

# UHCCR 1

Office of the President  
June 17, 2022

Members, Board of Trustees:

UK HEALTHCARE FY2023  
QUALITY ASSURANCE AND SAFETY PERFORMANCE IMPROVEMENT PLAN

Recommendation: that the Board of Trustees approve the UK HealthCare FY2023 Quality Assurance and Safety Performance Improvement 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 FY2023 Quality Assurance and Safety Performance Improvement Plan sets out such a program for the university's hospitals and clinical activities for FY2023.

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

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Action taken:    ☒ Approved    ☐ Disapproved    ☐ Other \_\_\_\_\_

## UK HEALTHCARE

### FY23 QUALITY ASSURANCE AND SAFETY PERFORMANCE IMPROVEMENT PLAN

#### Mission

UK HealthCare (UKHC) is committed to the pillars of academic health care – research, education and clinical care. Dedicated to the health of the people of Kentucky, we will provide the most advanced patient care and serve as an information resource. We will strengthen local health care and improve the delivery system by partnering with community hospitals and physicians. We will support the organization's education and research needs by offering cutting edge services on par with the nation's best providers.

#### Vision

One community committed to creating a healthier Kentucky.

#### 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.

#### FY23 Quality Assurance and Safety Performance Improvement Plan Goal and Structure

This plan will outline the quality and safety goals with targeted action items for UK HealthCare in FY23. To achieve these goals, leadership will engage stakeholders, support them with necessary resources, and hold stakeholders and themselves accountable to continuously improve care for patients. A key to the success of this plan will be the ability to leverage data from multiple sources, with an emphasis on optimization of data obtained from our new Electronic Health Record (EHR), Epic.

The foundation for the FY23 Quality Assurance and Safety Performance Improvement Plan is the quality and safety strategic plan approved in FY22. *Please see appendix for the framework that guides the FY23 Quality Assurance and Safety Performance Plan.* As we continue the pursuit of becoming a high reliability organization by becoming a top performer in quality and safety, the FY23 plan will describe specific outcome measures and process metrics to support the five pillars identified in the 2025 UKHC strategic plan.

- Build Our Culture
- Invest in Our People
- Provide More Value
- Advance Care Strategically
- Create a Healthier Community

An important new tool that will be used to track and trend our work is the Balanced Scorecard. The FY23 Balanced Scorecard is composed of five categories (Figure 1) that align with the five pillars from the 2025 UKHC strategic plan (Figure 2). Each Balanced Scorecard category is associated with outcome measures that will be achieved through the successful performance of appropriate process metrics. Each goal will be benchmarked to external and internal entities in order to optimize patient outcomes and elevate our national reputation. Each of the process metrics and tactics will be cascaded down to the unit as well as the individual level. Performance at the unit level will be shared on a regular cadence during huddles, Quarterly Quality meetings and other key venues.

**Figure 1: FY23 UKHC Balanced Scorecard Categories**



**Figure 2: FY23 UKHC Strategic Pillar and Balanced Scorecard Category Alignment**

**UKHC STRATEGY 2025**



Balanced Scorecard Category	Strategic Objective	Metric	Baseline	Threshold	Target	Max	Benchmark
Diversity and Inclusivity	Build Our Culture	Percentage of Executive, Administrative, Managerial Represented by All Minority Groups	TBD				Improvement from FY2022 (FY2022 enterprise goal was 3.45%)
		Percentage of Professional Represented by All Minority Groups	TBD				Improvement from FY2022 (FY2022 enterprise goal was 9.82%)
Exceptional Clinical Care	Provide More Value	Neonate Mortality Index	0.65 (Mar '21-Feb '22)	0.74 (50th %tile)	0.57 (75th %tile)	0.47 (85th %tile)	Vizient Q&A Specialty - Pediatrics 2022
		Pediatric Mortality Index	0.72 (Mar '21-Feb '22)	0.91 (50th %tile)	0.74 (75th %tile)	0.61 (90th %tile)	Vizient Q&A Specialty - Pediatrics 2022
		Mortality Index	0.93 (Mar '21-Feb '22)	0.96 (40th %tile)	0.91 (50th %tile)	0.82 (75th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
Extraordinary Engagement	Build Our Culture	Employee engagement	4.01 (Feb '22)	4.03	4.04 (Statistical rate of change)	4.05	Press Ganey
		Provider engagement	3.83 (Feb '22)	3.86	3.90 (Statistical rate of change)	4.00	Press Ganey
	Invest in Our People	Turnover	15.59% (Apr '21-Mar '22)	23.92% (50th %tile)	19.8% ( 75th %tile)	15.59% (Maintain)	Vizient ODB 4Q21 - Vizient Standard Group A
	Provide More Value	Child CAHPS - Rate Hospital Stay	72.09% Jul '21-Mar '22	72.20% (Step to 50th %tile)	72.50% (Step to 50th %tile)	77.7% (Step to 75th %tile)	Press Ganey University Health System Consortium
		ED - Likelihood of Recommending	77.97 Jul '21-Mar '22	78.1 (Step to 50th %tile)	78.2 (Step to 50th %tile)	80.8 (Step to 75th %tile)	Press Ganey University Health System Consortium
		HCAHPS - Rate the Hospital	72.25% Jul '21-Mar '22	70.80% (50th %tile)	73.10% (Step to 75th %tile)	76.60% (75th %tile)	Press Ganey University Health System Consortium
		OAS-CAHPS - Facility Rating	86.87% Jul '21-Mar '22	86.60% (50th %tile)	87.00% (>Baseline)	89.30% (75th %tile)	Press Ganey University Health System Consortium
		Medical Practice - Likelihood to Recommend the Practice	94.15 Jul '21-Mar '22	94.3 (Step to 50th %tile)	94.4 (50th %tile)	94.9 (Step to 75th %tile)	Press Ganey University Health System Consortium
Safe Care	Provide More Value	Hand Hygiene	75.77% (Mar '21-Feb '22)	85%	90%	95%	Internal Improvement
		NDNQI Patient Falls with Injury-Adult	0.24 (Mar '21-Feb '22)	0.25 (75th %tile)	0.24 (Maintain)	0.18 (Step to 90th %tile)	NDNQI- Magnet Facilities- 2021 Q4

		NHSN CAUTI SIR- Adult/Peds	0.48 (Mar '21-Feb '22)	0.65 (50th %tile)	0.51 (70th %tile)	0.45 (75th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		NHSN CLABSI SIR-Adult/Peds	1.18 (Mar '21-Feb '22)	1.11 (30th %tile)	0.95 (40th %tile)	0.85 (50th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		NHSN MRSA SIR-Adult/Peds	1.83 (Mar '21-Feb '22)	1.33 (25th %tile)	0.975 (40th %tile)	0.811 (50th %tile)	NHSN 2020 HAI National Progress Report-Acute Care Hospitals
		NHSN SSI-COLO SIR-Adult/Peds	0.65 (Mar '21-Feb '22)	0.74 (40th %tile)	0.69 (65th %tile)	0.61 (75th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		NHSN SSI-HYST SIR-Adult	0.54 (Mar '21-Feb '22)	0.54 (Maintain)	0.45 (75th %tile)	0.23 (Step to 90th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		PSI-03 - Pressure Ulcer Adult (rate per 1,000)	1.29 (Mar '21-Feb '22)	1.75 (25th %tile)	1.11 (50th %tile)	0.56 (75th %tile)	Vizient Quality and Safety Management Report
		Hypoglycemia in insulin use-Adult	3.0% (Mar '21-Feb '22)	3.23% (50th %tile)	2.72% (60th %tile)	2.17% (70th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
Value, Access and Efficiency	Advance Care Strategically	Strategic Volumes - (Ambulatory Service Visits, New Ambulatory Service Visits, Total Discharges, Operating Room Cases)		4% less than budget	Budget	4% greater than budget	Budget
		Personnel and Non-Personnel Expenses		4% greater than budget	Budget	4% less than budget	Budget
	Create a Healthier Community	Number of Counties Served	TBD	110	120		Internal Goal to Serve All Counties in Kentucky
		Unique Lives Touched	TBD	4% less than target	Growth target based on 3-year trend	4% greater than target	Growth from 2019, 2020, 2021
	Provide More Value	30-Day All Cause Unplanned Readmission Rate-Adult	11.80% (Mar '21-Feb '22)	11.79% (40th %tile)	11.46% (50th %tile)	10.36% (75th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		Pediatric Length of Stay Index	0.94 (Mar '21-Feb '22)	1.00 (25th %tile)	0.93 (50th %tile)	0.87 (75th %tile)	Vizient Q&A Specialty - Pediatrics 2022
		Adult Length of Stay Index	1.03 (Mar '21-Feb '22)	1.01 (40th %tile)	1.00 (50th %tile)	0.94 (75th %tile)	Vizient Q&A Comprehensive Academic Medical Centers 2022
		New Patient Access: New Patients Seen within 10 Days	44.19% (Mar '21-Feb '22)	40.75% (25th %tile)	45.26% (50th %tile)	48.25% (75th %tile)	Vizient AAMC Clinical Practice Solution Center

## Accountability Structure

A tiered accountability structure will be used to guide and supervise the work for each of the outcome metrics, process metrics and tactics. All quality and safety work will be linked to the committee reporting to the Executive Management Committee and ultimately to the Board of Trustees (see Table 1). Accountability will also be driven at the local level through medical directors and associated nursing or administrative partners who report to the entity-based triads and, ultimately, to the Executive Vice President for Health Affairs (EVPHA).

**Table 1: Committee Accountability**

Committee	Measures Monitored	Responsible To
<b>Executive Quality and Safety Committee (EQSC)</b>	Balanced Scorecard Measures	Executive Management Committee (EMC)
<b>No Harm Steering</b>	Hospital Associated Infections (HAIs)	EQSC
<b>Infection Prevention and Control</b>	HAIs	EQSC
<b>Mortality</b>	Mortality, Hospice Utilization, Patient Safety Indicator (PSI)	EQSC
<b>Clinical Documentation Improvement (CDI) Steering</b>	Mortality, Length of Stay (LOS)	Joint Operations Committee (JOC), EMC
<b>PSI Review</b>	PSI Performance	Mortality Committee
<b>Patient Centered Throughput</b>	Readmissions, LOS	EQSC

## APPENDIX

### FY23 QUALITY ASSURANCE AND SAFETY PERFORMANCE IMPROVEMENT PLAN FRAMEWORK

#### Quality Assurance and Safety Performance Improvement Plan

This Quality Assurance and Safety Performance Improvement 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 our current approaches to clinical care, engagement, efficiency, safety, accessibility and affordability.

The 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 caregivers in care redesign and decision-making in a way that meets their diverse, social and physical needs and preferences.
- **A relentless 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 aid in the collection and analysis of data to drive the best care and outcomes for our patients.
- **Comprehensive quality improvement, measurement and reporting:** Utilize a data-driven, systematic approach that fosters active employee, clinician, patient and family caregiver engagement.
- **Transparency and communication:** Provide easily accessible, valid and meaningful information about our clinical performance through open communication with leadership, clinicians, managers, front-line staff, patients, family caregivers and the general public.
- **Staff empowerment and innovation:** Create an environment and provide resources that foster problem-solving, innovations and breakthrough change to enhance quality and safety.

The engagement of front-line clinical teams in process- and performance-improvement is a critical component of accelerating our quality and safety work.

The strategies outlined in the Quality Assurance and Safety Performance Improvement Plan intend to facilitate the best care for our patients and the best clinical outcomes in accordance with evidence-based research.

#### 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 order 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:

- **Informed:** Leaders understand the technical, organizational, environmental and human factors that impact error.
- **Just:** Trust pervades the organization so that people report safety concerns and errors, and know what constitutes an unsafe practice.
- **Values reporting:** Staff and leaders know the importance of accurate data and reward reporting of errors, and near misses.
- **Flexible:** Front-line experts have the responsibility of addressing immediate safety issues.



### Alignment with UK HealthCare's 2025 Strategic Plan

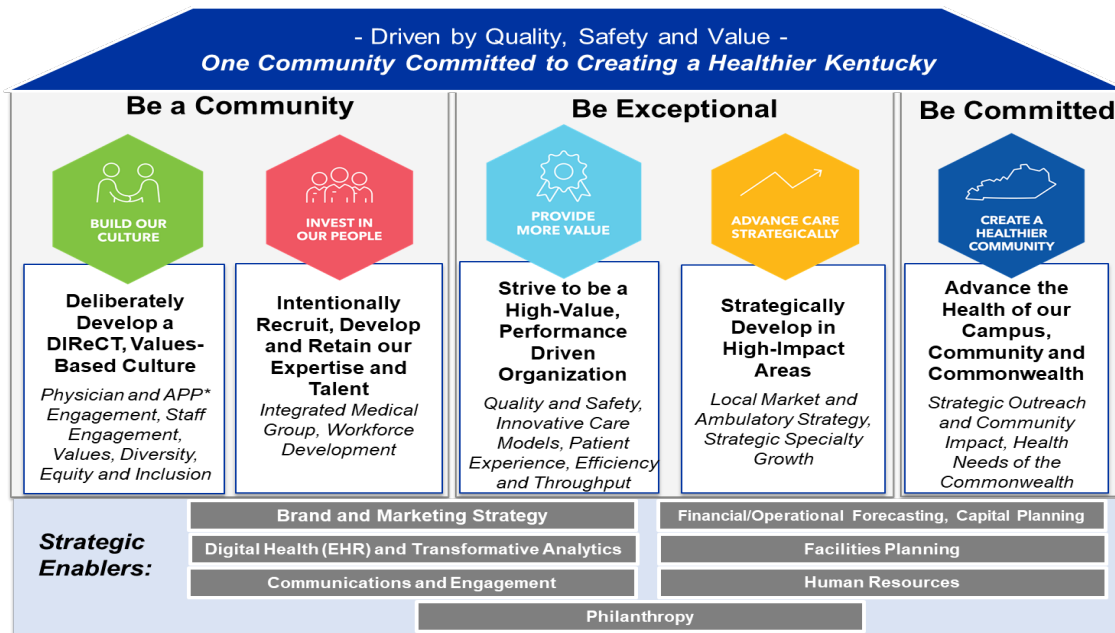
A centralized model for quality and safety improvement is outlined in the 2025 strategic plan. UK HealthCare is evolving into a high-value organization by continuing our transformation into a highly-reliable organization in our quality, safety and patient experience, and by appropriately managing costs and building efficiencies throughout our health system. Further, UK HealthCare is working to attain demonstrable improvements in care delivery assessments (e.g., mortality, patient safety incidences, standardization of processes with minimization of variation) to document the achievement of being a high reliability, high-value organization viewed as a leading and learning health system. To do this, we have developed an external ranking five-year plan (Table 2). The UK HealthCare Strategy 2025 is shown in figure 3 on page nine. This plan outlines how our tactics will improve performance through 2025.

**Table 2: External Ranking Five-Year Plan**

#### FIVE-YEAR ASPIRATION – MEASURING SUCCESS EXTERNALLY

Program	Vizient	CMS Hospital Compare Star Rating	U.S. News and World Report	Leapfrog	Medicaid Directed Payment Program
FY20 Baseline	27th	★	#1 in Kentucky 1 - Nationally Ranked Program	D	FY20 Reporting
FY21 Target	Top 30	★	#1 in Kentucky 2 - Nationally Ranked Programs	C	Achieve Threshold on 4 Measures
FY21 Results	Top 20 ✓	★★ Achieved ✓	#1 in Kentucky 3 - Nationally Ranked Programs #29 in Cancer Care (Markey) #14 in Pediatric Cardiology and Heart Surgery (Joint Program with Cincinnati Children's Hospital) #40 for Pediatric Orthopedics (with Shriners) ✓	Achieved ✓	Achieved Threshold on 12 of 14 Measures ✓
FY22 Target	Top 25	★★	#1 in Kentucky 3 - Nationally Ranked Programs	B	Achieve Threshold on 5 Measures
FY22 Results	TBD (Expected Results Sep '21)	TBD (July 2022 Release)	TBD Children's Embargo begins May 26 <sup>th</sup> TBD Adult Embargo begins July 7 <sup>th</sup>	Chandler Hospital ✓ Achieved B Good Samaritan Remained at C	TBD (Results at End of Fiscal Year)
FY23 Target	Top 20	★★★	#1 in Kentucky 3 - Nationally Ranked Programs	B	Achieve Threshold on 6 Measures
FY24 Target	Top 10	★★★	#1 in Kentucky 4 - Nationally Ranked Programs	B	TBD
FY25 Target	Top 10	★★★★	#1 in Kentucky 5 - Nationally Ranked Programs	A	TBD

Figure 3: UK HealthCare Strategy 2025



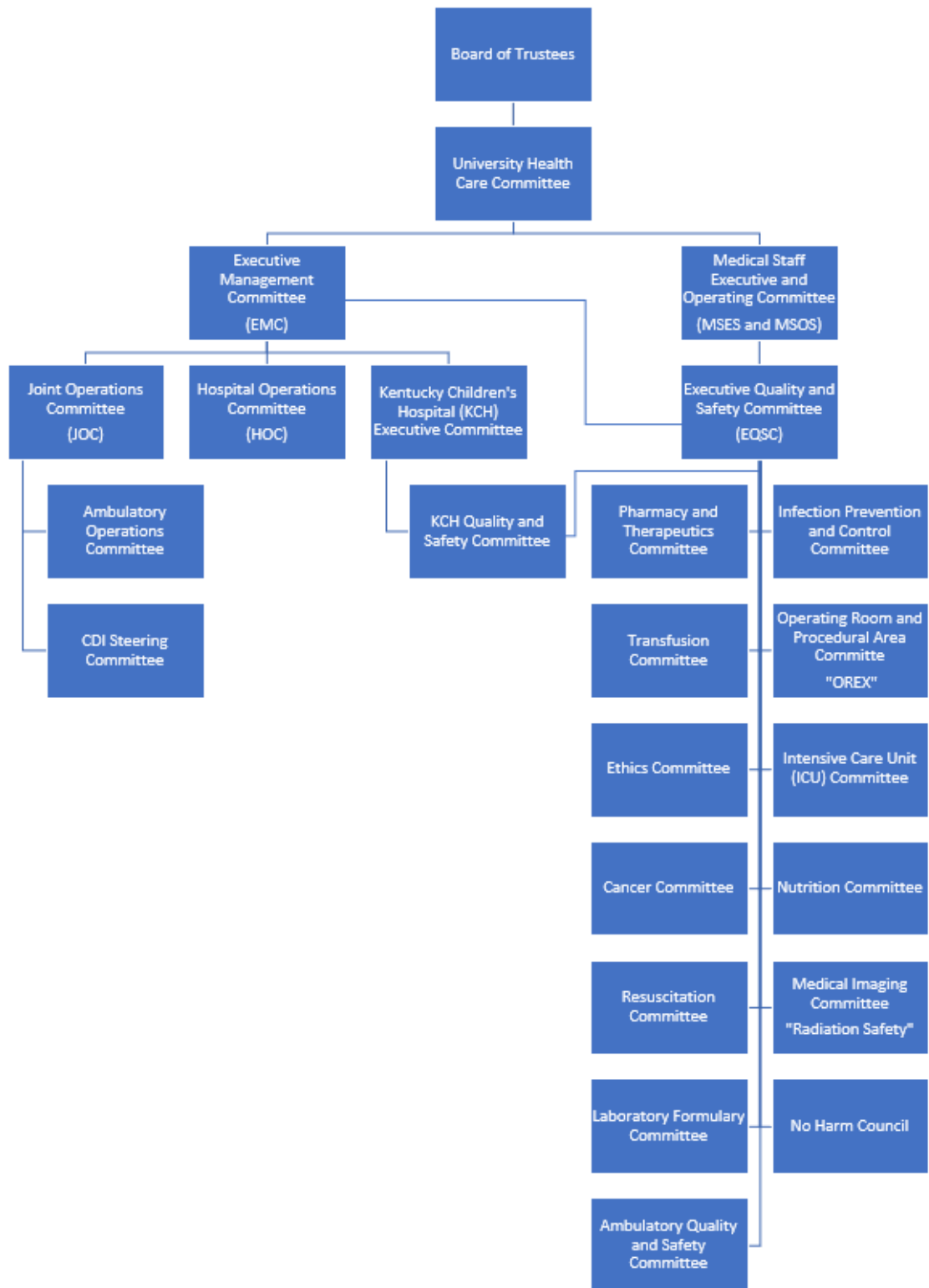
\*Advanced Practice Provider

### Quality and Safety 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 and safety improvement efforts at UK HealthCare. This performance monitoring starts at the patient level and is reported up through the enterprise to the governing body – the University Health Care Committee of the UK Board of Trustees.

Figure 4 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 4: Quality and Safety Reporting Structure**



## **Medical Staff and Board of Trustees Alignment**

The UK Board of Trustees establishes, maintains, supports and exercises oversight of the quality, safety and performance improvement 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 4), which oversees both the Executive Management Committee and the Medical Staff Executive Committee. These committees share oversight of the UK HealthCare Executive Quality and Safety Committee (EQSC), which serves as the primary conduit of all quality and safety of medical staff practice at UK HealthCare. The EQSC receives monthly reports from many committees and departments, including the Medical Staff Operating Committees within the enterprise. This reporting structure allows oversight of all quality, safety and performance initiatives within the enterprise. The Enterprise Medical Staff Executive Committee is composed of two Medical Staff Operating Subcommittees: Chandler and Good Samaritan Medical Staff Operating Subcommittees. The Medical Staff Executive Committee also oversees medical staff by-law functions and credentialing processes, and reviews contracts for outside clinical services. The Enterprise Medical Staff Operating Subcommittees meet regularly to supervise and direct the progress made by multiple teams and committees throughout the enterprise. The Medical Staff Bylaws outline these committees and teams.

Structuring the EQSC to report to both the Executive Management Committee and the Medical Staff Executive Committee allows for the hospital's executive chief medical officer and the president of the medical staff to fulfill their leadership responsibility by bringing issues from these venues to the University Health Care Committee of the UK Board of Trustees through appropriate avenues. Having a reporting line to the Medical Staff Executive Committee also ensures the medical staff has information about and authority over the appropriate clinical operation of the facility.

## **Executive Quality and Safety Committee (EQSC)**

The 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 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. The committee is co-chaired by the Executive Chief Medical Officer and the Chief Medical Officer for Ambulatory Services. The membership is comprised of UK HealthCare senior leadership, physician and nursing leaders, chairs and program directors. The EQSC is responsible for developing the enterprise quality and safety strategy, including enterprise goals, objectives and actions related to ensuring exceptional quality, safety, equity, value and patient experience at UK HealthCare.

## **Enterprise Goal Setting and Alignment**

It is important that all levels within an organization work to achieve similar goals. This process, also known as 'cascading goals', is our way of aligning the UK HealthCare strategic aims with our annual goal-setting process.

While goal-setting development may vary department-to-department, enterprise operations have worked to establish standard assumptions and expectations. This alignment supports employee engagement while also demonstrating how an individual's work can impact the greater organization performance.

The iterative process of developing the enterprise goals each year includes input from many individuals and groups across 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, diversity, equity 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 along with intentional integration with other externally reported measures used for rankings and public reporting (i.e. CMS). All metrics are validated by external agencies (such as Vizient, Solutions for Patient Safety, Centers for Medicare and Medicaid Services, Leapfrog and The Joint Commission), and their definitions and sources are 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 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
- UK HealthCare quality payment program at-risk compensation plan
- Medical director at-risk compensation plans
- Nursing performance evaluation goals
- Leadership performance evaluation goals
- Health information technology impact goals
- Other clinical discipline evaluation goals (e.g., pharmacy)
- 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, quality, safety and patient-centered care remain a foundation for our 2025 UK HealthCare Enterprise Strategy Plan. The plan also includes a strong focus on value-based care 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, equitable and accessible care, and helps us navigate the changing times in the health care industry.

### **Dyads and Focused Quality Improvement**

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

To promote a learning health system, inpatient, procedural and ambulatory dyad groups meet regularly as a learning collaborative - a Rapid Cycle Improvement group - where these teams engage in quality-improvement work 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, equity, 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.

### **The Inpatient Quality and Safety Team**

The Inpatient Quality and Safety Team is responsible for all strategies of the quality and safety work impacting inpatient care. This team is responsible for the following:

- Supporting dyads and clinical leaders to optimize patient outcomes through efforts to eliminate patient harm.
- Ongoing development of tools and programs to help UK HealthCare deliver the highest level of patient care and experience while also supporting engaged teams
- Building and supporting a culture of safety through training and supporting patient safety activities
- Partner with clinical care areas to provide resources for improving quality and safety

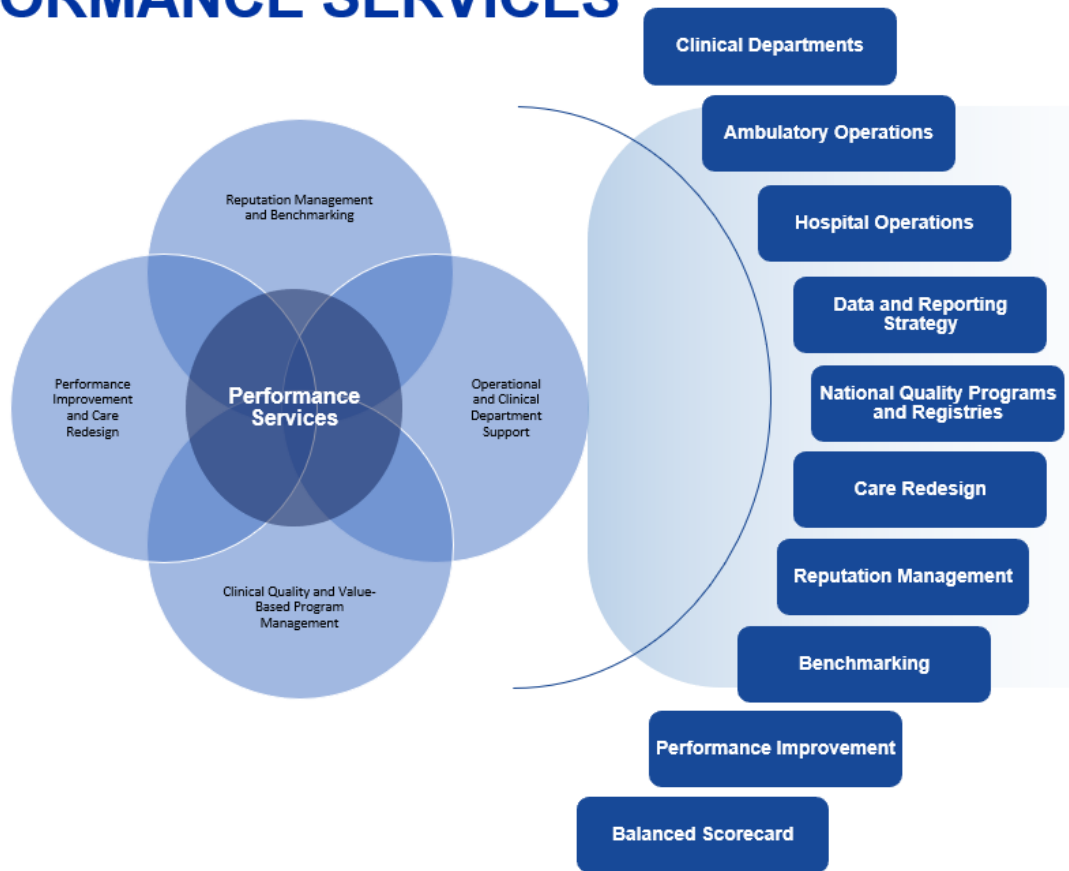
### **Office of Performance Services**

The University of Kentucky Office of Performance Services' mission is to support the attainment of enterprise goals through the measurement, monitoring and improvement of performance (see Figure 5). This team is responsible for the following:

- Reputation management and benchmarking including
  - Full understanding of program reporting requirements
  - Performance monitoring and identification of improvement opportunities
  - Forecasting performance
  - Coordination of efforts between programs and liaison to other performance services team members and UKHC leaders
- Performance improvement (PI) services including
  - Advancing Best Care (ABC): Facilitate enterprise initiatives focused on expense or variation reduction
  - Balanced Scorecard Process: Work in collaboration with an identified governance structure to lead an annual process that includes reviewing priorities, using benchmarks to set targets, and partnering with subject matter experts and performance analytics center of excellence (PACE) to facilitate process
  - PI Training and Support: Be a resource for the organization to train on PI processes and provide ad hoc support as needed
- Operational and Clinical Department Support including
  - Performance Services point of contact for entity triads and chairs
  - Groupings developed based on like services or synergies
  - Routine review of performance via a balanced scorecard, benchmark data and other sources
  - Close partnership with advancing best care, benchmarking/reputation management and clinical quality team to understand performance and additional projects
  - Support quarterly performance review process and focus on follow-up action items
- Clinical quality and value-based program management
  - Ensure all abstraction requirements are met across The Joint Commission (TJC) and the Centers for Medicare and Medicaid Services (CMS)
  - Develop processes for registries including annual fees, full time employee (FTE) needs for abstraction, Epic integration, and use of registry outcome metrics for improvement.
- Supporting diversity, equity and inclusion efforts in the Enterprise

Figure 5: Performance Services

## PERFORMANCE SERVICES

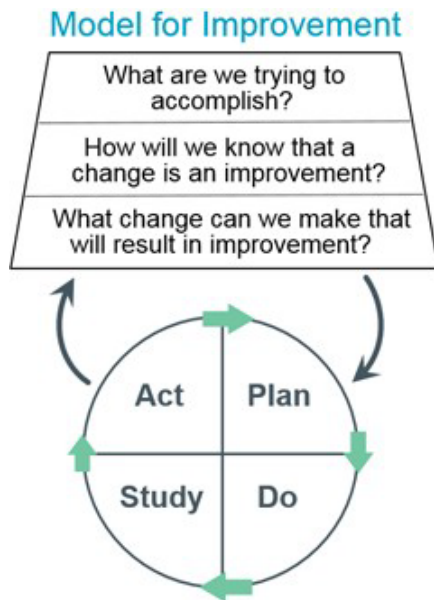


## Quality Methodology

The Performance Services team works alongside physicians, nurses, respiratory therapists, pharmacists and all other members of the healthcare team utilizing quality-improvement methodologies employed by high-reliability, high-value organizations. The Institute for Healthcare Improvement (IHI) Model for Improvement training provides the foundation for developing a skill set rooted in planning for the improvement and four steps of quality improvement, the Plan-Do-Study-Act (PDSA) cycle. The Performance Services team engages all members of the healthcare team through the project life cycle with hands-on improvement work and gradual adoption through iterative PDSA Sprints.

The use of the Model for Improvement (Figure 6) is evidenced in the structure of all inpatient quality improvement work.

**Figure 6: IHI Model for Improvement (ihi.org)**



## The Ambulatory Quality Team

With the growth in the number of programs and dollars at risk under value-based payment arrangements, UK HealthCare has grown and will continue to develop its ambulatory quality infrastructure. To accomplish the tactics laid out in the 2025 UK HealthCare Strategic Plan, the Ambulatory Quality Leadership Team will ensure our enterprise has the resources and structures needed to deliver high-quality, high-value, equitable healthcare in our ambulatory clinics, including:

### 2025 Ambulatory Quality Plan and Tactics

- A. Performance Measurement and Feedback:** analyzes payer value-based financial opportunities, develops an aligned set of improvement priorities and maintains a crosswalk of all quality and cost measures across all payers contracted with UK HealthCare. The PACE



team works with Ambulatory leadership to develop and maintain the Medicaid Directed Payment and Ambulatory Quality dashboards. In addition, a team of panel managers ensures the fidelity of the PCP listed for each patient record across all primary care clinics.

- B. Ambulatory Dyads and Collaboratives:** Each clinic has a medical director and practice manager that serve as a “dyad” and leaders on the front line who work together and with their clinical teams as champions in the clinic for high quality, safe efficient care. Dyads also work together with other dyads across Ambulatory in either the Primary Care Collaborative or Specialty Collaboratives
- C. Develop Population Health Capability:** UK HealthCare has expanded and will continue to scale its Population Health team including care navigators, community health workers and quality technicians who work with patients in coordination with clinic teams to engage patients before and after clinic visits or hospitalizations to ensure patients receive all recommended care.
- D. Value-based Care Programs and Reporting:** The Ambulatory quality leadership team is responsible for overseeing UK HealthCare's participation and success in several value-based payment programs:
  - Kentucky's University Medicaid Directed Payment Program.
  - Medicare's Quality Payment Program and
  - Value-based contracts with multiple commercial payers.
- E. Improving Care Transitions and Reducing Readmissions:** A comprehensive UK HealthCare Care transitions strategy has been developed to bring ambulatory and hospital resources together and develop a coordinated and sustainable plan for patients cared for by UK HealthCare. This development was led by Roberto Cardarelli, DO, MHA, MPH, Ambulatory Chief Medical Officer.

**Task Forces** developed detailed tactics and implementation plans across the following groups:

- **Technology** to ensure automated PCP notification, enable enhanced admission risk prediction, communicate with ambulatory clinics at discharge, support telemedicine for care transitions
- **Scheduling** to standardize policies and simplify easy and timely scheduling of all patients discharged from the hospital
- **UK HealthCare Population Care Transitions** to optimize for Transitional Care Management of patients receiving care from outpatient UK HealthCare clinicians
- **Non-UK HealthCare Transitions** to optimize care for patients receiving care outside UK HealthCare and moving into post-acute settings
- **Discharge Follow-up Plans** for patients lacking timely access to outpatient clinicians
- **Care Central** for optimized communication after hospital discharge

## Measures of Success

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, Leapfrog, US News and World Report and other regulatory bodies. This monitoring includes but is not limited to the measures in Table 3. The enterprise shares performance data and information through weekly, monthly and quarterly quality and safety meetings.

**Table 3: 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 (Agency for Healthcare Research and Quality [AHRQ] 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)	Monthly O/E rates received monthly; Weekly - number of admissions and discharges
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 inclusion (for staff and College of Medicine faculty)	Annually

## Measurement for Quality and Safety

The Performance Analytics Center for Excellence (PACE), under the chief data officer, has been created to meet the reporting and analytics needs of the organization. This is done through direct support, partnered work or by serving as the data infrastructure backbone for UK HealthCare. The reach of this group is to facilitate performance improvement, analytics and reporting in quality, operations and research.

PACE has several teams:

- Enterprise Data Management
- Performance Analytics
- Business Intelligence
- Data Science

Enterprise Data Management is comprised of two teams: (1) data architecture team; and (2) master data management (MDM) team. The data architecture team provides the data backbone for reliable, scalable, and standardized data. They are primarily responsible for bringing data into the enterprise data warehouse through standard extract transfer load (ETL) processes, integrating that data into standard data models, and staging data outbound to other systems or third parties.

- The MDM Team is responsible for mastering data through the enterprise data stewardship program (enterprise data steward oversight committee). They are primarily responsible for ensuring the fidelity of the data as an enterprise asset.
- The performance analytics team is the nimble arm of PACE that can rapidly deliver data for baseline measures and data over time for the teams engaged in improvement activities. Through structured data in the Enterprise Data Warehouse (EDW), as well as source systems. The aim is to provide high-touch data rapidly. The analysis is the focus of this team.
- The focus of the business team is to create dashboards and well-defined reporting that integrate into workflows. This team works in concert with the performance analytics team as PDSAs stabilize. The aim of the business intelligence team is to bring rigor and automation. To accomplish this, they work in a coordinated effort across PACE as well as other partners.
- The data science team aims to bring predictive and prescriptive modeling through machine learning (with an eye toward natural language processing). In addition, this team brings the discipline and oversight of the standard predictive models within Epic.

## Daily Briefing for Safety and Operations

UK HealthCare began the Daily Briefing for Safety and Operations (DBSO) in October 2019. This daily huddle initially began with pilot areas reporting out Monday through Friday and has quickly evolved to seven days a week with over 30 departments in participation. It is a brief meeting to share safety concerns that happened in the past 24 hours, as well as to review the next 24 hours to evaluate potential patient safety and operational issues. According to The Joint Commission (2017), a daily safety briefing is one of the hallmarks of a high-reliability organization. UK HealthCare introduced representatives from every department into the DBSO process on a rolling timeline. The DBSO allows all departments to report out during the briefing to increase awareness of patient safety issues and create a culture of safety.

This process begins every morning with a unit-level huddle, utilizing an enterprise-wide standard huddle form. This rolls up to a department huddle, which is then reported out during the 7 days a week at 10 a.m. DBSO. It is facilitated weekly by a senior leader within the hospital. The DBSO is just another step toward becoming a high-reliability organization and improving the quality of care at UK HealthCare.

## SWARMS

UK HealthCare developed a novel, rapid approach to root-cause analysis – called “SWARMing” – with the goal of establishing consistency in investigating and analyzing adverse or undesirable events (Li et al., 2015). Ideally, this process occurs without unnecessary delay after a patient or staff safety event, undertakes thoughtful analysis by an interdisciplinary team, and encourages reporting of near-miss and adverse events by front-line 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. The quality and safety team, in collaboration with the risk management team, reviews the report and makes the decision of conducting either a rapid root-cause analysis or a full SWARM. If a SWARM is determined to be the best approach, the report is reviewed by the teams, who rapidly conduct a preliminary investigation to document the basics of what happened and who was involved. Together, they develop a timeline, with the goal of scheduling a SWARM as soon as possible. In some cases of specific concern, SWARMS are performed immediately after the event.

Participants include those directly involved in the event, as leaders of units, service or departments involved in the event, and subject matter experts. 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
- Review of the facts that prompted the SWARM through the creation of a timeline
- 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

## Peer Review

With the approval of the UK Board of Trustees Health Care Committee, the UK HealthCare medical staff has established a Peer Review Committee responsible for safety- and quality-related oversight activities regarding the practices of the advanced practice professionals throughout the UK Healthcare enterprise. The charge of this committee is to establish policies and procedures to formalize and modernize peer-review processes that protect the quality and safety of patients and promote professionalism.

To support the legal protections for patient safety activities, UK HealthCare carries out patient safety activities under the realm of UK HealthCare’s Patient Safety Evaluation System 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 PSWP to encourage a culture of patient safety. PSWP includes incident reports, SWARM data, root-cause analyses, sentinel-event reviews, 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 the integrity of the information and the institutional processes.

### **Workplace Safety**

The UK HealthCare Workplace Safety Strategic group is made up of a multi-disciplinary team including but not limited to staff, providers, residents, ancillary, and ambulatory team members. This group is committed to promoting a safe work environment by establishing policies, procedures, education, and processes which enhance safety and outline strategies to address workplace violence.

### **Diversity, Equity and Inclusion**

The aim of the Chief Diversity Officer (CDO) / Office is to oversee all diversity, equity, and inclusion (DEI) efforts across the UK HealthCare system. The CDO role and office will establish a foundation that continues to strengthen the business case for a diverse, equitable and inclusive organizational culture and improve performance, outcomes and organizational excellence overall.

Some of the key areas of focus to becoming a premiere leader and top performing Diversity, Equity and Inclusion Institution of Excellence, are the following:

- Data collection, demographic disaggregation, tracking, monitoring and reporting results
- Training and development through diversity education
- Hiring and retention of a diverse workforce through talent management, talent acquisition and pipeline establishment
- Health equity through dismantling differential care and access and differences in exposure and opportunities by race, ethnicity and language
- Establish baseline goals for quality and safety, patient experience, workforce utilization and employee engagement
- Building community partnerships to meet the needs of historically underserved populations (HUP)

### **Patient Experience and Staff and Provider Engagement**

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
- Complaint resolution

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

**Experience:**

**Inpatient:**

- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
- Child Hospital Consumer Assessment of Healthcare Providers and Systems (CHCAHPS)
- Neonatal Intensive Care (NICU)

**Ambulatory and Outpatient Services:**

- Medical Practice (ambulatory clinics)
- Outpatient and Ambulatory Surgery Consumer Assessment of Healthcare Providers and Systems (OAS CAHPS)
- Outpatient Services (radiology, lab, infusion, etc.)
- Urgent Care

**Emergency Department:**

- Emergency Department (adult)
- Emergency Department (pediatrics)

**Engagement:**

- Staff engagement
- Physician and advanced practice provider engagement and alignment

**Customer Relations:**

- Grievance compliance in accordance with Centers for Medicare and Medicaid Services guidelines
- Complaints and resolutions

The Office of Patient Experience's goal 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.

**Patient and Family Advisory Councils**

Operating monthly, there are six (6) parent, patient and family advisory councils with more than 58 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, equity, safety and patient experience.

After each meeting, the content and information received are tracked on a strategy tool. 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. The council's influence creates change for the enterprise from signage, patient education material and bedside communication. Once implemented, items are marked with a seal of approval. The seal of approval designates that the healthcare team and the advisors have worked together to make a change that improves quality, safety and service.

## Graduate Medical Education Integration

The Accreditation Council for Graduate Medical Education (ACGME) determines educational program guidelines, 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 that they are also assimilated into health systems' continuous 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. The University of Kentucky Albert B. Chandler Medical Center had its fourth CLER site visit in 2022. Collaborating with the Graduate Medical Education (GME) Office and training programs, UK HealthCare has continued to enhance the integration of residents and fellows in supporting the organization's strategic goals to improve patient care. Residents and fellows regularly attend patient safety analysis events and participate in interprofessional quality improvement teams. Additionally, resident, fellow and GME program director representatives serve as active members of the ECQS. GME also collaborates with UK HealthCare to provide additional training in patient safety and quality improvement for residents and fellows.

The Department Quality and Safety Program Officer (DQSPPO) role was developed in FY22. This role works to further the education and engagement of residents, fellows and faculty with a focus around patient safety and quality improvement. It acts as a bridge between the UK HealthCare, Graduate Medical Education and Department personnel for quality and performance improvement engagement and education. Duties of this role include expanding professional development in quality improvement and patient safety, involvement in swarms, support of GME program patient safety curriculum expansion, support of GME program quality improvement curriculum and engagement in enterprise goal improvement through the integration of residents and fellows.

## Health Information Technology

The adoption of health information technology (HIT) and the promotion of health information exchange to improve health care follows the premise that HIT, when fully integrated into a health care delivery organization, facilitates substantial improvements in health care quality and safety. Our belief in HIT supports the Office of National Coordinator's objective to use HIT to make care safer and to continuously improve the safety of HIT (ONC, 2013). In support of this principle, technology remains one of the key enablers of the UK HealthCare Strategic Plan.

In 2019, UK HealthCare embarked on a journey to select the best electronic medical record platform, Epic, to support the clinical enterprise needs of the future. Our quest is the successful implementation of a single digital patient record required for success in the value-based ecosystem. The entire enterprise is engaged in a robust evaluation of current processes and the adoption of industry best practices to ensure marked improvements in all aspects of care delivery. This project provided innovative, real-time clinical data integrated across the enterprise, with an activation date of June 5, 2021.

The broad adoption of other digital platforms into the health care workflow is proving to be a catalyst for clinical and business process improvement in order to pivot in response to environmental changes and consumer needs. This digital transformation is occurring in various modalities beyond the electronic medical record, such as the move to a virtual care environment and the use of telehealth. Enabling virtual visits, home monitoring, patient communication through alternative modalities and remote oversight of critical patients are examples of the digital support to newer modalities of care.

The privacy and security of patient health information is a top priority for the enterprise, and UK HealthCare institutes policies and security safeguards to protect all health information. Adopting a risk-aware organizational approach, monitoring occurs through risk assessments, the utilization of previously mentioned incident reports, SWARMS and the aggregation and analysis of data on key processes to prevent adverse events.

## Pharmacy Quality and Safety

**Medication-Use Technology and Automation:** Pharmacy Services contribute to the selection, implementation, monitoring, and optimization of various health information technologies (HIT) that help prevent medication errors.

- Each event includes the medication administration error demographics, type of error, breakdown point, severity, drugs involved and actions taken into a database.
- Key performance indicator metrics (KPI) for medication safety-related HIT are tracked quarterly and action plans are implemented if metrics are not meeting goals. Examples include: smart pump safety software utilization and alert rates, BCMA utilization rate, EHR medication warning and override rates, and automatic dispensing cabinet (ADC) override rate.

### Quality Program Focus

- **Antimicrobial Stewardship:** The antimicrobial stewardship program has continued working with the microbiology department in using the newest rapid diagnostic blood culture technology (ePlex) and getting appropriate antimicrobial therapy started on our complex patients. An antimicrobial Stewardship app has been developed and is utilized by providers to follow protocol algorithms and guidelines, guiding users in the appropriate selection and dosing of antimicrobials.
- **Antithrombosis Stewardship Program:** The UK HealthCare antithrombosis (AT) stewardship program was developed in 2014 with the primary goal to improve/optimize the care of patients on antithrombotic agents for patients at UK HealthCare. Active work of the AT Stewardship program includes leadership of the Anticoagulation Subcommittee, of the Pharmacy and Therapeutics (P&T) Committee including the development of over 20 new UK HealthCare institution-specific guidelines and protocols for adults and pediatrics including antithrombotic guidance for the care of COVID-19 patients, participation in Anticoagulation Quality Assurance and Safety Committees, lab monitoring optimization for antithrombotic and development of a Pulmonary Embolism Response Team (PERT). Recent highlights for the AT team:
  - o AT stewardship leadership is actively involved with the National PERT Consortium which UK HealthCare is a founding member with the PERT Consortium now includes over 80 academic and community hospitals in the US and focuses on the #1 preventable cause of hospital death in the US which is venous thromboembolism including pulmonary embolism.
- **Glycemic Control Support:** The diabetes stewardship program's goal is to improve the overall management of blood glucose throughout the enterprise while reducing the harm associated with hyperglycemia and hypoglycemia. The program coordinator and other clinical pharmacists have been an integral part of multidisciplinary teams to identify root causes for hypoglycemia and have proposed ideas for order set modifications and education to reduce rates of low blood glucose.
- **Parenteral Nutrition Stewardship Program:** The parenteral nutrition stewardship program oversees the usage of parenteral (IV) nutrition for UK HealthCare adult patients that are unable to use their GI tract for adequate nutrition support. This complex and expensive therapy requires specialized assessment, monitoring and compounding to treat malnourished or nutritionally compromised patients due to their disease or injuries. The stewardship established guidelines for appropriate indications, consults for optimal drug dosing, daily monitoring for efficacy and complication, minimizes expensive drug waste, and assists with the transition of care for outpatient therapy.

## Regulatory Readiness and Accreditation

The regulatory readiness program at UK HealthCare exists to focus on creating a framework for continual survey readiness across the enterprise. The program utilizes a variety of approaches to promote continual survey readiness that includes but is not limited to internal tracers, an environment



of care safety rounds, conducting a standards gap analysis, policy management and intracycle monitoring. See appendix for a full report of the regulatory readiness plan, policy review, tracer activities and regulatory reports.

### **Policy Review**

The regulatory readiness program shall serve as the manager for the enterprise policy committee and policy review processes. The policy manager shall provide oversight to ensure policy reviews are completed in a timely manner by policy stakeholders. New policies proposed should be reviewed carefully to avoid duplicate or conflicting active policies. Policy version control shall be maintained.

### **Tracer Activity**

Patient tracer activity is recommended on but not limited to the following factors:

- New or prepublication standards
- High-risk, problem-prone processes
- Identification for improvement during the regulatory survey by outside licensure and accrediting agencies
- Identification during intracycle monitoring of non-compliance
- Non-compliance noted during routine tracer activity
- Accreditation Preparedness for Medication Management: Pharmacy services participate in the accreditation team's weekly tracer activities conducted throughout the Enterprise to assess compliance with The Joint Commission accreditation standards. Pharmacy specifically is assessing for medication management compliance. In addition to the weekly tracers, an additional tracer was conducted for sterile compounding areas. This past year, Pharmacy also implemented the Joint Commission Resource (JCR) software inspection auditing tools for the sterile compounding areas. The tools allow for consistent auditing and trending of issues identified.

### **Regulatory Reports**

Regulatory reports are provided weekly at the safety briefing and monthly at the UK HealthCare quality and safety committee and accreditation management team meetings, and other groups upon request.

### **Annual Activities**

- Education (e.g. new employee orientation, new provider orientation, supervisor training, continuous readiness checklist training)
- Review of standing orders and protocols
- Intracycle monitoring for The Joint Commission
- Licensure and accreditation application submissions

### **Surveillance of Regulatory Changes**

The Regulatory Readiness Program monitors changes in the regulatory environment through several different methods:

- Engagement of outside consultants such as Joint Commission Resources
- Monitoring of "The Joint Commission Perspectives" monthly publication
- Industry-related newsletters and periodicals
- Monitoring regulatory websites for information regarding prepublication standards, proposed rules or frequently asked questions
- Participation in industry audioconferences and webinars
- Participation with Kentucky Hospital Association accreditation committee

### **Environment of Care Rounds**

Based on a predetermined schedule, tracers occur weekly on patient care units, in departments and

on outside grounds looking for safety issues and non-compliance with standards. Focus areas for tracers are compliance with policy and standards, such as:

- Physical environment (on doors, walls and ceiling tiles)
- Fire safety features, such as fire extinguishers, fire alarm activation devices and sprinklers
- Discussion with staff on knowledge of emergency response for fire, code silver and tornados
- Employee identification

### **Employee Injury Prevention**

Daily reporting of employee injuries and identification of any serious employee injury occurs at the DBSO. We continue employee injury investigation and reporting to unit/department managers. Other reporting venues include:

- Quarterly Executive Oversight Committee (EOC) and Emergency Management Committee (EMC) meetings
- Policy review and development related to the Healthcare Safety and Emergency Management Program

### **Program and Process Monitoring**

Monitoring for the Following Areas is Ongoing with Subcommittees:

- Chemical safety: Departmental inventories and safety data sheets requirements; chemical spill response
- Medical equipment: Staff and patient injury prevention; compliance with manufacturer maintenance requirements
- Security: Risk assessments for identified high-risk areas and, as requested, training for safe patient interactions
- Utilities: Maintenance and testing; requirements and emergency response with interruptions

## **Healthcare Safety and Emergency Management Program**

The healthcare safety and emergency management program aims to provide a safe environment for all patients, the UK HealthCare workforce and visitors across the enterprise. Some examples of methods utilized to meet the program mission and goals are environment of care tracers, incident report review and follow-up, data collection and analysis and planning for and responding to emergency events and drills.

- Conduct regular fire drills; annual TJC requirements related to an influx of patients and an escalating event
- Follow-up on opportunities for improvement related to events that occur