

UHCCR 3

Office of the President
December 9, 2019

Members, Board of Trustees:

UK HEALTHCARE FY 2020
QUALITY, SAFETY, AND PATIENT EXPERIENCE PLAN

Recommendation: that the Board of Trustees approve the UK HealthCare FY 2020 Quality, Safety, and Patient Experience Plan, attached as Exhibit I.

Background: The University of Kentucky Governing Regulation II.E.i(1)(a), established the University Health Care Committee to serve as the governing body and governing authority to manage and operate the University Hospitals in accordance with the Conditions of Participation promulgated by the Centers for Medicare and Medicaid Services and with the laws and regulations governing the operations and services of hospitals in the Commonwealth of Kentucky.

In 43 Code of Federal Regulations (CFR) Part 482, the Centers for Medicare and Medicaid Services (CMS) set out the conditions for a hospital to participate in the Medicare Program. As part of the conditions for participation, CMS requires in 42 CFR 482.21 that the participating hospital develop, implement, and maintain an effective, ongoing, hospital-wide, data-driven, quality assessment, and performance improvement program. The UK HealthCare FY 2020 Quality, Safety, and Patient Experience Plan sets out such a program for the University's hospitals and clinical activities for FY 2020.

This Plan has been developed and approved by the necessary and appropriate officials as documented on page one of the attached Exhibit I.

Action taken: Approved Disapproved Other _____

FY2020 QUALITY, SAFETY AND PATIENT EXPERIENCE PLAN



The FY2020 Quality, Safety, and Patient Experience Plan demonstrates UK HealthCare's promise to the people of the Commonwealth of Kentucky and beyond that we are committed to providing high-quality, high-value, safe, efficient, and patient-centered care to each and every patient. On behalf of all members of the UK HealthCare family, we endorse this plan.

Mark Newman, MD	Executive Vice President for Health Affairs
Robert DiPaola, MD	Vice President and Dean, UK College of Medicine
Fred Zachman, MD, MBA	President, Medical Staff
Phillip Chang, MD, MBA, FACS	Chief Medical Officer
Craig Collins, MBA	Vice President and Chief Financial Officer
Jay Grider, MD	Interim Chief Physician Executive
Cecilia Page, DNP, RN	Chief Information Officer
John Phillips, MHA	Vice President for Ambulatory Services
Colleen Swartz, DNP, MBA, RN	Vice President for Hospital Operations
Mark V. Williams, MD	Chief Quality and Transformation Officer

DATE FINALIZED BY UK HEALTHCARE LEADERSHIP:

DATE APPROVED BY THE BOARD OF TRUSTEES HEALTH CARE COMMITTEE:

Executive Vice President for Health Affairs: _____
Mark Newman, MD

VP & Dean, UK College of Medicine: _____
Robert DiPaola, MD

President, Medical Staff: _____
Fred Zachman, MD, MBA

Chief Medical Officer: _____
Phillip Chang, MD, MBA, FACS

VP & Chief Financial Officer: _____
Craig Collins, MBA

Interim Chief Physician Executive: _____
Jay Grider, MD

Chief Information Officer: _____
Cecilia Page, DNP, RN

VP for Ambulatory Services: _____
John Phillips, MHA

VP for Hospital Operations: _____
Colleen Swartz, DNP, MBA, RN

Chief Quality and Transformation Officer: _____
Mark V. Williams, MD

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OUR QUALITY FOCUS

UK HealthCare has a longstanding commitment to excellence in patient care, teaching and research, and our highest priority is high-quality, safe, patient- and family-centered care. For FY2020, we are seeking to further refine and enhance our ability to ensure quality, safety, value, and engagement for every patient, every time. Our goal is to be among the nation's top-performing academic health systems. As demonstrated by the diagram (Figure 1), our focus on quality, value, and safety will seek to achieve excellence across four domains:

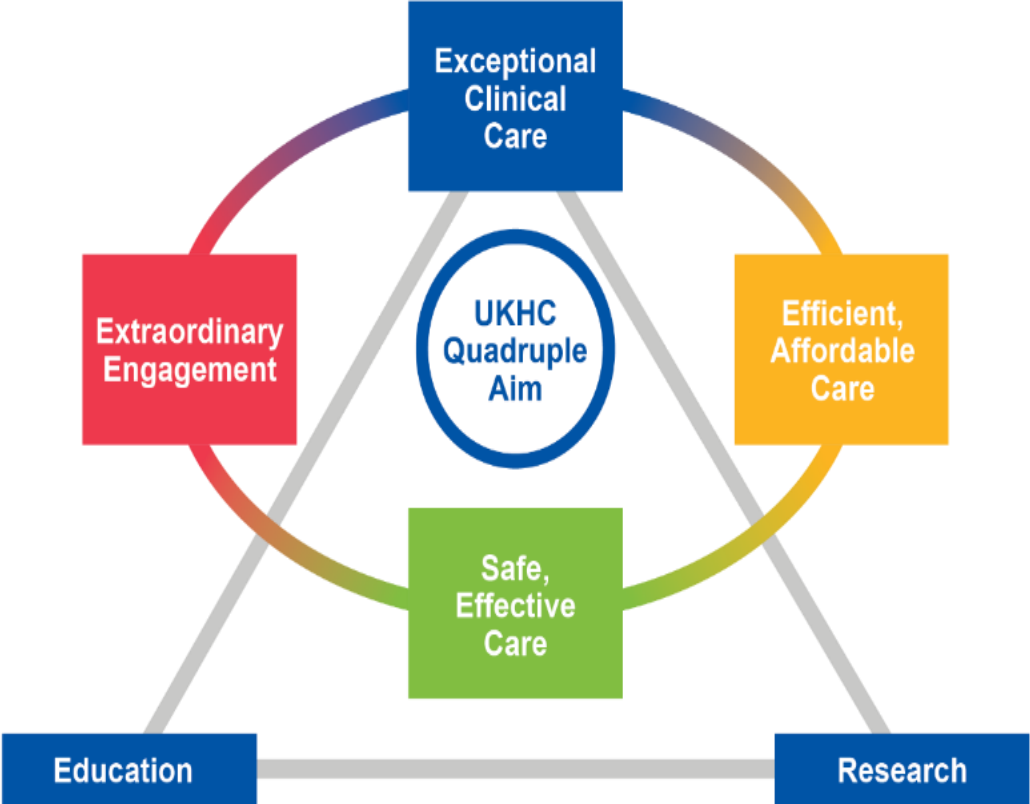
- Exceptional clinical care
- Efficient and affordable care
- Safe and effective care
- Extraordinary engagement of our patients and families, as well as our employees

QUADRUPLE AIM

This UK HealthCare Quadruple Aim is critical to our future success because it is:

- Part of our mission to provide advanced clinical care, education, and research for the people of Kentucky and beyond
- Important to all patients and families
- Vital to all providers and staff who care deeply about providing the best, evidence-based care
- Part of our Enterprise Strategy and Enterprise Goals
- Critical to our future under Medicare, Medicaid, and commercial quality and value programs

Figure 1: UK HealthCare Quadruple Aim



PLAN FOCUS

This updated Quality, Safety, and Patient Experience Plan reflects UK HealthCare's drive for excellence in providing safe, high-quality, patient- and family-centered care in every aspect of its day-to-day operations. Ultimately, our goal is to increase the value of the care we deliver to our patients by building on and enhancing our current approaches to improving clinical care, engagement, efficiency, safety, and affordability.

Engagement of frontline clinical teams in process and performance improvement is a critical component of our enhanced effort around sustaining quality and safety.

The Quality, Safety, and Patient Experience Plan ensures compliance with The Joint Commission standards and our enterprise policies and bylaws, reflects our dyadic/interdisciplinary teams, and is built on the following guiding principles:

- *Patient- and family-centered care*: Involve patients and family members in care redesign and decision-making in a way that meets their needs and preferences
- *A culture of safety*: Promote blame-free incident reporting with a focus on correcting the underlying systematic design or system malfunctions
- *Support and empower interprofessional teams to drive improvement*: Provide care teams with goal-defined responsibilities, support them with dedicated staff and resources, and provide assistance in data collection and analysis as well as monitoring/reporting
- *Comprehensive quality surveillance, measurement, and reporting*: Utilize a systematic approach that fosters active employee and caregiver engagement
- *Transparency and communication*: Provide easily accessible, valid, and meaningful information about our clinical performance through open communication with leadership, clinicians, managers, frontline staff, patients, and the general public
- *Staff empowerment and innovation*: Create an environment and provide resources that foster problem-solving and breakthrough change to enhance quality and safety

The strategies outlined in the Quality, Safety, and Patient Experience Plan intend to facilitate the best service to our patients and the best clinical outcomes in accordance with evidence-based research.

AWARDS AND RECOGNITION FOR FY2020

- Level 1 Trauma Center
- Level IV Neonatal Intensive Care Unit
- Magnet® Recognized
- No. 1 Hospital in Kentucky and the Bluegrass Region, according to *U.S. News & World Report* Best Hospitals rankings for a fourth consecutive year
- *U.S. News & World Report* Top 50 national ranking in cancer
- The only National Cancer Institute-designated cancer center in Kentucky, having earned a five-year NCI-designation renewal in 2018
- UK Albert B. Chandler Hospital remains among the “100 Great Hospitals in America” by *Becker’s Hospital Review*
- UK Gill Heart & Vascular Institute received the Get with the Guidelines® - Resuscitation Gold Award
- Comprehensive Stroke Center
- Baby Friendly
- UK HealthCare’s Kentucky Neuroscience Institute received the Get with the Guidelines® - Stroke Gold Plus Quality Achievement Award
- Kentucky Children’s Hospital Circle of Blue Sedation and Procedure Unit designated as a Center of Excellence in Pediatric Sedation
- Healthcare Equality Index Leader status for 2018, 2017, and 2016
- Kentucky Children’s Hospital named a National Gold Certified Safe Sleep Hospital by the Cribs for Kids National Safe Sleep Initiative
- 155 physicians named to the “Best Doctors in America List” by Best Doctors Inc. for 2019-20
- Kentucky Neuroscience Institute named a Certified Treatment Center of Excellence by the Amyotrophic Lateral Sclerosis Association
- Women’s Choice Award in cancer care and for the UK Comprehensive Breast Care Center
- Ranked 27 out of 93 academic medical centers in the Vizient 2019 Quality and Accountability Study, receiving four out of five stars

UK HEALTHCARE MISSION

UK HealthCare is committed to the pillars of academic health care – research, education, and clinical care. Dedicated to the health of the people of Kentucky and surrounding regions, we will provide the most advanced patient care and serve as an information resource. We will strengthen local health care and improve the Commonwealth’s health delivery system by collaborating with community hospitals and physicians. We will support the University of Kentucky’s education and research needs by offering cutting-edge services on par with the nation’s very best providers.

UK HEALTHCARE VISION

UK HealthCare's vision is to become a top academic medical center serving Kentucky and beyond that strives to:

- Provide a broad range of advanced subspecialty care so that Kentuckians need not travel outside Kentucky for medical care
- Become a clinical destination serving Kentucky and beyond for select, highly specialized services
- Support rural health care by collaborating closely with community providers so that citizens may receive appropriate health care in their local communities
- Foster collaborative relationships in a well-integrated health delivery system that can respond to a changing health care environment and provide high-quality, cost-efficient health care
- Support UK's research and teaching missions

UK HEALTHCARE VALUES

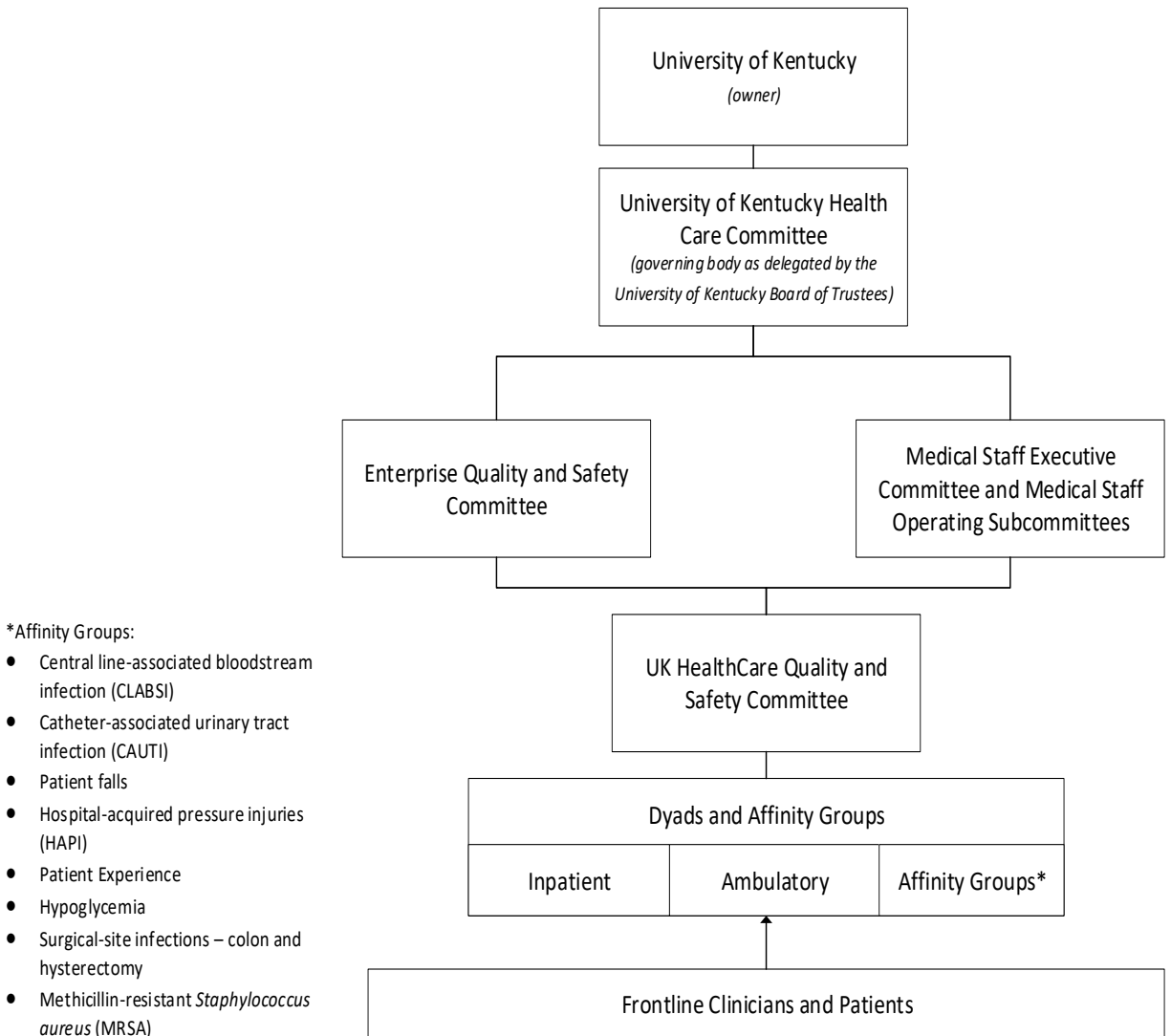
- Diversity – We foster a people-centered environment inclusive of all
- Innovation – We embrace continual learning and improvement to drive positive change
- Respect – We value our patients and families, our community, our co-workers, ourselves, and the resources entrusted to us
- Compassion – We express empathy for the needs, thoughts, and feelings of those we serve and with whom we work
- Teamwork – We cultivate meaningful relationships to create positive outcomes

GOVERNANCE STRUCTURES AND PROCESSES

Our governance structure aims to ensure accountability, two-way information sharing, and transparent reporting of performance and oversight regarding the quality-improvement efforts at UK HealthCare. This performance monitoring starts at the patient level, with performance being reported up through the enterprise and ultimately to the governing body – the University Health Care Committee of the UK Board of Trustees.

Figure 2 shows the main elements of the reporting structure at UK HealthCare. All reporting relationships are bidirectional, with information flowing up to the governing body and back down to the bedside clinicians and patients.

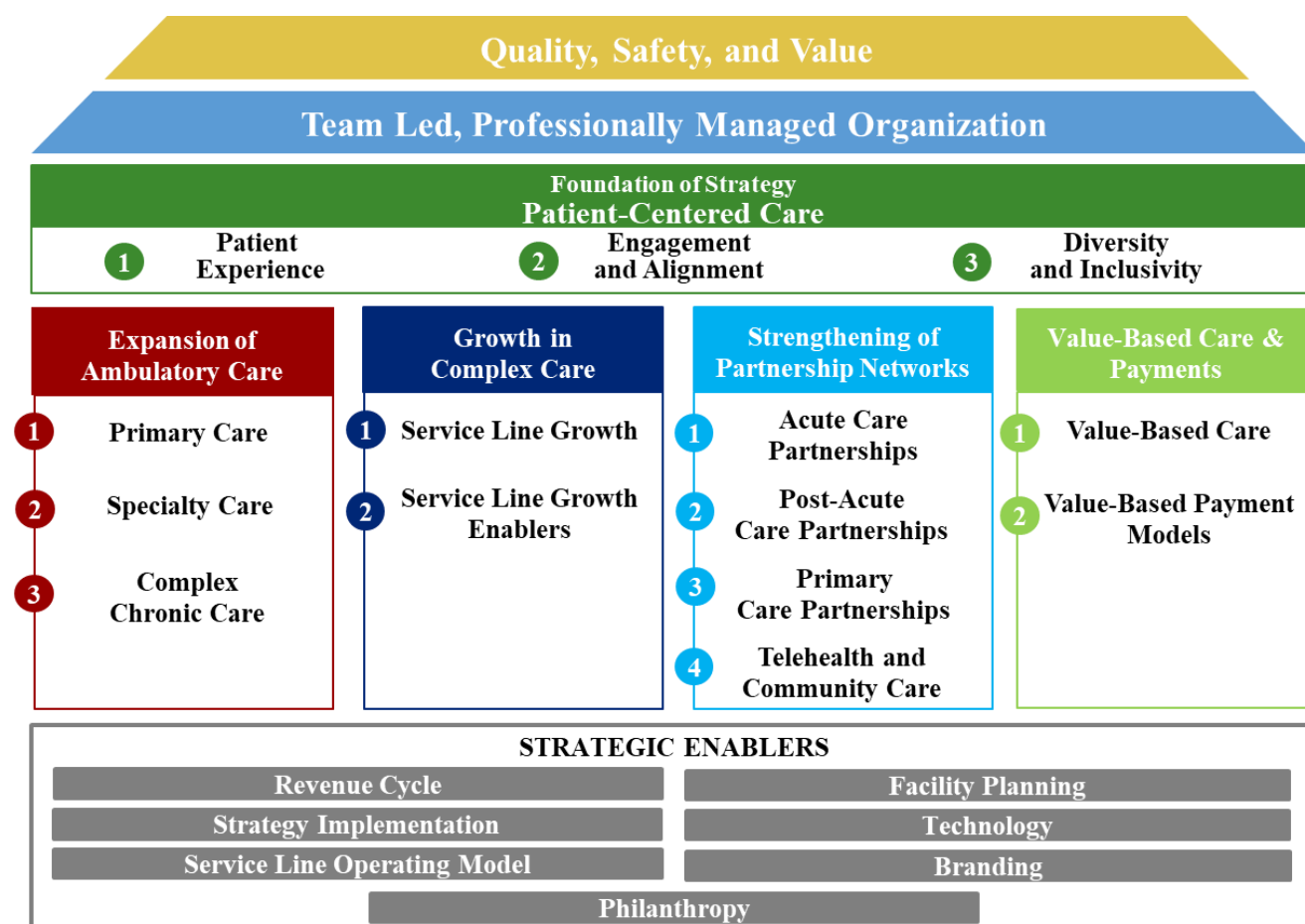
Figure 2: Reporting Structure



EXECUTIVE QUALITY AND SAFETY COMMITTEE

The Executive Quality and Safety Committee (EQSC) is the senior oversight committee responsible for providing guidance and direction to the overarching UK HealthCare Enterprise Strategic Plan around quality, safety, and value (see Figure 3) for both UK HealthCare and the UK College of Medicine. The EQSC also coordinates all efforts in quality improvement, quality measurement, data reporting, patient safety, patient experience, value-based care, and value-based payment. Chief Quality and Transformation Officer Mark V. Williams, MD, chairs the committee. The membership is comprised of UK HealthCare senior leadership, physician and nursing leaders, chairs, program directors, and graduate medical education representatives (residents and fellows). The EQSC is responsible for developing the Enterprise Quality and Safety Strategy, including enterprise goals, objectives and actions related to ensuring exceptional quality, safety, value, and patient experience at UK HealthCare.

Figure 3: Revised UK HealthCare Strategy 2020



MEDICAL STAFF AND BOARD OF TRUSTEES ALIGNMENT

The UK HealthCare Quality and Safety Committee, also chaired by the Chief Quality and Transformation Officer and the Medical Staff Operating Subcommittees (MSOS), receives monthly reports from many other committees and departments within the enterprise (Tables 1 and 2). This reporting structure allows oversight of all quality, safety, and performance initiatives within the enterprise.

The Medical Staff Operating Subcommittees at both Chandler and Good Samaritan Hospital structure the UK HealthCare medical staff with an overall Enterprise Medical Staff Executive Committee (MSEC) providing oversight of and support to the medical staff subcommittees. The MSEC also oversees medical staff by-law functions and credentialing processes, and reviews contracts for outside clinical services. The Medical Staff Operating Subcommittees meet monthly and review the progress made by multiple teams and committees throughout the enterprise. The Medical Staff Bylaws outline these committees and teams.

While there is some duplication in reporting to the EMSEC, the intent is to ensure that the medical staff has information about and authority over the appropriate clinical operation of the facility. The president of the medical staff and the hospital's chief medical officer have the leadership responsibility to bring issues from these venues to the University Health Care Committee of the UK Board of Trustees. The chief medical officer and the chief quality and transformation officer report to the chief physician executive, who has the responsibility of overseeing all quality and safety issues at UK HealthCare in collaboration with other members of the senior executive team.

The UK Board of Trustees establishes, maintains, supports, and exercises oversight of the quality, safety, and performance activities that occur within the enterprise. The Board fulfills its responsibilities related to these metrics through the governing body, the University Health Care Committee (see Figure 2).

Table 1: UK HealthCare Enterprise Quality and Safety Agenda Items

Commission on Cancer
Eastern State Hospital
Transplant Program
Kentucky Children’s Hospital
Gill Heart & Vascular Institute
Stroke Affiliate Network
Trauma Program
Emergency Department
Radiology Department
Medication Use and Safety Quality Committee
Patient Safety Committee

Table 2: Medical Staff Operating Subcommittees Reporting Areas

Quality & Safety Committee Agenda Items	*Reporting Committees
Risk Management	Pharmacy and Therapeutics
Health Information Management	Infection Prevention and Control
Nursing	Resuscitation
Hospital Operations	Transfusion
Good Samaritan Hospital	Operating Room and Procedural Area
Medical Staff Affairs	Medical Imaging
Information Technology	Ethics
Ambulatory	Intensive Care Unit
Reporting Committees <i>(as defined by the Medical Staff Bylaws)</i>	Laboratory Formulary
Organ Donation	Cancer
Reporting Committees*	Nutrition
	Quality and Safety

SETTING THE QUALITY AND SAFETY AGENDA

UK HealthCare expanded the FY2020 Annual Enterprise Goals to support our enterprise efforts in ensuring quality, safety, value, and engagement for every patient, every time. These goals include adding Centers for Medicare and Medicaid Services measures for inpatient and ambulatory goal grids that affect value-based payments and star ratings. By separating goals and performance in this manner, UK HealthCare can have a more focused approach to improving patient care. We have organized all grids into five domains – exceptional clinical care, safe care, value and efficiency, extraordinary engagement, and diversity and inclusivity – with the following objectives:

Table 3: FY2020 UK HealthCare Enterprise Goals - Inpatient

		Threshold	Target	Max	Additional Details
Exceptional clinical care	Mortality index	≤0.79	≤0.78	≤0.77	Using Vizient 2018 methodology; core service lines only
Safe care	Hospital-acquired conditions	2 of 4	3 of 4	4 of 4	Includes these domains: catheter-associated urinary tract infections, central-line associated bloodstream infections, surgical site infections – colon, and methicillin-resistant <i>Staphylococcus aureus</i>
	Patient safety indicator	2 of 5	3 of 5	4 of 5	Includes these domains: PSI-3 (pressure ulcer), PSI-6 (IP), PSI-9 (hemorrhage/hematoma), PSI-11 (PORF) and PSI-13 (sepsis)
	Employee safety	≥4.08	≥4.10	≥4.13	Using Press Ganey's "Employees and Management Work Together to Ensure the Safest Possible Working Conditions." Excludes contractors and outsourced staff
	Provider safety	≥3.92	≥3.94	≥3.97	Using Press Ganey's "Providers and Management Work Together to Ensure the Safest Possible Working Conditions"
Value and efficiency	Length of stay index	≤0.94	≤0.93	≤0.92	Using Vizient 2018 methodology; core service lines only
	Readmissions	≤13.50%	≤13.00%	≤12.20%	Using Vizient 2018 methodology; core service lines only, all-cause, unplanned, and same-hospital readmissions
	Cost per case mix index-adjusted discharge	≤\$13,300 (budget)	≤\$13,100 (-1.5%)	≤\$12,900 (-3%)	Using budgeted allocation for hospital operating and college clinical expense per CMI-adjusted discharge (all in). Target set at 1.5% less and max at 3% less than budgeted allocation
Extraordinary engagement	Patient experience	4 of 8	5 of 8	6 of 8	Includes these domains: cleanliness/quietness, discharge, doctor, medications, nurse, overall, responsiveness, and transitions of care

	Staff engagement	≥4.09	≥4.11	≥4.14	Staff survey, excluding contractors and outsourced personnel
	Provider engagement	≥3.77	≥3.81	≥4.04	Provider survey (doctors and advanced practice providers), excluding residents and fellows
Diversity and inclusivity		1 of 4	2 of 4	3 of 4	

NOTE: Approved by the UK Board of Trustees University Health Care Committee in June 2019.

Table 4: FY2020 UK HealthCare Enterprise Goals - Kentucky Children’s Hospital

		Threshold	Target	Max	Additional Details
Exceptional clinical care	Mortality index	≤0.71	≤0.70	≤0.69	Using Vizient 2018 methodology; core service lines only
Safe care	Hospital-acquired conditions	3 of 5	4 of 5	5 of 5	Includes these domains: catheter-associated urinary tract infections, central-line associated bloodstream infections, surgical site infections - spine/shunt/cardiothoracic surgery, falls, and hospital-acquired pressure injuries
	Employee safety	≥3.96	≥3.98	≥4.01	Using Press Ganey’s “Employees and Management Work Together to Ensure the Safest Possible Working Conditions.” Excludes contractors and outsourced staff
Value and efficiency	Length of stay index	≤0.88	≤0.87	≤0.86	Using 2018 Vizient methodology; all patients ages 0-17 years, including normal newborns
	Readmissions	≤5.93%	≤5.43%	≤4.93%	Using 2018 Vizient methodology; all patients ages 0-17 years, including normal newborns
	Cost per case mix index-adjusted discharge*	≤\$13,300 (budget)	≤\$13,100 (-1.5%)	≤\$12,900 (-3%)	Using budgeted allocation for hospital operating and college clinical expense per CMI-adjusted discharge (all in). Target set at 1.5% less and max at 3% less than budgeted allocation
Extraordinary engagement	Patient and family experience	3 of 6	4 of 6	5 of 6	Includes these domains: communication with your child’s nurse, communication with your child’s doctor, nurses communicate child, attention to child’s pain, neonatal intensive care unit nurse, and NICU physician
	Staff engagement	≥3.96	≥3.98	≥4.10	Staff engagement rolls up for all of Kentucky Children’s Hospital
	Provider engagement*	≥3.77	≥3.81	≥4.04	
Diversity and inclusivity*		1 of 4	2 of 4	3 of 4	

NOTE: Approved by the UK Board of Trustees University Health Care Committee in June 2019.

*Using enterprise number and goal

Table 5: FY2020 UK HealthCare Enterprise Goals - Ambulatory

		Threshold	Target	Max	Additional Details
Exceptional clinical care	Diabetes hemoglobin A1c poor control (lower is better)	≤25%	≤20%	≤15%	Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9% during the measurement period
	Depression screening and follow-up plan	≥50%	≥55%	≥60%	Percentage of patients aged 12 years and older screened for depression on the date of the encounter using an age-appropriate standardized depression screening tool and, if positive, a follow-up plan is documented on the date of the positive screen
Safe care	Fall risk screening	≥60%	≥82%	≥91%	
	Employee safety	≥4.08	≥4.10	≥4.13	Using Press Ganey's "Employees and Management Work Together to Ensure the Safest Possible Working Conditions." Excludes contractors and outsourced staff
Value and efficiency	No-show rate (lower is better)	≤25.5%	≤25%	≤24.5%	
	14-day new patient access	≥38%	≥39%	≥40%	
	Cost per case mix index-adjusted discharge*	≤\$13,300 (budget)	≤\$13,100 (-1.5%)	≤\$12,900 (-3%)	Using budgeted allocation for hospital operating and college clinical expense per CMI-adjusted discharge (all in). Target set at 1.5% less and max at 3% less than budgeted allocation
Extraordinary engagement	Patient experience	2 of 6	3 of 6	4 of 6	Includes these domains: rate provider, recommend provider, physician communication, office staff quality, access to care, and care coordination
	Staff engagement	≥4.08	≥4.10	≥4.13	
	Clinic provider engagement	≥3.84	≥3.88	≥4.07	Using provider engagement, filter by clinic engagement, providers who self-select "Yes" to practicing in a UK HealthCare clinic
Diversity and inclusivity*		1 of 4	2 of 4	3 of 4	

NOTE: Approved by the UK Board of Trustees University Health Care Committee in June 2019.

*Using enterprise number and goal

Table 6: FY2020 UK HealthCare Enterprise Goals – Eastern State Hospital

		Threshold	Target	Max	Additional Details
Exceptional clinical care	Alcohol use treatment during hospitalization	≥85.00%	≥88.00%	≥91.00%	
	Substance use treatment at discharge	≥72.00%	≥75.00%	≥78.00%	
	Tobacco use treatment during hospitalization	≥91.00%	≥92.00%	≥93.00%	
Safe care	Patient safety indicator	1 of 4	2 of 4	3 of 4	Includes these domains: seclusion rate, restraint rate, adult fall rate, and geriatric fall rate
	Environmental safety	≥4.11	≥4.13	≥4.16	Using Press Ganey's "Employees and Management Work Together to Ensure the Safest Possible Working Conditions." Excludes contractors and outsourced staff
Value and efficiency	Readmissions	≤9.00%	≤8.50%	≤8.00%	
	Cost per case mix index-adjusted patient day	≤\$877.17	≤\$863.81	≤850.46	
Extraordinary engagement	NRI patient satisfaction	4 of 7	5 of 7	6 of 7	Includes these domains: outcomes, dignity, rights, participation, environment, empowerment, and Central Kentucky Recovery Center
	Employee engagement	≥3.96	≥4.03	≥4.09	

NOTE: Approved by the UK Board of Trustees University Health Care Committee in June 2019.

ENTERPRISE GOAL ALIGNMENT

The iterative process of developing the enterprise goals each year includes input from many individuals and groups within UK HealthCare, as well as local experts and teams in each domain. The goal-building process sets the focus for quality improvement, harm prevention and reduction, access and efficiency initiatives, patient experience, engagement, and diversity and inclusivity for the coming fiscal year. We develop goals based, in part, on the Vizient Top Performer model, which provides a robust and tested framework. All metrics are validated by external agencies (such as Vizient, Solutions for Patient Safety, Centers for Medicare and Medicaid Services, and The Joint Commission), and their definitions and sources are clearly documented. UK HealthCare selects measures of performance that contain historical performance data and a reliable measurement tool, often using the most recent year's performance as the internal benchmark.

To align effort and resource allocation and to focus our quality-improvement work, UK HealthCare deploys cascading of enterprise goals throughout the organization by a variety of methods. Those cascading efforts include the following:

- Approval of the Enterprise Goals at the University Health Care Committee meeting
- Executive leadership at-risk compensation plans
- Clinical Chair at-risk compensation plans
- Medical Director performance evaluations
- Nursing performance evaluation goals
- Leadership performance evaluation goals
- Health Information Technology impact goals
- Other clinical discipline evaluation goals (e.g., pharmacy, therapeutic services, etc.)
- Staff performance evaluation goals
- Capital prioritization process
- Purchased services contracts

The cascading process is a translation or application of the enterprise strategic-level goals to more specific goals that organizational units such as departments, teams, and individuals can easily understand. We consider the cascading of our Enterprise Goals to be a performance-management system aimed at achieving and sustaining organizational alignment throughout the UK HealthCare clinical enterprise.

Additionally, patient- and family-centered care remain a foundation for our UK HealthCare Enterprise Strategic Plan 2020 (developed in 2015), which also includes a strong focus on value-based care (see Figure 3) and emphasizes our culture's need to change in order to deliver a more connected and personalized experience for our patients. This five-year strategic plan guides all of us at UK HealthCare toward our

goal of delivering safe, high-quality, efficient, and accessible care and helps us navigate the changing times in the health care industry.

Hundreds of UK HealthCare faculty and staff participated in the Plan’s development, which represents the collective wisdom of our talented community. Currently, UK HealthCare has initiated its process to develop the 2025 Enterprise Strategic Plan, aiming to complete the Plan by the summer of 2020.

KEY PERFORMANCE INDICATORS

Key performance indicators drive performance-improvement activities within organized areas and align with UK HealthCare’s needs and Quality, Safety and Patient Experience Plan. See Figure 4 for a sampling of metrics that would fall within these respective categories.

Figure 4: Key Performance Indicator Domain Example



GRADUATE MEDICAL EDUCATION INTEGRATION

The Accreditation Council for Graduate Medical Education (ACGME) determines educational program guidelines and benchmarks for physician residencies and fellowships. ACGME-accredited residency and fellowship programs must ensure that learners are not only educated regarding fundamental patient-safety and quality-improvement methods, but also assimilate into health systems’ patient-safety and quality-improvement efforts. Since 2013, the ACGME has conducted Clinical Learning Environment Review (CLER) site visits with a focus on understanding and enhancing resident and fellow engagement. At UK HealthCare, residents and fellows regularly attend patient-safety analysis events and participate on interprofessional quality-improvement teams. Additionally, a resident and fellow serve as active members on

the Executive Quality and Safety Committee. The University of Kentucky Albert B. Chandler Medical Center had its third CLER site visit in August 2019. Additionally, the UK College of Medicine continues to participate in the ACGME Patient Safety Leaders Collaborative, with a focus on piloting strategies to increase learner engagement in patient safety and advance organizational patient-safety culture.

DYAD PARTNERSHIPS

A hallmark of reliable, high-performing health care organizations across the United States is focused engagement of frontline teams in leading quality-improvement efforts. A number of scholarly articles support the use of dyads or triads of medical, nursing and administrative leaders who commit to serve as frontline champions for quality improvement.

THE FORMATION OF DYADS AND FOCUSED QUALITY IMPROVEMENT

On August 31, 2018, Mark Newman, MD, Executive Vice President for Health Affairs, named more than 60 “dyad” leaders within inpatient and procedural units and areas to serve as visible champions of quality at UK HealthCare. This expanded to include more than 50 dyad leaders within ambulatory services in March 2019. Both groups participated in kickoff meetings that established expectations for the dyad leaders and supported goal-setting for performance improvement.

To promote a learning health system, inpatient, procedural, and ambulatory dyad groups have met regularly as a learning collaborative for training in quality improvement and sharing of best practices. Dyad leaders meet as pairs regularly and work with all members of the interdisciplinary teams within their units, areas, and service lines to maximize quality, safety, patient experience, and staff engagement. With their teams, they review performance data, identify areas for improvement, and develop interventions to test improvements in quality.

Beginning in September 2019, UK HealthCare formed affinity groups of dyads to focus quality and safety efforts on specific issues, such as patient experience, hospital-acquired pressure injuries, falls, surgical site infections, methicillin-resistant *Staphylococcus aureus* infections, hypoglycemia episodes, central-line associated blood stream infections, catheter-associated urinary tract infections, etc.

Each dyad submitted at least two initial improvement goals for FY2020. The dyads use the FOCUS-PDSA model to conduct small tests of change, as well as weekly huddles, leader rounding, and a peer learning collaborative to support the changes necessary

for goal progress. The dyads also involve the entire team in evaluating quality issues in inpatient and procedural areas, solving them through small cycles of change.

UK HealthCare is making quality-improvement coaching and other resources available to the dyads and their teams, and each dyad has an executive sponsor supporting their work. By leveraging dyad leadership at the frontlines, UK HealthCare is committed to equipping clinical leaders to improve clinical care, safety, efficiency, patient experience, and employee engagement.

While still new within UK HealthCare, dyads have shown substantial improvements in their units and clinics in their focused areas for improvement: patient experience, patient safety, faculty and staff engagement, and no-show rates.

ENTERPRISE SUPPORT STRUCTURES FOR QUALITY IMPROVEMENT

A key part of performance improvement is developing the capacity of clinical teams to lead transformation efforts in their areas. UK HealthCare has established several enterprise support structures aimed at providing teams across the organization with the training, tools, and data needed to aid frontline improvement efforts.

QUALITY IMPROVEMENT TRAINING

Since July 2018, UK HealthCare has focused on ensuring all clinician and administrative leaders receive quality-improvement training. Initially, this effort started with a three-month initiative to train a large selection of managers and clinical leaders in basic quality-improvement methods. To date, more than 1,300 physicians, nurse managers, and administrative leaders have received training in using the FOCUS-PDSA model of quality improvement (see Figure 5). FOCUS-PDSA is a method for identifying problems and efficiently completing tasks. The training provides common language, structures, and processes for teams to undertake in their improvement efforts.

Figure 5: FOCUS-PDSA Overview

FOCUS-PDSA is the basic process-improvement model that UK HealthCare will use going forward to help teams improve quality, safety, efficiency and engagement.

F	Find a process to improve	P	Plan the improvement
O	Organize a team	D	Do the improvement
C	Clarify current knowledge	S	Study the results
U	Understand root causes	A	Act and determine next steps
S	Select the improvement		

To help teams analyze specific breakdowns in care and their underlying causes, the UK Center for Quality, Value, and Safety developed a continuous quality-improvement

storyboard using the FOCUS-PDSA model (Appendix 1). This process can strategically guide teams' efforts to focus, collect data, and select and organize a team for the problem area chosen. It also guides teams through all the remaining steps of the quality-improvement process using a checklist based upon the FOCUS-PDSA cycles of quality improvement.

In order to further build capacity in quality improvement, UK HealthCare leadership supported a two-day "white belt" program in FOCUS-PDSA methodology to provide more intense training for dyads and other UK HealthCare leaders. Since the summer of 2019, nearly 300 UK HealthCare physicians, nurse managers, administrative leaders, and others at every level of leadership have completed this training, with hundreds more signed up for the course in the next six months.

Additional training will be available in the coming months for employees seeking to incorporate quality- and process-improvement methods into their work.

ALIGNMENT OF STAFF ON THE DATA ANALYTICS AND QUALITY, SAFETY, AND VALUE TEAMS

Over the years, UK HealthCare has made substantial investments in staffing for quality and safety as well as data analytics. In FY2019, a major realignment and coordination of these efforts occurred under the leadership of Mark Newman, MD, Executive Vice President for Health Affairs.

The two largest data analytics groups – the Data, Analytics and Statistical Core in the UK Center for Health Services Research and the Business Intelligence group from UK HealthCare Information Technology – merged to form the Performance Analytics Center of Excellence (PACE). A chief data officer leads PACE, reporting to the chief quality and transformation officer and the chief information officer; they share accountability for the data analytics group. The new PACE group includes 29 staff members charged with supporting enterprise efforts in improving data-driven decision-making and performance.

Additionally, the UK Office for Value and Innovation in Healthcare Delivery and the Quality Monitoring and Reporting Department merged to form the Center for Quality, Value and Safety (CQVS). The senior director for quality and safety, who reports to the chief quality and transformation officer, oversees the CQVS, which includes 31 staff members. This new team is responsible for providing quality-improvement training, supporting dyads and other quality-improvement teams, performing quality monitoring and reporting, and developing tools and programs to help the Enterprise deliver the highest level of patient care and experience while also supporting engaged teams.

EXPANSION OF PEER REVIEW FOR QUALITY AND SAFETY

In the 2018 state legislative session, the Kentucky General Assembly passed House Bill 4, signed into law by Governor Matthew Bevin. Until that time, Kentucky was only one of two states in the U.S. not to protect peer-review documents from discovery by malpractice attorneys. Peer review in health care organizations in other states has long been a cornerstone of creating a blame-free, non-punitive culture of safety that promotes understanding the root causes of poor outcomes and patient safety issues and errors, and helps to address them. With the new authority granted by law, UK HealthCare is working to significantly expand its peer-review framework and policies to establish a modernized system for overseeing medical practice in UK HealthCare hospitals and clinics.

With approval of the UK Board of Trustees Health Care Committee, the UK HealthCare medical staff will establish a Peer Review Committee responsible for safety- and quality-related oversight activities regarding the practices of the advanced practice professionals at UK HealthCare's hospitals and clinics. The charge of this Committee will be to establish policies and procedures to formalize and modernize peer review processes that protect the quality and safety of patients and promote professionalism.

Peer review may involve monitoring, assessment, review, and evaluation of practitioners and will consist of a range of interventions, from collegial interventions to referrals for formal action. All organizational units of the medical staff will perform peer review, and all practitioners will be required to cooperate with any peer review activity. These changes provide a comprehensive system of peer review, from credentialing and privileges through ongoing and focused professional practice evaluation to more formalized peer review actions. The peer review framework will involve UK HealthCare's Credentials Committee, department leadership, Peer Review Committee and Enterprise Medical Staff Executive Committee.

DOMAIN 1: CLINICAL CARE

With the aforementioned enterprise infrastructure in place, UK HealthCare is able to deploy resources to a number of initiatives and programs aimed at improving performance across the following five domains:

- Clinical care
- Safe care
- Efficient care
- Engagement
- Healthy financial performance

Below is a description of various ways that UK HealthCare teams are addressing the domain of providing exceptional clinical care.

MONITORING METRICS

UK HealthCare utilizes nationally recognized performance metrics and benchmarks in order to help position the enterprise as a national leader in quality, safety, and performance improvement. Vizient is the primary source of comparison.

UK HealthCare collects data on required items as defined by The Joint Commission, Centers for Medicare and Medicaid Services, and other regulatory bodies. This monitoring includes but is not limited to the measures in Table 5. The Enterprise shares performance data and information through weekly, monthly, and quarterly quality and safety meetings, and biweekly Patient Safety Committee meetings. Weekly and monthly scorecards are available to all staff (via the Quality Monitoring and Reporting SharePoint site).

Table 5: UK HealthCare Reported Measures and Monitoring Frequency

Measures	Monitoring Frequency
1. Mortality, both observed and expected (O/E) mortality rates	Raw numbers monitored weekly; O/E rates received monthly
2. Patient safety indicators	Weekly
3. Hospital-acquired infections	Weekly
4. Access to care (new patient visit lag, bump rate, and no-show rate)	Monthly
5. Length of stay (both O/E rates)	O/E rates received monthly; number of admissions and discharges monitored weekly

6. Same-hospital readmissions	Weekly
7. Patient experience (inpatient and ambulatory)	Weekly
8. Engagement (staff and providers)	Annually through engagement survey
9. Sentinel events	Weekly (reported monthly)
10. Nursing sensitive indicators (catheter-associated urinary tract infections, central line-associated bloodstream infections, restraints, assaults, pressure ulcers, and falls)	Weekly
11. Diversity and inclusivity (for staff and College of Medicine faculty)	Annually

PERFORMANCE AND QUALITY IMPROVEMENT

The Center for Quality, Value, and Safety (CQVS) serves as the resource for all quality-improvement and patient-safety projects. The CQVS uses a systematic approach to supporting and guiding improvement teams at UK HealthCare by applying lean principles as well as problem-solving and change-management processes and tools. The health systems engineers and quality-improvement specialists have specific expertise in improvement methodologies, and support UK HealthCare’s priority organizational initiatives.

The Performance Analytics Center of Excellence (PACE) provides data for numerous projects in clinical care and at the Office for Value and Innovation in Healthcare Delivery. The CQVS and PACE teams have expertise in numerous quality-improvement and data-analytic tools, including but not limited to patient flow, FOCUS-PDSA, engagement, lean, Six Sigma, process design, FMEA, reflective learning, statistical process control, data extraction and analytics, and Tableau and statistical software. This group supports cross-organizational priorities and teams who are engaged in improvement. Educational programs are available to help build capacity and bring performance- and quality-improvement to life at all levels. This encourages teams to embed their quality-improvement processes in their daily activities, rather than house them in a single overseeing department.

AMBULATORY QUALITY AND VALUE STEERING COMMITTEE

On October 14, 2016, the Centers for Medicare and Medicaid Services created a new payment program called the Quality Payment Program (QPP), authorized by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). The MACRA and QPP regulations established a fundamentally new framework for how physicians and other eligible clinicians receive compensation from Medicare Part B through 2025. This new program is part of the shift to value-based payment at the federal level. Under the QPP requirements, Medicare providers who meet those requirements must submit data to the Centers for Medicare and Medicaid Services and then receive a score in four categories: quality, cost, improvement activities, and use of technology (advancing care information and promoting interoperability). Based on the score, Medicare adjusts claims payments upward or downward, or they remain neutral.

UK HealthCare formed the MACRA Steering Committee to organize and oversee the implementation of the new QPP requirements. Over time, additional commercial payers began to join Medicare in incentivizing UK HealthCare to achieve a certain level of quality performance. Therefore, in January 2019, UK HealthCare changed the name and scope of the MACRA Steering Committee to the Ambulatory Quality and Value Steering Committee. This Committee is comprised of leadership members from across the Enterprise that meet monthly and oversee work on a variety of pay-for-performance and value-based payment initiatives, including MACRA and QPP, Medicare Advantage plans, and Medicaid Managed Care Organizations, among others. The Committee worked to develop an aligned quality-measure grid across the various value-based initiatives. This includes an aligned set of roughly 20 high-priority ambulatory quality measures that are reported to the Centers for Medicare and Medicaid Services or are assessed by commercial payers or Medicaid Managed Care Organizations. UK HealthCare used those measures to formulate enterprise goals, and they will inform ambulatory dyad efforts in FY2020.

Further development of an ambulatory quality and value infrastructure has been important to UK HealthCare in succeeding with value-based payment programs. For the 2017 and 2018 performance years in the QPP, UK HealthCare clinics and providers received an exceptional performance score. The Kentucky Medical Services Foundation's tax identification number, which includes most physicians, received a score of 99.94 points and, as a result, will receive a 1.68 percent positive payment adjustment for Medicare Part B claims in 2020. The UK HealthCare tax identification number, which includes some physicians and most advanced practice providers, received a score of 95.03 and will receive a 1.45 percent positive payment adjustment for Medicare Part B claims in 2020. Additionally, UK HealthCare continues to work with commercial payers and Medicaid Managed Care Organizations to hit quality targets for those value-based contracts.

PATIENT-CENTERED MEDICAL HOME AND SPECIALTY PRACTICE RECOGNITION

Over the past three years, 15 UK HealthCare clinics have earned Patient-Centered Medical Home (PCMH) or Patient-Centered Specialty Practice (PCSP) recognition from the National Committee for Quality Assurance. This nationally recognized program helps practices develop and implement comprehensive, high-quality, patient-centered care. To achieve these recognitions, clinics met rigorous requirements and demonstrated capabilities around team-based care, patient-centered care and access, continuous quality improvement, population health, care management, and care coordination. PCMH and PCSP efforts are key parts of preparing UK HealthCare ambulatory clinics for value-based care and payment.

UK HealthCare Patient-Centered Medical Home Clinics

- Internal Medicine Group
- Center for the Advancement of Women's Health
- UK Polk-Dalton Clinic
- Adolescent Medicine
- General Pediatrics, Kentucky Clinic South
- UK Pediatrics at Maxwell
- UK Pediatrics - Family Care Center
- Family Medicine - UK North Fork Valley Community Health Center, Hazard

UK HealthCare Patient-Centered Specialty Practice Clinics

- UK Pediatric Developmental Behavioral Clinic
- UK Pediatric Specialties
- UK Pediatric Hematology/Oncology
- UK Pediatric Congenital Heart Clinic
- UK Neonatal Intensive Care Unit Graduate Clinic

DOMAIN 2: EFFICIENT CARE

As value-based care and payment continue to transform health care in the U.S., UK HealthCare is continuing to develop its capacity to monitor and deliver efficient, affordable, and high-value care.

HIGHLIGHTING OUR APPROACH (LENGTH OF STAY REDUCTION)

Length of stay is an important quality and patient-safety indicator for UK HealthCare. It is important that patients transition home or to the next appropriate level of care as soon as their condition warrants. The case management team is actively involved in the care of all patients, and reviews regularly those with a complex discharge in order to provide as timely of a discharge as possible.

UK HealthCare has improved the length of stay index by collaborating with skilled nursing facilities and rehabilitation centers across the state to ensure timely access and quality of care for our patients. In October 2019, UK HealthCare formed an affinity group to focus on increasing the proportion of patients who might be discharged earlier in the day in order to increase hospital throughput. Using FOCUS-PDSA methodology, the team will identify opportunities to implement interventions that can enhance the discharge process and allow admitted patients in the emergency department to transfer to an inpatient bed.

BUNDLED PAYMENTS FOR CARE IMPROVEMENT

On October 1, 2018, UK HealthCare began participating in a new Medicare alternative payment model called the Bundled Payments for Care Improvement Advanced Model. Participation means that UK HealthCare is part of an elite group of health care providers nationwide working to improve the quality and cost-effectiveness of care for patients undergoing coronary artery bypass grafting (CABG) or outpatient percutaneous coronary intervention (PCI). As part of the program, UK HealthCare is financially accountable for the entire 90-day post-discharge episode of care for Medicare patients that have an outpatient PCI or CABG procedure at UK HealthCare. This program will continue until December 31, 2023. The goal of our participation is to identify and address opportunities to reduce cost and improve patient outcomes, as well as to prepare UK HealthCare to participate more widely in alternative payment models and value-based payment initiatives.

The Division of Cardiology has provided leadership for this effort, with Enterprise support from Finance, Regulatory Affairs, Quality, Information Technology, and other teams at UK HealthCare. Cardiology has assembled a Care Transformation Committee and several focused subgroups to address these specific tasks and issues. The Centers for Medicare and Medicaid Services will provide claims data at regular intervals to help guide decision-making on opportunities for improvement in reducing variability in practice, supply costs, and post-acute care coordination.

LEAN THINKING PRINCIPLES

The lean principle in health care is “an organization’s cultural commitment to applying the scientific method to designing, performing, and continuously improving the work delivered by teams of people, leading to measurably better value for patients and other stakeholders.” The leadership at UK HealthCare understands that for lean principles to take root, leaders must first work to create an organizational culture that is receptive to lean thinking. We use the following Six Principles of Lean to help implement this approach to improving care ([View full article here](#)).

1. Lean is an *attitude of continuous improvement*. Lean involves a culture of continuous improvement, in which leaders are always raising the bar to drive value.
2. Lean is *value-creating*. The ultimate goal of lean is to improve value.
3. Lean is *unity of purpose*. Lean can unify teams around a shared goal.
4. Lean is *respect for the people who do the work*. Health care leaders need to empower frontline workers to drive improvement.
5. Lean is *visual*. Visual tracking provides easy access to data and serves as a place for communicating concerns and new ideas.
6. Lean is *flexible regimentation*. In a lean approach, workers need to identify root causes of problems and change standards to optimize processes.

HEALTH INFORMATION TECHNOLOGY PERFORMANCE IMPROVEMENT

As a resource to the entire health system, we endorse adoption of health information technology and the promotion of health information exchange to improve health care. This endorsement follows the premise that health information technology, when fully integrated into a health care delivery organization, facilitates substantial improvements in health care quality and safety. We continue to embark on the deployment and optimization of information technology as a critical infrastructure to our program. Our belief in health information technology supports the Office of National Coordinator’s (ONC) objective to use health information technology to make care safer and to continuously improve the safety of health information technology (ONC, 2013). Monitoring occurs through utilization of previously mentioned incident reports, SWARMS, and aggregating and analyzing data on key processes such as medication errors, computerized provider order entry (CPOE) compliance, documentation standards, and clinical decision support alerting, to prevent adverse events.

The transformation of Information Technology in health care has changed the role of the patient enabling access to manage his or her own health information. Through deployment of the patient portal, patients at UK HealthCare have access to medical

information electronically. The privacy and security of the Patient Health Information is a top priority for the Enterprise, and UK HealthCare institutes policies and security safeguards to protect all health information. The comprehensiveness and speed of getting information to the patient and between providers of care has been a cornerstone in program development.

Technology remains as one of the key enablers of the UK HealthCare Strategic Plan. UK HealthCare's future viability is dependent on an integrated platform for internal and external data management and use. A technology platform enabling seamless interoperability of data across the continuum of care is essential. In 2019 UK HealthCare embarked on a journey to select the best information system platform to support the clinical enterprise needs of the future. Our quest is the successful implementation of a single-patient record delivering the digital platform required for success in the value based ecosystem.

DOMAIN 3: SAFE CARE

UK HealthCare places great emphasis on the continuous monitoring of quality, safety, and performance-improvement initiatives throughout the enterprise. This monitoring includes weekly, monthly, and quarterly venues to discuss outcomes in order to ensure that UK HealthCare is delivering optimal care in a timely fashion.

The weekly patient-care huddle is an intense and thorough review of the patient care provided each week. This group meets on Thursdays to discuss performance on the enterprise goals, and identifies, and often discusses, any safety events that occurred during the prior week. All levels of clinicians and staff (inpatient and ambulatory) attend this meeting with the goal of engaging all participants in ongoing initiatives and creating an open dialog to discuss any concerns related to quality and safety. For this year, we are actively trialing a daily briefing.

UK HealthCare takes time monthly to reflect on performance results regarding enterprise metrics by holding the UK HealthCare Executive Quality and Safety Committee meeting. The Chief Quality and Transformation Officer and the Director of Quality Monitoring and Reporting co-chair this meeting. Attendees include members of the senior leadership team and leaders throughout the enterprise, ensuring key metrics are transparent. Committees, programs, and service lines report to this group on a rotating basis to ensure monitoring and support of all initiatives as necessary (see Table 1). UK HealthCare widely circulates the Enterprise Scorecard and posts it on the employee website (CareWeb).

This monthly review and evaluation includes a summary report regarding the health system's performance on measures sensitive to the practice of nursing. The metrics are included in the full report but also are furnished and presented as needed for Magnet

designation. The Nursing Strategic Plan provides the structure to implement and direct a firm foundation for nursing practice expression.

At the end of each quarter, a Report on Quality meeting reviews enterprise performance on initiatives and their associated metrics. Patients and their family members may also present at these meetings in order to emphasize the importance of patient-centered care and provide feedback on the care provided at UK HealthCare. Agenda items for this meeting include reports by the teams working diligently on quality, safety, and performance-improvement initiatives, and awards that recognize teams and individuals who have made significant contributions to the enterprise. The Executive Vice President for Health Affairs or his designee chairs this meeting. The meeting is open to all UK HealthCare physicians and staff, and more than 300 people routinely attend. UK HealthCare posts meeting results and slides on the internal website for reference.

It is important for the organization to communicate its performance and priorities to all staff within the Enterprise. Information reaches staff through a variety of channels, including but not limited to the following:

- Bulletin boards in work areas
- Regular staff and department meetings
- Huddles (departmental, dyadic, etc.)
- Leader rounding
- Email (In the Loop)
- Website - CareWeb
- Ad-hoc meetings
- Medical director meetings
- Medical department meetings
- Town Hall leadership meetings
- Regular leadership meetings
- Quarterly nursing staff meetings
- Nursing leader meetings

BUILDING A CULTURE OF SAFETY

A culture of safety is also one of learning: Organizations learn from their safety data, undertake needed actions, and make substantial system changes in an effort to ultimately prevent injuries and save lives. An organization's actions – its practices, procedures and processes – reflect its culture. UK HealthCare strives for a culture of safety by ensuring it is:

1. **Informed** – Leaders understand the technical, organizational, environmental, and human factors that impact error

2. **Just** – Trust pervades the organization so that people report safety concerns and errors and know what constitutes unsafe practice
3. **Values** reporting – Staff and leaders know the importance of accurate data, and reward reporting of errors and near misses
4. **Flexible** – Frontline experts have the responsibility of addressing immediate safety issues

HIGHLIGHTING OUR APPROACH (MORTALITY)

All mortality cases at UK HealthCare receive a thorough review. Upon a patient's death, the Center for Quality, Value, and Safety assesses the patient's chart in detail to identify potential quality indicators. If any are present, the chart goes to a physician for further analysis; each service within UK HealthCare has a physician who reviews these cases as appropriate. If the physician identifies a quality concern, the UK HealthCare Mortality Committee – a multidisciplinary team that meets twice monthly to perform a thorough review of mortalities – inspects the case. After presentation at the Mortality Committee, a case can undergo a SWARM or further assessment by department leadership as deemed appropriate. Through this process, UK HealthCare identifies underutilization of hospice: By transitioning patients to hospice, there is increased support for both the patient and the family.

All mortality charts also undergo review to identify potential clinical care opportunities for improving patient experience and outcomes.

PROACTIVE SAFETY DATA COLLECTION, RISK IDENTIFICATION, AND PROCESS FOR MITIGATING THE RISK FACTORS

UK HealthCare collects safety-event information using The Joint Commission's National Patient Safety Goals (standards of practice set by professional organizations), and federal guidelines provided by the Centers for Medicare and Medicaid Services and other regulatory agencies. This includes incident-reporting systems collectively referred to as Safety Intelligence. The information includes actual or potential occurrences involving inpatients, outpatients, employees, visitors, and unsafe conditions such as near misses. Employees, medical staff members, house staff, and some contractors provide information primarily through the completion of incident reports using UK HealthCare's online system; these reports may be anonymous.

UK HealthCare uses safety intelligence reporting data to track and trend processes and outcomes, as well as to initiate activities that address events related to processes, systems, protocols, or equipment. The Enterprise prioritizes opportunities for improvement regarding patient safety according to the level of severity; frequency of the occurrence; potential for harm to the patient, employee or visitor; and potential

for liability (failure mode and effects analysis). The Enterprise Incident Reporting Steering Committee performs biweekly review of information in collaboration with UK HealthCare Risk Management in order to direct the administrative and medical staffs' attention to areas of clinical care that represent significant sources of actual or potential risk. UK HealthCare's safety intelligence system describes specific types of medical and/or health care events and level of severity.

The Accreditation and Risk Management departments track sentinel events, and the Accreditation Department works with the Chief Quality and Transformation Officer to ensure all information is considered. The monthly UK HealthCare Executive Quality and Safety Committee meetings review and report all sentinel events to facilitate oversight at the senior executive level of the enterprise.

UK HealthCare has a hospital-wide interdisciplinary response mechanism to address sentinel-event alerts issued by The Joint Commission (TJC), in which the enterprise takes the following steps:

- Gap analysis
- Development of a risk-reduction strategy through an action plan
- The Enterprise Patient Safety Committee reviews and approves action plans and next steps

The Joint Commission's Comprehensive Accreditation Manual - Hospital outlines the expectations of the appropriate response to a sentinel event, which includes conducting a timely, thorough, and credible root-cause analysis; developing an action plan designed to implement improvements to reduce risk; implementing the improvements; and monitoring the effectiveness of those improvements. UK HealthCare's SWARM process (described further below) includes comprehensive, systematic analysis and an action plan that meets the above TJC standards. This is UK HealthCare's standard approach to all sentinel events, in addition to providing some supplemental documentation (e.g., event-related documents) of a root-cause analysis.

INVESTIGATION, ANALYSIS, AND REPORTING

UK HealthCare developed a novel, rapid approach to root-cause analysis (RCA) – called “SWARMing” – with the goal of establishing consistency in investigating and analyzing adverse or undesirable events.* Ideally, this process occurs without unnecessary delay after an event, undertakes thoughtful analysis by an interdisciplinary team, and encourages reporting of adverse events by frontline staff.

Any personnel at UK HealthCare may call for a SWARM. Most often, the SWARM process begins when a staff member completes an incident report regarding an event. A patient safety analyst, in collaboration with the risk management team, reviews the report or a known adverse event and makes the decision of conducting either a rapid

RCA or a full SWARM. If a SWARM is determined to be the best approach, the report is reviewed by a department administrator and a clinical risk manager, who rapidly conduct a preliminary investigation to document the basics of what happened and who was involved, with the development of a timeline with the goal of a SWARM being scheduled as soon as possible. In some cases of specific concern, SWARMS are performed immediately after the event.

Participants typically include those directly involved in the event, as well as those with authority over or responsibility for a unit, service, or department. Attendees might range from a ward clerk to the chair of the department of surgery.

The SWARM process consists of five key steps:

- Brief explanation of the process and guiding principles
- Introduction of participants in the room and those participating by telephone
- Review of the facts that prompted the SWARM
- Discussion of what, why, and how the event happened, with investigation of the underlying system factors
- Conclusion outlining proposed focus areas for action and assignment of task leaders, with specific deliverables and completion dates

UK HealthCare disseminates the weekly SWARM closure status to system leaders to ensure transparency and accountability for tasks assigned in order to ensure timely closure.

*Reference: Li, J.; Boulanger, B.; Norton, J.; Yates, A.; Swartz, C.H.; Smith, A.; Holbrook, P.J.; Moore, M.; Latham, B.; Williams, M.V. "SWARMIing" to Improve Patient Care: A Novel Approach to Root Cause Analysis. *Jt Comm J Qual Patient Saf.* 2015 Nov; 41(11):494-3.

LEGAL PROTECTIONS FOR PATIENT SAFETY ACTIVITIES

Congress passed the Patient Safety and Quality Improvement Act of 2005, 42 U.S.C. 299b-21 et seq., to "facilitate an environment in which health care providers are able to discuss errors openly and learn from them" (H.R. Rep. No. 109-197, at 9, 2005). The act was intended to replace a "culture of blame" and punishment with a "culture of safety" that emphasizes communication and cooperation (see S. Rep. No. 108-196, at 2, 2003).

UK HealthCare carries out patient safety activities under the ambit of UK HealthCare's Patient Safety Evaluation System in an effort to improve patient safety and the quality of health care delivery. This includes the collection and analysis of Patient Safety Work Products, and the development and dissemination of information with respect to patient safety, such as recommendations, protocols, and best practices. It may also

include the use of Patient Safety Work Products to encourage a culture of patient safety. Patient Safety Work Products include incident reports, SWARM data, sentinel-event analyses, and all other data and information described in UK HealthCare Policy No. A06-035, entitled "Patient Safety Evaluation System," and submitted to UK HealthCare's patient safety organization in accordance with the Patient Safety Organization Service Agreement. All activities conducted within the Patient Safety Evaluation System are privileged and confidential to the greatest extent allowable under the Patient Safety and Quality Improvement Act and the Kentucky Court of Appeals. Counsel in Risk Management is responsible for legal oversight and protection of information contained within the Patient Safety Evaluation System, and works closely with the Executive Quality and Safety Committee to ensure integrity of the information and the institutional processes.

INTEGRATING AMBULATORY PATIENT SAFETY

We recognize that the types of events that occur in a dynamic, ever-changing ambulatory setting require a similar analysis and approach to those that occur in a controlled hospital environment. Continuing to learn from inpatient partners and other organizations across the country, the ambulatory patient safety team evaluates quality and safety at the ambulatory level. The team is responsible for identifying trends and issues that potentially influence care delivery, and for developing communication plans and educational materials that focus on changing the culture and increasing the quality of care provided to patients in this setting.

The Ambulatory Patient Safety Team analyzes all patient-safety events and identifies opportunities for unit- and/or system-level SWARMS. This structure has proven effective in providing leadership with insight on what needs changing or modification within the ambulatory system in order to create a safer environment for patients, visitors, and staff. In addition to continuously educating staff on the value of incident reporting, the FY2020 focus includes developing a hand-hygiene compliance initiative, standard equipment cleaning between patients, a standard approach for sample medications, standard temperature monitoring of refrigerated medications, high-level disinfection compliance, and a structure to ensure all patients considering suicide receive assessment and referral as appropriate.

BUILDING A 'NO HARM' ENVIRONMENT

Safety is measured by the no-harm score (patient safety indicator-90), individual Agency for Healthcare Research and Quality patient safety indicators, and rates of health-care acquired infections. UK HealthCare maintains focus in the following areas:

- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Ventilator-associated events
- *Clostridium difficile* infections
- Methicillin-resistant *Staphylococcus aureus*
- Surgical-site infections – colon and hysterectomy
- Patient falls
- Hospital-acquired pressure injuries
- Zero Suicide Initiative – early phases

The no-harm initiative – led by nursing teams consisting of directors, patient care managers, assistant patient care managers, clinical nurse specialists, infection preventionists, staff development specialists, and clinical quality specialists – convenes on a quarterly basis and focuses on falls, hospital-acquired pressure injuries, central line-associated bloodstream infections, and catheter-associated urinary tract infections. The goal of these discussions is to support coordination of UK HealthCare leadership roles in order to promote a safe patient care environment. Leads for each workgroup present emerging trends, corresponding evidence-based practices and gap analyses, and provide recommended next steps, demonstrating their commitment to ensuring no harm to their patients and the support of clinical nurses at the point of care. Standardization of work across the organization includes but is not limited to the following:

- Wildcard initiative to promote real-time quality improvement at the point of care through implementation of evidence-based practices
- Weekly huddles when patient harm occurs to evaluate care improvement opportunities
- Standardization of data use across the organization
- Electronic health record optimization and alerts to support best practices at the point of care (e.g., tracheotomy suture removal reminder)
- Automated vs. manual data extraction to create more time to spend at the point of care
- Evaluating the sustainability of all initiatives

PERFORMANCE AND MEASURES OF SUCCESS

Providing periodic (monthly, quarterly, etc.) reports on specific sets of indicators is a routine essential to the quality and safety plan. All patient care areas at UK HealthCare effectively and continuously monitor on a monthly basis all patient safety indicators for national patient safety goals. UK HealthCare bases monitoring and analysis of patient

safety indicators on multiple patient safety programs: The Joint Commission's national patient safety goals, the Agency for Healthcare Research and Quality's patient safety indicators, and the Centers for Medicare and Medicaid Services' standards for hospital-acquired infections/conditions.

The Patient Safety and Infection Prevention and Control Departments construct the monthly patient safety report through direct observation of practice, concurrent medical-record review, and retrospective chart review. As events are identified, the caregivers for these patients work together to complete a root-cause analysis in order to identify opportunities for continuous improvement. UK HealthCare conducts data collection and analysis at an interdisciplinary level, and then constructs and communicates organizational patient safety reporting.

The following are some of the metrics monitored by the infection prevention and control department:

- Ventilator-associated events
- Central line-associated bloodstream infections
- Catheter-associated urinary tract infections
- Methicillin-resistant *Staphylococcus aureus* or multidrug resistant organisms
- Surgical site infections
- *Clostridium difficile* infections
- Hand hygiene
- Outbreaks of infectious disease or clusters of organisms

The following are some of the national patient safety goal metrics monitored by the patient safety department:

- Improved accuracy of patient identification
- Effective communication regarding critical values
- Safe use of medications regarding correct labeling of medications and/or solutions in procedural areas, anticoagulant therapy mismanagement, and medication reconciliation
- Reduced harm associated with clinical alarm systems
- Reduced risk of health care-associated infections
- Identification of inherent risks in the suicide population, patient needs for appropriate treatment, and education in the prevention of suicide for the patient and his or her family
- The Joint Commission's Universal Protocol
- Falls
- Hospital-acquired pressure injuries

PATIENT SAFETY EDUCATIONAL ACTIVITIES – TRANSLATING RESEARCH INTO PRACTICES

UK HealthCare’s educational and promotional events emphasize research evidence, best practices, medical-error reduction, and specific job-related aspects of patient safety. As appropriate, training activities incorporate methods of team training to foster an interdisciplinary, collaborative approach to the delivery of patient care, and reinforce the importance of reporting medical errors as well as the proper way to report them. Leadership initiates the relevant plans (e.g., World Thrombosis Day) and conducts educational activities in coordination with other educational efforts undertaken at UK HealthCare. Simulation is also an invaluable and necessary adjunct for teaching, certification, training, research, and recruitment for all health care areas.

DOMAIN 4: ENGAGEMENT

PATIENT AND STAFF EXPERIENCE

The UK HealthCare Office of Patient Experience, working in collaboration with the Center for Quality, Value, and Safety, serves as the content expert and champion of patient- and family-centered care improvements and projects. The Office of Patient Experience uses a systematic approach to consulting and guiding improvement teams at UK HealthCare by applying best practices, facilitation, problem-solving, and change-management processes and tools. The team has expertise in numerous patient- and staff-experience improvement topics, including but not limited to: analysis of patient satisfaction and employee and provider engagement, patient and family partnerships, education and training, leadership development, and complaint resolution.

The following are some of the metrics monitored by the Office of Patient Experience:

- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
- Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS)
- Additional patient experience surveys for other areas not captured in CAHPS surveys
- Employee and physician engagement
- Grievance compliance in accordance with Centers for Medicare and Medicaid Services guidelines

The goal of the Office of Patient Experience is to guide the integration of patient- and family-centered care into all aspects of the planning, delivery, and evaluation of health care through mutually beneficial partnerships among health care providers, patients, and families.

PROVIDER AND STAFF ENGAGEMENT

Engagement is one of the measures used to gauge UK HealthCare’s cultural health and to provide further insights into how the organization can continue to develop a values-based culture. Engaged employees drive outcomes, which leads to a better work environment, increased quality outcomes, higher productivity, and enhanced patient satisfaction, as well as improved financial performance.

UK HealthCare conducts an annual full-census survey for regular and on-call UK HealthCare staff and clinical practicing providers (residents and fellows were included in the 2018 provider survey). A third-party vendor, Press Ganey – which provides validation for themes and survey items, as well as academic health care and physician benchmarks – administers the surveys annually. The vendor receives responses directly, and then aggregates and reports them to UK HealthCare, adhering to strict confidentiality guidelines.

The surveys offer employees the opportunity to provide confidential feedback, help the organization gauge the management team’s performance, and pinpoint how to assist leaders in influencing change, based on employee feedback. The surveys, administered online using a five-point agreement Likert scale, include various metrics, domains, and themes, such as autonomy, communication, leadership, and teamwork.

PATIENT AND FAMILY ADVISORY COUNCILS

Operating monthly, there are six patient and family advisory councils with more than 75 patient, parent, and family advisors and facilitators. Potential advisors are recruited and recommended by the Health Care Steering Council members and complete an onboarding process to secure a committed advisor role. Patient and family advisors provide feedback and insight about their health care experiences across the UK HealthCare enterprise, and partner with interdisciplinary teams to improve quality, safety, and patient experience.

After each meeting, a council records the topic of focus on a tracking tool under a category labeled “Strategy.” There are four additional sub-categories: patient and family experience, staff/organizational experience, health care quality, and safety/risk. The impact of the advisory work is often cross-sectional, meaning that the advisors’ input affects multiple areas across quality, safety, and service.

DOMAIN 5: HEALTHY FINANCIAL PERFORMANCE

Continuing to assess financial performance and long-term viability is important. UK HealthCare balances cost and quality in delivering patient-centered, value-based care outcomes by exercising disciplined cost management that supports a value-based approach. This includes assessing the quality of services that patients receive, and if the care was affordable and satisfactory.

MODEL UNITS

The advent of value-based payment has been transforming the way health care organizations deliver care and receive compensation for it. This shift in the fundamental operating system of health care demands a substantial change at UK HealthCare as well. While dyad leaders will work broadly across every unit and area as champions for quality, there is also the need to begin deeper testing of innovations as required by new care delivery and payment models.

The Executive Quality, and Safety Committee approved plans to create a focused effort for total transformation by recruiting a small number of departments to serve as “model units” or learning labs. The goal of the Committee is to work more intensively over an 18-month period with a group of three to five inpatient and ambulatory groups in assessing and improving all aspects of clinical operations, including clinical quality, safety, efficiency, patient engagement, faculty and staff engagement, and financial and operational health. The lessons learned from these model units can be tested and then scaled across additional areas. UK HealthCare leadership members plan to work with a multidisciplinary transformation team (a health systems engineer from the Center for Quality, Value, and Safety and a data analyst from the Performance Analytics Center of Excellence) in each unit to coordinate improvement efforts. An executive sponsor within the unit and at the enterprise level will also work with the transformation team on escalation of issues as needed for resolution. Additionally, UK HealthCare will provide the following support:

- **Training:** Model unit teams will participate in initial intensive training in quality, safety, process improvement, project management, and change management. Team leads and selected members of the team will also participate in monthly learning sessions with an improvement coach, and the whole team will attend two additional in-person trainings across 12 months.
- **Data:** Transformation teams will receive monthly data dashboards for all improvement areas, including:
 - Exceptional care: clinical quality (enterprise, Centers for Medicare and Medicaid Services, and unit-specific goals)
 - Safe care: hand hygiene, hospital-acquired conditions
 - Efficient care: readmissions, length of stay, access, etc.

- Care experience: staff, faculty, and patient engagement
- Financial health: billing, revenue, total cost per patient, etc.
- **Initial assessment:** Each model unit will go through an initial assessment of its performance across the domains, identify its resources and capabilities for improvement work, and determine a core set of aims and measures for improvement.
- **Transformation plan:** Following the initial training, each model unit must identify its top five improvement areas based on the assessment results, enterprise goals, and unit performance data. The team then develops an initial transformation plan for tests of change around these areas. The plan is presented to unit leadership and frontline teams with the goal of refining the priority list to three or four areas to undergo further improvement work, with at least one area identified as being accomplished in under three months.
- **Coaching and tools:** Each model unit has an improvement coach and a data analyst. These individuals will participate together with dyads and transformation teams. Model units will have access to standardized methodologies for project management and process improvement.

After a competitive application process and review, UK HealthCare named the following as model units:

1. Neonatal Intensive Care Unit (NICU)
2. Trauma/Surgery Progressive Care Unit at Chandler Hospital Pavilion A, Floor 7
3. Medicine Universal Care Unit at Chandler Hospital Pavilion A, Floor 9

Table 6: Model Unit Projects and Goals

Unit/Area	Goal Number	Goal/Project Details
Trauma/surgery progressive care unit	1	By June 30, 2020, the trauma/surgical services unit on Floor 7 of Pavilion A will improve the Physician and Nurse Communication Domain scores as reported by Press Ganey through the Office of Patient Experience Stoplight Reports, with both areas exceeding the threshold (for physicians > 83.8%; nurses >82.3%) as defined by enterprise goals.
	2	By June 30, 2020, the trauma/surgical services unit on Floor 7 of Pavilion A will reduce the number of hospital-acquired pressure injuries by 15% (57 HAPIs compared to baseline of 67 HAPIs as measured by the Tableau report).
	3	By June 30, 2020, the trauma/surgical services unit on Floor 7 of Pavilion A will reduce the number of inpatient falls by 15% (38 falls compared to baseline of 45 falls) as measured by the safety incidence reporting system.



Medicine universal care unit (9UB)	1	By October 2020, 9UB will improve the Top Box rating for "Hospital Environment" from 62.7% to the FY2020 enterprise target goal of 66.7% as reported by Press Ganey through the Office of Patient Experience Stoplight Reports.
	2	By March 2020, 9UB will improve the overall employee engagement score of 3.93 (March 2019 score) to 4.03.
	3	By October 2020, 9UB will decrease the fall rate from 1.80 to 1.40 or less.
	4	By October 2020, 9UB will decrease 30-day readmissions (baseline of FY2019) by 10%.
Neonatal intensive care unit	1	Decrease the Vermont Oxford Network rate of severe Retinopathy of prematurity (ROP) from 14.3% to 10.0% by June 30, 2020, in very low birth weight infants.
	2	Decrease unplanned extubations from 2.23/100 vent days to 1.0/100 vent days by June 30, 2020.
	3	Increase breast milk at discharge from 41.2% to 55% by June 30, 2020.

CLOSING

The FY2020 UK HealthCare Quality, Safety, and Patient Experience Plan aligns with, supports, and promotes UK HealthCare's mission, vision, and values. The plan is not a stand-alone document; it is supported by other documents and tools, including the Enterprise Strategic Plan, the balanced scorecard, and numerous educational and research opportunities.

The Quality, Safety, and Patient Experience Plan provides guidance for identifying priorities and measures of our achievements in service quality, care outcomes, and risk mitigation. UK HealthCare wants to ensure that it is a national leader in patient safety and quality, does not subject patients to unintended harm, and delivers best-practice care to all patients. UK HealthCare reviews this plan on an annual basis to ensure continued alignment with the vision, mission, and strategic directions of the enterprise.

Appendix 1 – UK HealthCare Clinical Quality Improvement (CQI) Storyboard

TITLE: EXECUTIVE SPONSOR: FRONT LINE LEADERS:		CQI Storyboard <i>(Continuous Quality Improvement)</i>			
FIND a Process to Improve					
<input type="checkbox"/> Identify a problem and understand how solving would align with UKHC Enterprise Goals <input type="checkbox"/> Collect and analyze data to understand scope of problem <input type="checkbox"/> Display the gap between standard and current situation <input type="checkbox"/> Observe the process through the eyes of the patient and/or staff <input type="checkbox"/> Write a problem statement describing the impact on care provided at UKHC	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Observations • Data • Staff/Patient Surveys • Scoping Document • Prioritization Matrix • FMEA </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Observations • Data • Staff/Patient Surveys • Scoping Document • Prioritization Matrix • FMEA
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PLAN the Improvement					
<input type="checkbox"/> Obtain buy-in from key stakeholders, leadership, and frontline staff on change ideas <input type="checkbox"/> Create future state process map <input type="checkbox"/> Make predictions and identify ways to counteract resistance to change <input type="checkbox"/> Create communication action plan and project timeline describing how the team will move forward including who, what, where, and when <input type="checkbox"/> Finalize SMART goals	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Communication Plan • Future State Process Map • FMEA </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Communication Plan • Future State Process Map • FMEA
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ORGANIZE a Team					
<input type="checkbox"/> List project owner responsible for ensuring project completion <input type="checkbox"/> List key team members essential for the interdisciplinary team <input type="checkbox"/> List the team member who is responsible for collecting, analyzing, and displaying data <input type="checkbox"/> Set-up and schedule standing meetings	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Team Member List • Meeting Agenda • Timeline </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Team Member List • Meeting Agenda • Timeline
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DO the Improvement					
<input type="checkbox"/> Pilot the improvement with a small cycle of change <input type="checkbox"/> Observe the process through the eyes of the patient and staff <input type="checkbox"/> Collect data before, during, and after the pilot <input type="checkbox"/> Analyze the results <input type="checkbox"/> Document any unexpected events and other observations <input type="checkbox"/> Make any system adjustments to improve data outcome <input type="checkbox"/> Pilot again with changes if needed <input type="checkbox"/> Document standardized work	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • 5S • Revisions to Future State Process Map • Observations • Standardized Work </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • 5S • Revisions to Future State Process Map • Observations • Standardized Work
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STUDY the Results					
<input type="checkbox"/> Collect data before, during, and after system-side implementation and analyze <input type="checkbox"/> Analyze data to determine if the team achieved SMART goals <input type="checkbox"/> Complete observation of compliance of change idea including speaking with frontline staff and patients <input type="checkbox"/> Document the findings of the pilot and system-wide implementation <input type="checkbox"/> Determine if/when modification to the change idea is needed	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Data Analysis • Pre/Post Data Comparison • Run Chart • Observations • Compliance </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Data Analysis • Pre/Post Data Comparison • Run Chart • Observations • Compliance
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ACT and Determine Next Steps					
<input type="checkbox"/> Brainstorm all possible causes of the identified problem <input type="checkbox"/> Complete observations to eliminate causes that are not true <input type="checkbox"/> Continue to narrow down the list and identify causes for variation in the process	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Fishbone Diagram • Affinity Diagram • 5 Whys </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Fishbone Diagram • Affinity Diagram • 5 Whys
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UNDERSTAND Root Causes					
<input type="checkbox"/> Brainstorm change ideas for eliminating root causes <input type="checkbox"/> Complete observations to verify effectiveness, feasibility, and sustainability of change ideas <input type="checkbox"/> Contact similar areas or organizations to see what has worked <input type="checkbox"/> Identify what improvements will be made in the process <input type="checkbox"/> Remember the solution does not have to be perfect the first time	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Brainstorming (Learning Circle) </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Brainstorming (Learning Circle)
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SELECT the Improvement					
<input type="checkbox"/> Develop implementation strategy across areas impacted by change idea <input type="checkbox"/> Develop a monitoring schedule to measure if SMART goal is continually being sustained <input type="checkbox"/> If SMART goal is not met, evaluate process to determine if it needs to be refined or if a new FOCUS-PDSA necessary <input type="checkbox"/> Establish ongoing education plan to keep stakeholders informed <input type="checkbox"/> Document obstacles and lessons learned encountered throughout the process <input type="checkbox"/> Continually challenge the team on how the process can be improved further	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Available OVIHD Tools</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Sustainability Plan • Observations • Lessons Learned • Action Items List • Visual Management • Dashboard • Run Chart </td> </tr> </tbody> </table>			Available OVIHD Tools	<ul style="list-style-type: none"> • Sustainability Plan • Observations • Lessons Learned • Action Items List • Visual Management • Dashboard • Run Chart
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