dehiscence	4		X	X				X	X
MRSA	3	X	X					X	
COMP-HIP-KNEE	3	X		X			X		
PSI-08 Hip fracture	3		X	X					X
Readmissions	3			X	X		X		
PSI-10 Postoperative Acute Kidney Injury Rate	3		X	X					X
PSI-04 Death among surgical inpatients	2							X	X
ED-2b Admit decision time to ED departure	2			X			X		
ED-OP-18B-Median Time: Discharged Patients	2			X			X		
PSI-21 Retained Surgical Item or Unretried Device Fragment Rate	2							X	X
PC-01 Elective Delivery	2	X		X					
Complication Outcomes	2					X			X
Lab metrics - lactate, hypoglycaemia, INR, transfusions	2			X			X		
ED-1B Median time: Admitted Patients	2			X			X		
AHA Survey	1							X	
PSI-02 Death in low mortality DRGs	1								X
Air Embolism	1							X	
Designations and Accreditations	1					X			
Efficiency - aggregate non-core service lines	1						X		
Excess days - aggregate	1						X		
Falls and Trauma	1							X	
Medicare Spending per Beneficiary	1	X							
Postop physiological and metabolic derangement rate	1								X
Reputation with Specialists	1					X			
IMM-2 Influenza Immunization	1			X					
IMM-3/OP-27 Healthcare Personnel Imm Vaccination	1			X					
OP-10 Abdomen CT Use of Contrast Material	1			X					
OP-11 Thorax CT Use of Contrast Material	1			X					
OP-13 Cardiac Imaging for Preoperative Risk Assessment	1			X					
OP-14 Simultaneous Use of Brain CT and Sinus CT	1			X					
OP-20 Door to Diagnostic Evaluation	1			X					
OP-21 Median time to pain management for long bone fracture	1			X					
OP-22 Patient Left without being seen	1			X					
OP-23 ED-Head CT or MRI scan Results for STK	1			X					
OP-29 Colonoscopy- Appropriate follow-up average risk pt	1			X					
OP-30 Colonoscopy - Appropriate follow-up hx polyps	1			X					
OP-3b Median Time to transfer	1			X					
OP-4 Aspirin at arrival	1			X					
OP-5 Median Time to ECG	1			X					
OP-8 MRI Lumbar Spine for Low Back Pain	1			X					
SEP-1: Early management bundle sepsis/septic shock	1			X					
OP-1: median time to fibrinolysis for AMI/CP outpatients	1			X					
OP-2: Fibrinolytic therapy received within 30 minutes of ED arrival	1			X					
OP-33: External Beam Radiotherapy	1			X					
LOS Index	1						X		
Public Transparency	1					X			

Yale NewHaven Health Greenwich Hospital

ADDENDUM 5

YNHHS Comprehensive List of Metrics & Registry Activity

Measure	Description	Chart Abstracted Measures Selected Effective January 2020 Discharges	CMS YNHH	CMS BH	CMS GH	CMS LMH	CMS WH	EcQM YNH-BH-GH-LMH-WH	IPFQR YNHH-BH	QHIP YNHH-BH GH-LMH	GWTG/STK (PSC) YNH-BH-GH-LMH	GWTG/STK (CSC) YNHH	GWTG/STK (ASR) WH	GWTG Resuscitation YNHH-LMH-GH WH	TJC YNHH	TJC BH	TJC GH	TJC LMH	TJC WH
IP Measures																			
STK-1	VTE Prophylaxis	X									X				X	X	X	X	
STK-2	Discharged on antithrombotic therapy	X						X			X				X	X	X	X	
STK-3	Anticoag therapy for atrial fib/flutter	X						X			X				X	X	X	X	
STK-4	Thrombolytic therapy for ischemic stroke	X									X				X	X	X	X	
STK-5	Antithrombotic therapy by end of hospital day 2	X						X			X				X	X	X	X	
STK-6	Discharged on statin	X						X			X				X	X	X	X	
STK-8	Stroke Education	X									X				X	X	X	X	
STK-10	Assessed for rehabilitation	X									X				X	X	X	X	
CSTK-01	National Institutes of Health Stroke Scale (NIHSS Score Performed for Ischemic Stroke Patients)	X									x	X			X	X	X	X	
CSTK-03	Severity Measurement Performed for SAH and ICH Patients (Overall Rate)	X										X			X				
CSTK-04	Procoagulant reversal agent initiation for intracerebral Hemorrhage (ICH)	X										X			X				
CSTK-05	Hemormagic Transformation (Overall Rate)	X										X			X				
CSTK-06	Nimodipine Treatment Administered	X										X			X				
CSTK-08	Thrombolysis in Cerebral Infarction (TICI Post-Treatment Reperfusion Grade)	X										X			X				
CSTK-09	Arrival time to skin puncture	X										X			X				
CSTK-11	Timeliness of Reperfusion: Arrival Time to TICI 2B or Higher	X										X			X				
CSTK-12	Timeliness of Reperfusion: Skin Puncture to TICI 2B or Higher	X										X			X				
ASR-IP-1	Thrombolytic Therapy: Inpatient Admission	X											X						X
ASR-IP-2	Antithrombotic Therapy By End of Hospital Day 2	X											X						X
ASR-IP-3	Discharged on Antithrombotic Therapy	X											X						X
ASR-OP-1	Thrombolytic Therapy: Drip and Ship	X											X						X
ASR-OP-2	Door to Transfer to Another Hospital	X											X						X
Resuscitation Gold Standard Recognition Measure	CPA: Time to first shock<= 2min for VF/pulseless VT first documented rhythm	X												X					
Resuscitation Gold Standard Recognition Measure	CPA: Time to IV/IO epinephrine <= 5 minutes for asystole or Pulseless Electrical Activity (PEA)	X												X					
Resuscitation Gold Standard Recognition Measure	CPA: Percent Pulseless Cardiac events monitored or witnessed	X												X					
Resuscitation Gold Standard Recognition Measure	CPA: Confirmation of airway device placement in trachea	X												X					
SEP-1	Severe sepsis & septic shock management bundle (composite)	X	X	X	X	X	X												
PC-01	Early Elective Delivery	X	X	X	X	X	NA			X					X	X	X	X	
PC-02	Cesarean section	X								X					X	X	X	X	
PC-03	Antenatal Steroids	X								X					X	X	X	X	
PC-04	Healthcare-associated Bloodstream infections in newborns	X													X	X	X	X	
PC-05	Exclusive Breast milk feeding	X													X	X	X	X	
PC-06	Unexpected Complications in Term Newborns	X													X	X	X	X	
IP Psych Measures																			
HBIPS-5	Patients Discharged on Multiple Antipsychotic Meds with Appropriate Justification	X							X										
IMM-2	Influenza Immunization	X							X										
SUB-2/2a	Alcohol Use Brief Intervention Provided or Offered	X							X										
SUB-3/3a	Alcohol & Other Drug Use Disorder Treatment Provided or Offered at D/C	X							X										
TOB-2/2a	Tobacco Use Treatment Provided or Offered	X							X										
TOB-3/3a	Tobacco Use Treatment Provided or Offered at D/C	X							X										
TR-1	Transition Record with Specified Elements Rec'd by D/C Patients	X							X										
TR-2	Timely Transmission of Transition Record	X							X										
Met-1	Screening for Metabolic Disorders	X							X										
OP Measures																			
AMI OP-2	Fibrinolytic Therapy Received Within 30 Minutes of ED Arrival	X	X	X	X	X	X												
AMI OP-3	Median Time to Transfer to Another Facility for Acute Coronary Intervention	X	X	X	X	X	X												
OP-18 EDT	Median Time from ED Arrival to ED Departure for Discharged ED Patients	X	X	X	X	X	X												
OP-23	Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who received head CT or MRI scan interpretation within 45 min of ED arrival	X	X	X	X	X	X												
OP-29	Endoscopy: Interval for Normal Colonoscopy in Average Risk Patients	X	X	X	X	X	X												
OP-33	External Beam Radiotherapy (EBRT) for Bone Metastases		X	X	X	X	X	NA											
STK-OP-01	Door to Transfer to Another Hospital	x													X	X	X	X	

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YNHHS Comprehensive Panel of Clinical Quality and Safety Metrics	
Center of Medicare and Medicaid Services and/or The Joint Commission Core Measure Requirements	
Measure	**Definition**
INPATIENT	
eCQMs	
ED-1	Median time from ED arrival time to time of departure for admitted patients
ED-2	Median time from admit decision to time of departure from ED for admitted patients
STK-2	Antithrombotic therapy for ischemic stroke
STK-6	Discharged on a statin
Venous Thromboembolism (VTE)	
VTE-5	Venous Thromboembolism Warfarin Therapy Discharge Instructions
VTE-6	Hospital Acquired Potentially-Preventable Venous Thromboembolism
Perinatal Care (PC)	
PC-01	Elective Delivery (Patients with elective vaginal deliveries or elective cesarean sections at ≥ 37 and < 39 weeks of gestation completed)
PC-02	Cesarean Delivery (Nulliparous women with a term, singleton baby in a vertex position delivered by cesarean section)
PC-03	Antenatal Steroids (Patients at risk of preterm delivery at >=24 and <32 weeks gestation receiving antenatal steroids prior to delivering preterm newborns)
PC-04	Healthcare Associated Bloodstream infections in Newborns
PC-05	Exclusive Breast Milk Feeding
Stroke (STK)	
STK-1	VTE Prophylaxis
STK-2	Antithrombotic therapy for ischemic stroke
STK-3	Anticoagulation therapy for Afib/flutter
STK-4	Thrombolytic therapy for acute ischemic stroke
STK-5	Thrombotic therapy by end of hospital day 2
STK-6	Discharged on a statin
STK-8	Stroke education
STK-10	Assessed for rehab
Emergency Department (ED)	

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YNHHS Comprehensive Panel of Clinical Quality and Safety Metrics	
Center of Medicare and Medicaid Services and/or The Joint Commission Core Measure Requirements	
Measure	**Definition**
ED-1	Median time from ED arrival time to time of departure for patients admitted to the hospital
ED -2	Median time from admit decision to time of departure from ED for patients admitted to the hospital
Immunization (IMM)	
IMM-2	Influenza Immunization Status (screening and vaccine administration when indicated)
Sepsis (SEP)	
SEP	Severe sepsis and septic shock management bundle
OUTPATIENT	
OP-1	Median Time to Fibrinolysis
OP-2	Fibrinolytic Therapy Received within 30 Minutes of ED Arrival
OP-3	Median Time to Transfer to Another Facility for Acute Coronary Intervention
OP-4	Aspirin at Arrival
OP-5	Median time to EKG
OP-18	Median Time from ED Arrival to ED Departure for Discharged ED Patients
OP-20	Door to Diagnostic Evaluation by a Qualified Medical Professional
OP-21	ED-Median Time to Pain Management for Long Bone Fracture
OP-23	ED-Head CT or MRI scan results for Acute Ischemic or hemorrhagic stroke received within 45 minutes of arrival
OP-29	Endoscopy/polyp surveillance: appropriate follow-up interval for normal colonoscopy in average risk patients
OP-30	Endoscopy/polyp surveillance: colonoscopy interval in patient with history of adenomatous polyps
OP-33	External Beam Radiotherapy (EBRT) for Bone Metastases
INPATIENT PSYCHIATRIC FACILITY MEASURES	
Hospital-based Inpatient Psychiatric Services (HBIPS)	
HBIPS-2	Hours of physical restraint use
HBIPS-3	Hours of seclusion use

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YNHHS Comprehensive Panel of Clinical Quality and Safety Metrics	
Center of Medicare and Medicaid Services and/or The Joint Commission Core Measure Requirements	
Measure	**Definition**
HBIPS-5	Patients discharged on multiple antipsychotic medications with appropriate justification
IMM-2	Influenza Immunization
NA	Transition record with specified elements received by discharged patients
NA	Timely transmission of transition record
NA	Screening for metabolic disorders
Substance Abuse (SUB)	
SUB-1	Alcohol use screening
SUB-2 SUB-2a	Alcohol use brief intervention provided or offered Subset: Alcohol use brief intervention
SUB-3 SUB-3a	Alcohol and other drug use disorder treatment provided or offered at discharge Subset: Alcohol and other drug use disorder treatment at discharge
Tobacco Use (TOB)	
TOB-1	Tobacco use screening
TOB-2 TOB-2a	Tobacco use treatment provided or offered Subset: tobacco use treatment
TOB-3 TOB-3a	Tobacco use treatment provided or offered at discharge Subset: tobacco use treatment at discharge
Inventory of Registries and other Abstraction	
National Cardiovascular Data Registry (NCDR)	
PCI (YNHH, LMH, BH, GH)	Characteristics, treatments, and outcomes of cardiac disease patients who receive diagnostic catheterization and/or percutaneous coronary intervention (PCI) procedures; Quarterly risk-adjusted benchmark reports provide a rolling 4 quarter view of performance plotted against all other facilities for each metric
Other Registries	
GWTG Resuscitation (GH, L+M, YNHH)	American Heart Association Get With the Guidelines Resuscitation Registry (Outcomes
GWTG Stroke	Registry for reporting stroke data to The Joint Commission to meet stroke center certification requirements.

Heart Transplant	Internal collection of data on all Heart transplant patients and their re-admissions for life.
Door to Balloon (YNHH, GH, LMH BH)	This is STEMI data that is collected and used as an internal barometer of our D2B times. The AHA guidelines state that the D2B time should be 90 minutes or less.
Healthcare Associated Infection(HAI) Measures	
CLABSI	Central Line Associated Blood Stream Infections
SSI	Colon and Abdominal Hysterectomy
CAUTI	Catheter Associated Urinary Tract Infections
MRSA Bacteremia	Methicillin-Resistant *Staphylococcus aureus*
CDI	*Clostridium difficile* infection
HCP	Healthcare Personnel Influenza Vaccination
Readmissions	
READM-30-AMI	30-day all-cause, risk-standardized readmission rate following acute myocardial infarction hospitalization
READM-30-CABG	30-day all-cause, unplanned, , risk-standardized readmission rate following coronary artery bypass graft surgery
READM-30-COPD	30-day all-cause , risk-standardized readmission rate following chronic obstructive pulmonary disease hospitalization
READM-30-HF	30-day all-cause , risk-standardized readmission rate following heart failure hospitalization
READM-30-HWR	Hospital-wide all-cause unplanned readmission measure
READM-30-PN	30-day all-cause , risk-standardized readmission rate following pneumonia hospitalization
READM-30-STK	30-day all-cause , risk-standardized readmission rate following stroke hospitalization
REAMD-30-THA/TKA	30-day all-cause , risk-standardized readmission rate following elective primary total hip arthroplasty and/or total knee arthroplasty

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ADDENDUM 6

YNHHS Corporate Quality and Safety Objectives for FY2020

Last revised: November 2019

Final Quality and
Safety Corporate Obj

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ADDENDUM 7

Add YNHHS plan once approved

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ADDENDUM 8

PI PLAN OBJECTIVES

This plan is written to carefully outline how we meet the following critical objectives:

- To systematically **manage, control and improve quality and performance** through all activities and programs that are intended to direct, control and coordinate quality including mechanisms that establish and ensure that quality requirements are being met which increases reliability of a process. Additionally, measurement of patient care practices and the healthcare delivery system in a planned and continuous manner so as to achieve one level of care and to evaluate outcomes through such improvement models of Six Sigma, Lean, PDSA, etc. and linked to evidence-based QI initiatives such as IHI Initiatives, Collaboratives, Clinical Redesign programming, etc.;
- To **improve patient safety** by proactively identify potential risks through conducting healthcare failure mode effects analyses as well as responding actively to serious safety events and near misses, implementing corrective actions and improvements necessary to resolve identified system problems and improve care by provider or system;
- To create and foster a culture of improvement through an active **clinical redesign program** that works on high priority areas for implementing redesign principles such as LEAN, Six Sigma and other performance improvement based teams.
- To create a culture of patient safety and performance improvement, especially in terms of high-risk care practices identified by the Joint Commission embodied in the **National Patient Safety Goals**;
- To perform **internal reviews** on identified high risk, high volume, and/or problem prone activities to focus on and prioritize key functions by potential risk areas including, but not limited to medication management, blood usage, moderate and deep sedation, restraints and seclusion, infection control and surveillance, morbidity/mortality/autopsy, tumor case registry and peer reviews which shall be reported directly to the Medical Executive Committee;
- To **measure performance and health indicators**, assessing and detecting healthcare system wide problems and issues by objectively evaluating information collected through the measurement process and identify trends and opportunities for improvement as well as to substantiate excellence;
- To consider the **perceptions of internal and external customer satisfaction** in an effort to remain agile and sensitive to the needs of our customers, implemented through a comprehensive patient experience program;
- To **engage our staff and providers** to assure that their safety and
- To **manage risk and utilization** as markers of quality and efficiency and evaluated through accreditation, safety and regulatory affairs; and

- To provide **quality information resources** that assure the validity of the data, collaboration tools, sharing and dissemination of effective quality improvement approaches, identifying opportunities for educational offerings based on findings from organizational performance improvement and patient safety activities.

Yale NewHaven Health Greenwich Hospital

ADDENDUM 9

CHAMP Behaviors
Guidelines

C — **Communicate Clearly**
- Repeat Backs / Read Backs
- Clarifying Questions
- Phonetic and Numeric Clarifications

H — **Handoff Effectively**
- Situation, Background, Assessment Recommendation (SBAR)

A — **Attention to Detail**
- Self Check using Stop, Think, Act, Review (STAR)

M — **Mentor Each Other – 200% Accountability**
- Cross-Check and Coach Teammates
- Speak up for Safety: "I Have a Concern"

P — **Practice and Accept a Questioning Attitude**
- Validate and Verify
- Stop the Line – "I Need Clarity"