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Baldrige Case Study for the Alliance for Performance Excellence: Copansburg Regional Health System, Year 2

2023

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This ***2023 Baldrige Case Study for the Alliance for Performance Excellence: Copansburg Regional Health System, Year 2*** is based on the 2023–2024 Health Care Criteria for Performance Excellence (part of the *2023–2024 Baldrige Excellence Framework: Proven Leadership and Management Practices for High Performance* (health care version). It was written by volunteers Denise Haynes and Doug Serrano, master examiners who have each served for many years on the Baldrige Program's all-volunteer Board of Examiners. This case study was distributed in early 2023 for use by Baldrige-based award programs that are members of the nonprofit Alliance for Performance Excellence (baldrigealliance.org), part of the Baldrige Program's public-private partnership, for the benefit of organizations throughout the United States.

This case study is a work of fiction, created and produced for the sole purpose of training in relation to the *2023-2024 Baldrige Excellence Framework*. The fictitious organization featured in this case study is a large, not-for-profit, integrated delivery health care provider that is headquartered in the greater Lexington, KY region. There is no connection between the fictitious Copansburg Regional Health System and any other organization, named either Copansburg Regional Health System or otherwise. The names of several national and government organizations are included to promote the realism of the case study as a training tool, but any data and content about them may have been fictionalized, as appropriate; all other organizations cited in the case study are fictitious or have been fictionalized. Because this case study is intended to serve primarily as a tool for training examiners to evaluate organizations against the 2023–2024 Health Care Criteria for Performance Excellence, it may not address all Criteria questions or demonstrate role-model responses in all Criteria areas.

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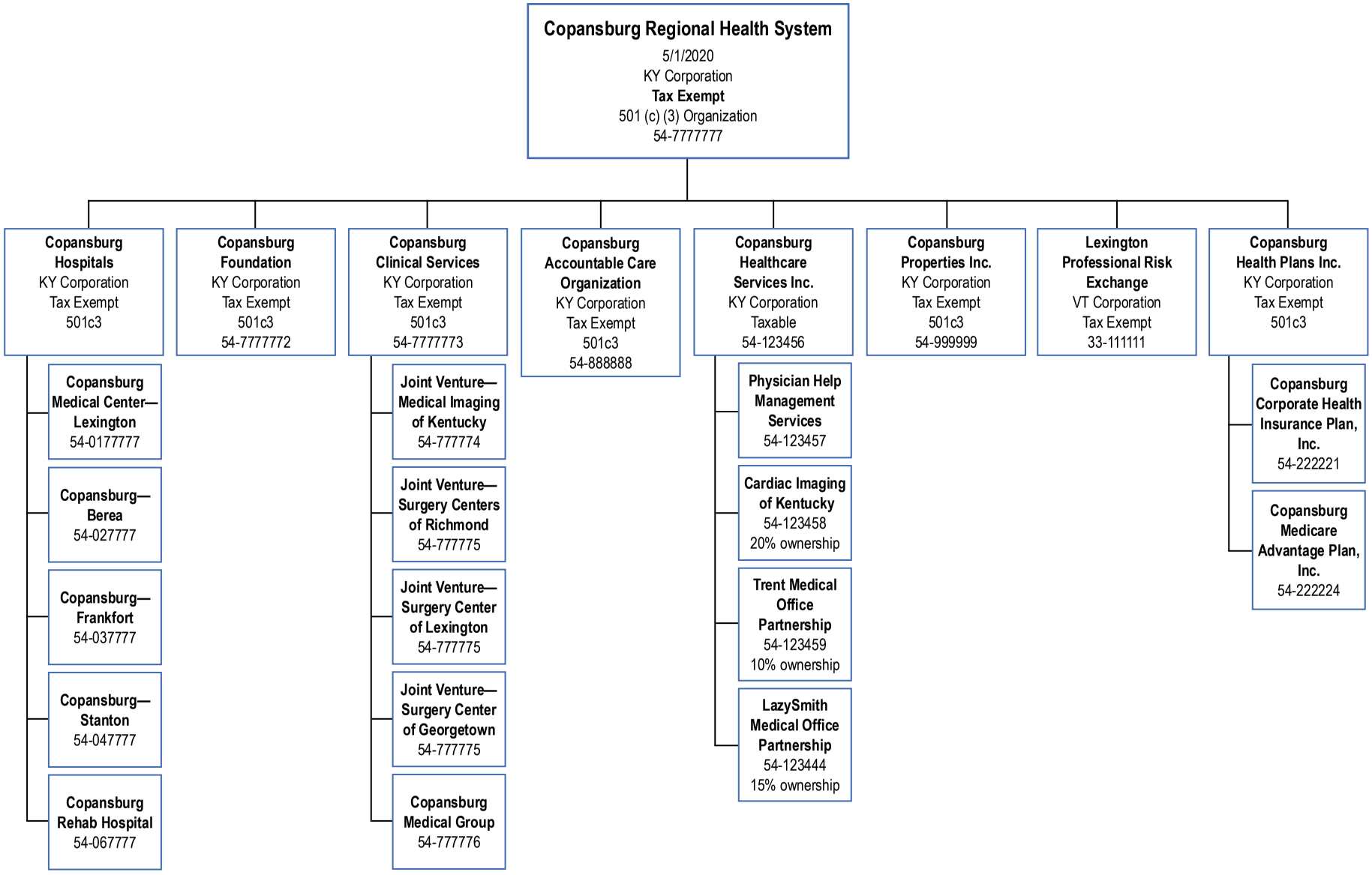

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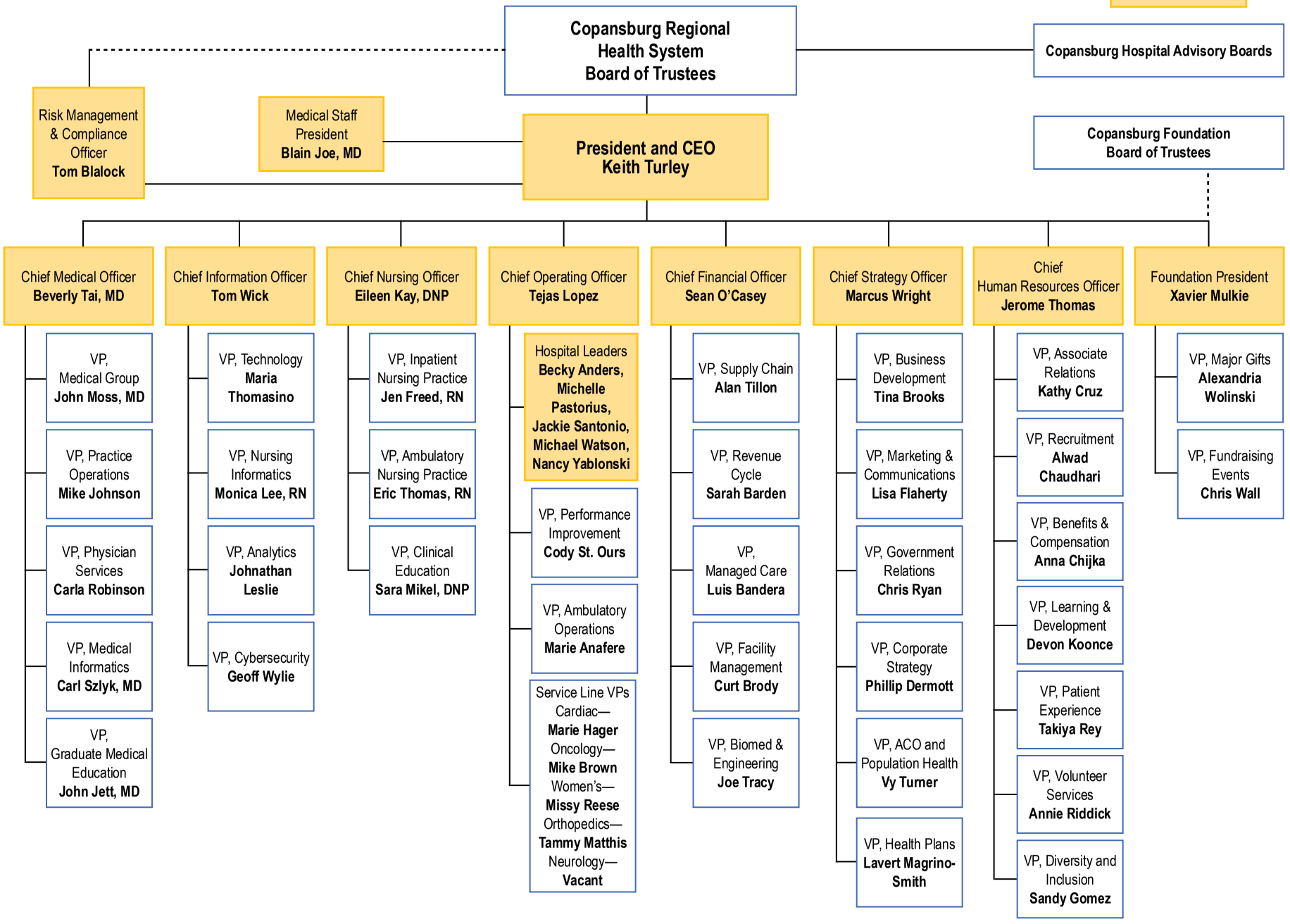

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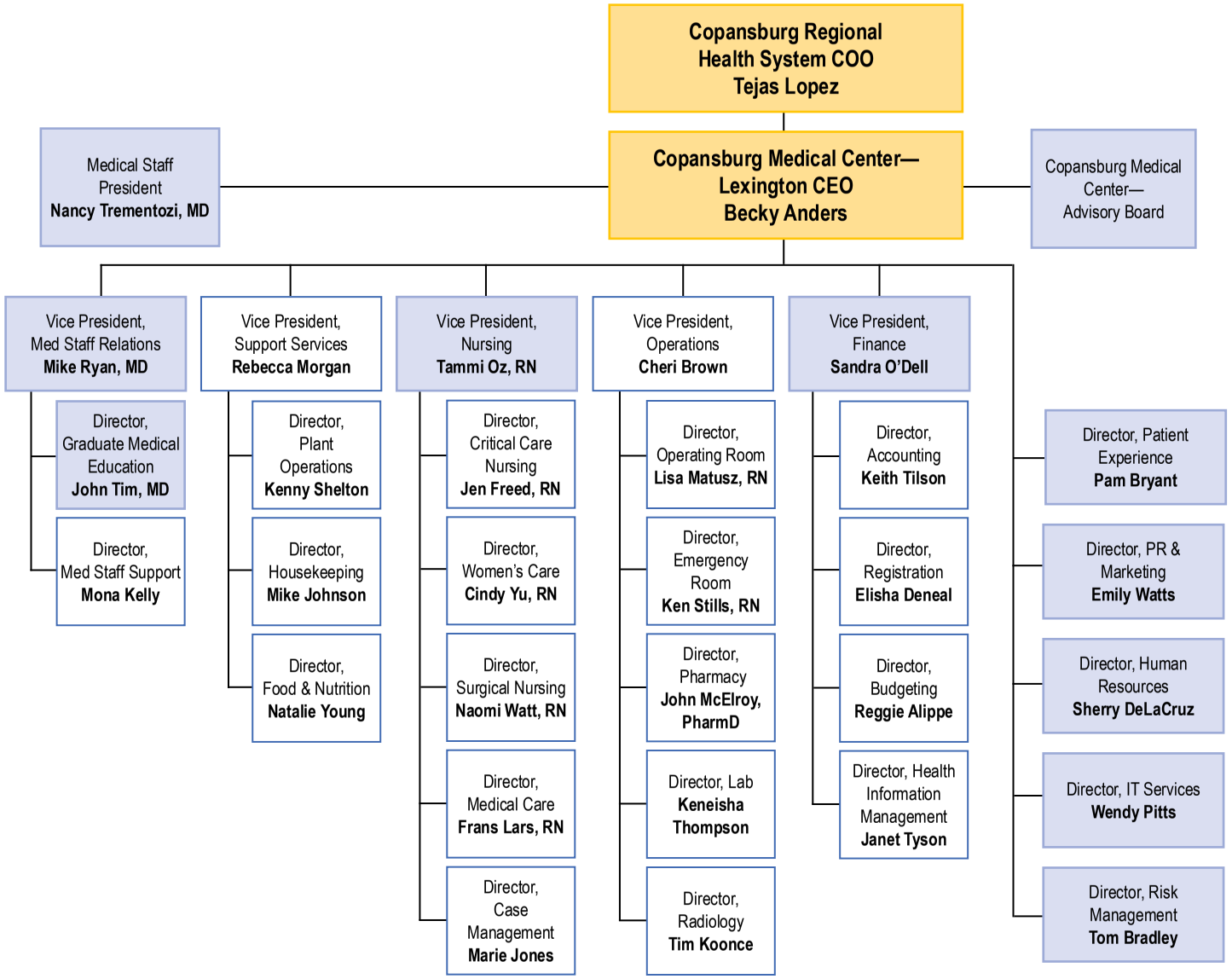
Designates Executive Leadership Team Member

Positions with blue backgrounds are matrixed positions, with reporting relationships to aligned functions on Copansburg Regional Health System Organization Chart



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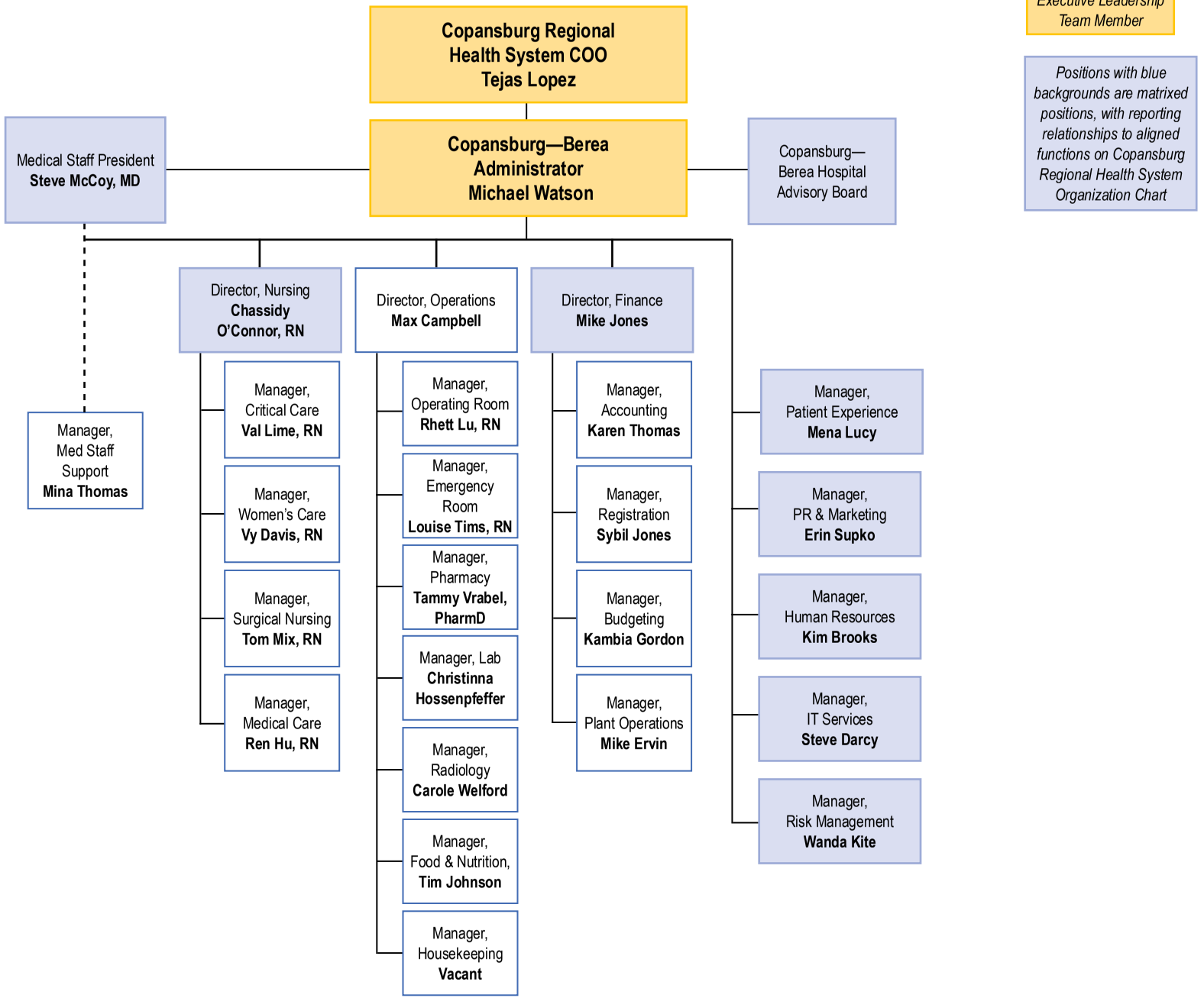

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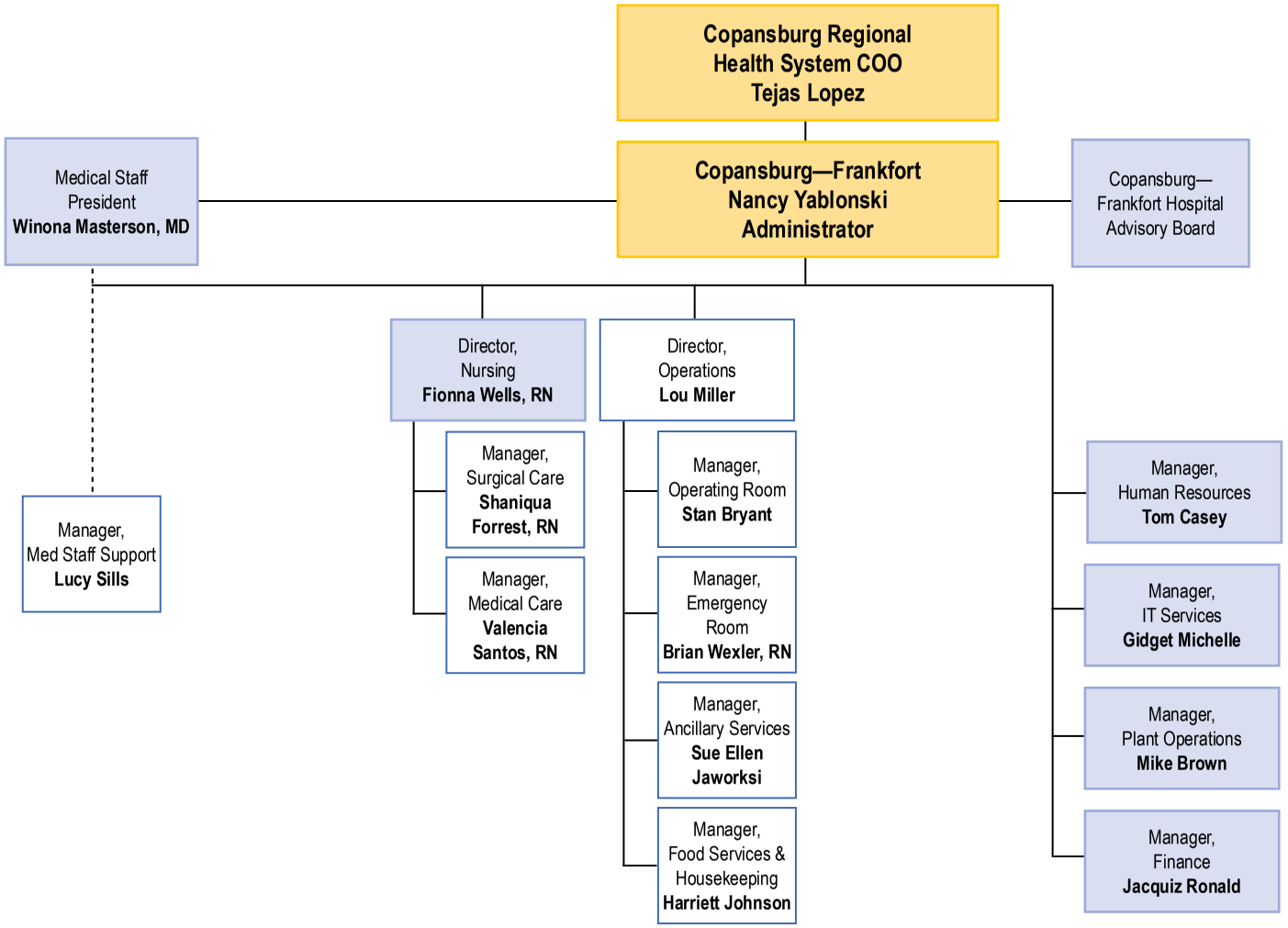

Designates Executive Leadership Team Member

Positions with blue backgrounds are matrixed positions, with reporting relationships to aligned corporate functions on the Copansburg Regional Health System Organization Chart

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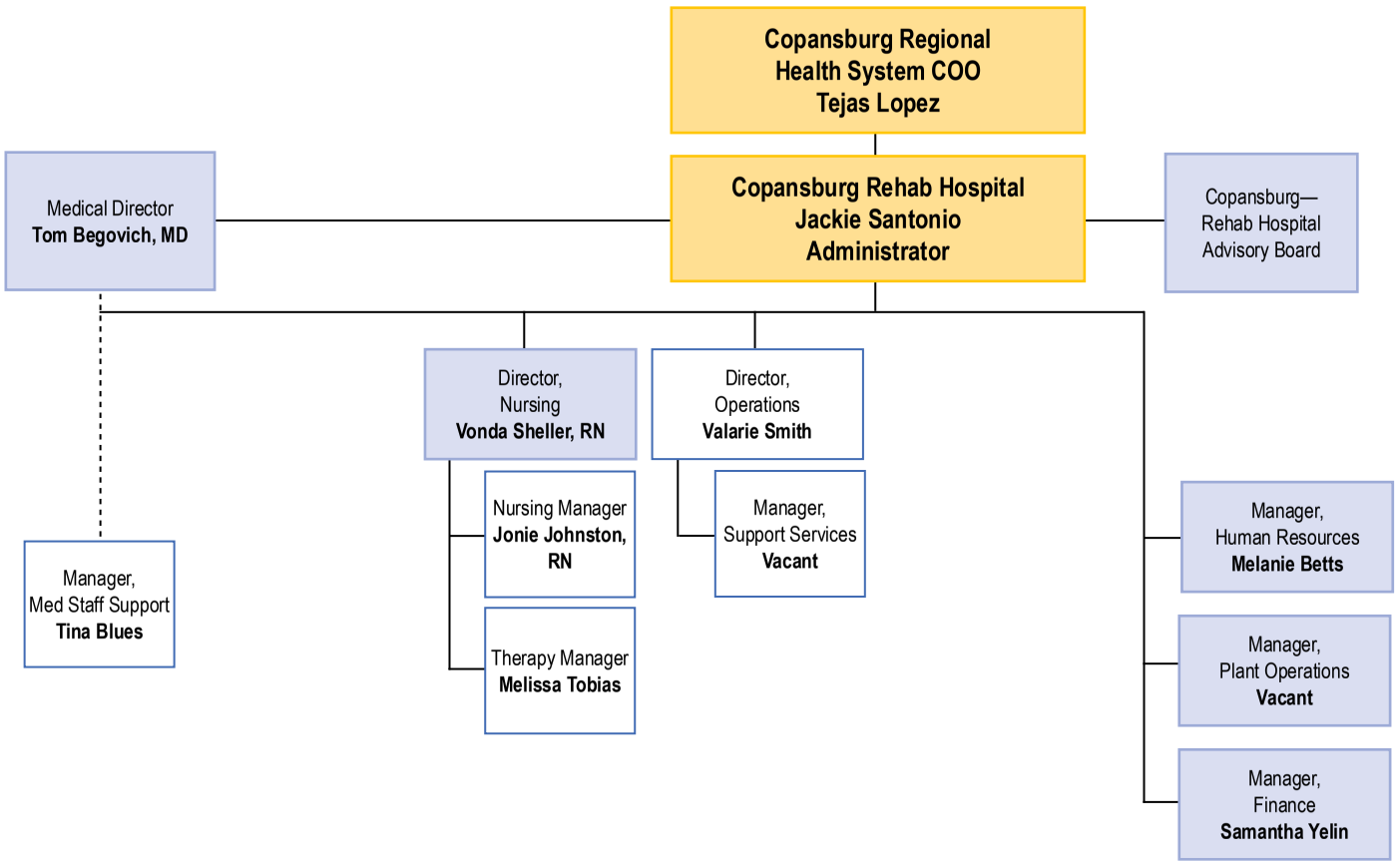

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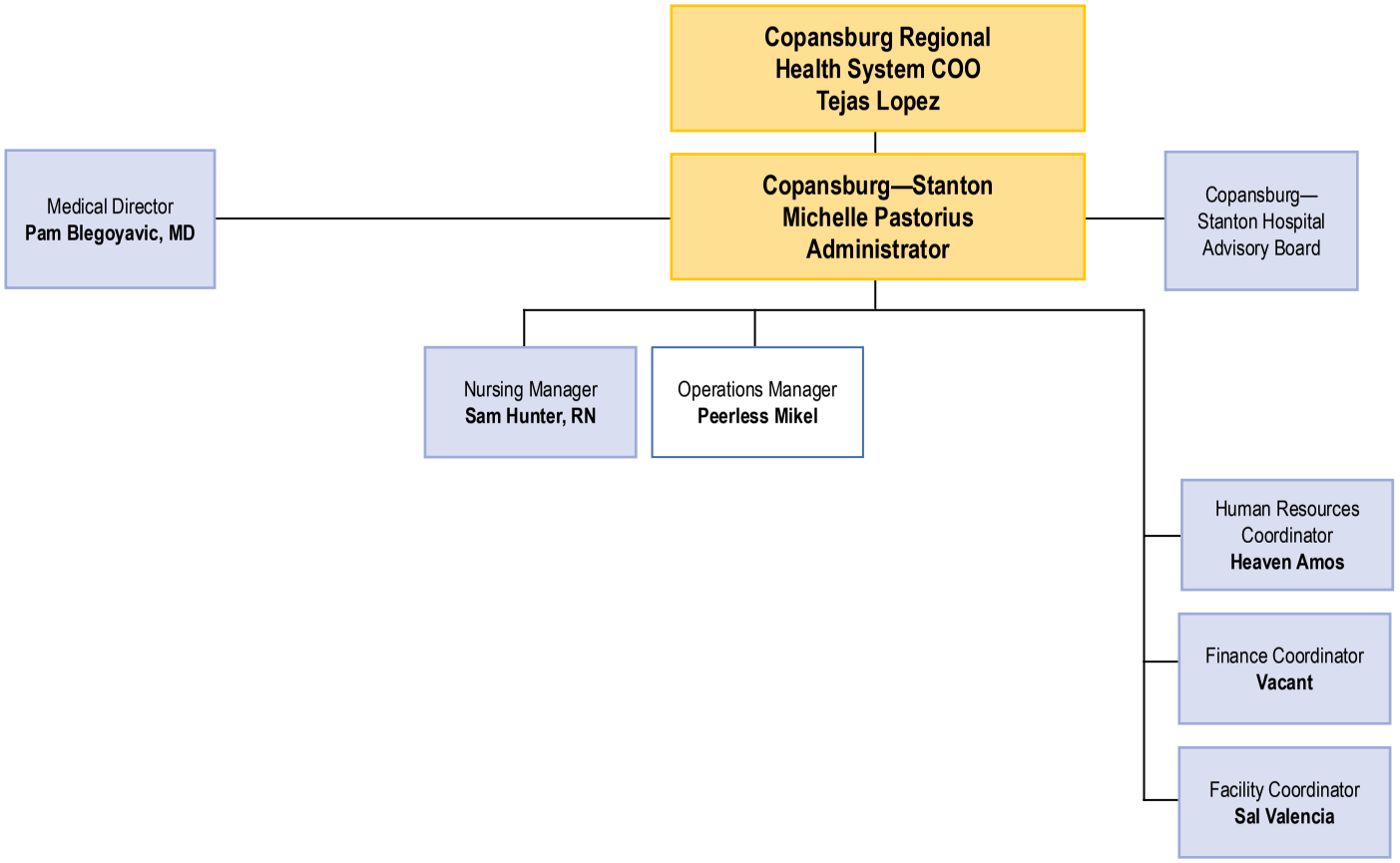


Designates Executive Leadership Team Member

Positions with blue backgrounds are matrixed positions, with reporting relationships to aligned functions on the Copansburg Regional Health System Organization Chart

GLOSSARY OF TERMS AND ABBREVIATIONS

Glossary of Terms and Abbreviations

A

A: Annual

A3: A3 quality improvement process

A3E2: Ability, Agility, Aspiration, Engagement, Exposure

A3E3: Ability, Agility, Aspiration, Engagement, Exposure, Emotional Intelligence

AB: Advisory Board

ACO: Accountable Care Organization

ACR: American Collect of Radiology

AMD: Advance Medical Directive

AOS: Available On-site

APP: Action Planning Process

ASC: Ambulatory Surgery Center

ASG: American Surgeons Group

ASQ: American Society for Quality

B

BAR: Baldrige Award Recipient

BM: Benchmark

BOT: Board of Trustees

BSC: Balanced Scorecard

BSN: Bachelor of Science in Nursing

C

C: Collaborators

CAH: Critical Access Hospital

CAHPS: Consumer Assessment of Healthcare Providers and Systems

CAPA: Corrective and Preventive Actions

CB: Copansburg Hospital—Berea

CC: Core Competency

C&C: Capability and capacity

CCC: Corporate Compliance Committee

CCM: Capability and Capacity Model

CCP: Corporate Compliance Program

CDC: Centers for Disease Control and Prevention

CDI: Clinical Documentation Improvement

CDL: Commercial Driver's License

CEG: Community Excellence Group

CEO: Chief Executive Officer

CESB: Code of Ethical Standards of Behavior

CF: Copansburg Hospital—Frankfort

CGCAHPS: Clinician and Groups Consumer Assessment of Healthcare Providers and Systems

CHDMG: College of Healthcare Data Management Group

CHNA: Community Health Needs Assessment

CHRO: Chief Human Resources Officer

CI: Continuous Improvement

CIO: Chief Information Officer

CMCL: Copansburg Medical Center—Lexington

CMI: Case-Mix Index

CMS: Centers for Medicare and Medicaid Services

CNA: Certified Nurse Assistant

COE: Communities of Excellence 2026

COPs: Communities of Practice

COS: Culture of Safety

COVID: Coronavirus

CPT: COVID Process Team

CRH: Copansburg Rehab Hospital

CRHS: Copansburg Regional Health System

CS: Copansburg Hospital—Stanton

CT: Computerized Tomography

D

DDI: Data Drive Improvement

DEI: Diversity, Equity and Inclusion

DEIC: Diversity, Equity and Inclusion Committee

DME: Durable Medical Equipment

DOE: U.S. Department of Education

E

E: Employees

EBIDA: Earnings Before Interest, Depreciation, and Amortization

ED: Emergency Department

EDCAHPS: Emergency Department Consumer Assessment of Healthcare Providers and Systems

EEOC: Equal Employment Opportunity Commission

EL: Executive Leader

EL/SL: Executive and Senior Leader

ELT: Executive Leadership Team

EMR: electronic medical record

EOC: Environment of Care

EPA: Environmental Protection Agency

EPOP: Emergency Preparedness and Operations Plan

F

F: Family

FAQ: Frequently Asked Questions

FDA: Food and Drug Administration

FM: Facilities Management

FMEA: Failure Mode and Effects Analysis

FQHC: Federally Qualified Health Center

FT: Full Time

FTE: Full Time Equivalent

G

GPO: group purchasing organization

GSF: Gross Square Feet

GYN: Gynecology

H

H: Hospital

HAC: Hospital-Acquired Conditions

HAI: Healthcare-Associated Infection

HAPU: Hospital-Acquired Pressure Ulcer

HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems

HDR: High Dynamic Range

HEDIS: Healthcare Effectiveness Data and Information Set

HH: Home Health

HHCAHPS: Home Health Consumer Assessment of Healthcare Providers and Systems

HIPAA: Health Insurance Portability and Accountability Act

HP: Health Plan

HPCAHPS: Hospice Consumer Assessment of Healthcare Providers and Systems

HR: Human Resources

HS: High School

I

ICU: Intensive Care Unit

IDT: Interdisciplinary Team

IM: Information Management

IP/Inpt: Inpatient

IRB: Institutional Review Board

IRS: Internal Revenue Service

IT: Information Technology

ITM: Integrated Talent Management

J

JV: Joint Venture

K

KPI: Key Performance Indicator

KSA: Knowledge, Skills and Abilities

KWH: Kilowatt-hour

KY: Kentucky

KY HA: Kentucky Hospital Association

L

L&D: Learning and Development

LDP: Leadership Development Program

LDS: Learning and Development System

LED: Light-Emitting Diode

LEED: Leadership in Energy and Environmental Design

LERC: Legal, Ethics, Regulatory and Compliance

LGBTQ: Lesbian, Gay, Bisexual, Transgender, Queer or Questioning

LOS: Length of Stay

LS: Leadership System

LWBS: Left Without Being Seen

M

M: Monthly

MA: Medicare Advantage

MADS: Maximum Annual Debt Service

MAP: Medicare Advantage Program

MCP: Multidisciplinary Care Plan

MD: Medical Doctor/physicians

MLP: Mid-Level Provider

MM: Middle Managers

MO: Medical Office

MRI: Magnetic Resonance Imaging

MS: Medical Staff

MVV: mission, vision, values

MYPHI: Patient electronic medical record

N

NDCQF: National Database of Care Quality Factors

NEO: New Employee Orientation

NHC: National Hospital Corporation

NHSN: National Healthcare Safety Network

NICU: Neonatal Intensive Care Unit

NIST: National Institute of Standards and Technology

NSQIP: National Surgical Quality Improvement Program

O

O: Other

OB: Obstetrics

OC: Organizational Change

OCR: Office for Civil Rights

OIG: Office of Inspector General

OP/Outpt: Outpatient

OPPE: Ongoing Professional Practice Evaluation

OR: Operating Room

OSBC: Office of Safety and Business Continuity

OSHA: Occupational Safety & Health Administration

P

P: Partners or Projection

PA: Post Acute

Pandemic: COVID-19

PCP: Primary Care Physician/Provider

PCR: Polymerase Chain Reaction

PDCA: Plan, Do, Check, Act

PEO: Patient Experience Office

PESTLE+W: Political, Economic, Social, Technological, Legal, Environmental, Workforce

PET: Positron Emission Tomography

PFAC: Patient Family Advisory Council

PHI: Protected Health Information

PHQ-9: Patient health questionnaire for depression screening

PI: Process Improvement

PIC: Performance Improvement Council

PIP: Performance Improvement Plan

PIT: Process Improvement Teams

POAM: Plan of actions and milestones

PPDP: Performance and Professional Development Plan

PPE: Personal Protective Equipment

PSI: Patient Safety Indicators

PT: Part Time

Pt: Patient

Q

Q: Quarterly

QI: Quality Improvement

R

RCA: Root Cause Analysis

RN: Registered Nurse

ROI: Return on Investment

S

S: Semi-annual

SA: Strategic Advantage

SC: Strategic Challenge

SCM: Supply Chain Management

SCPE: State Center for Performance Excellence

SEEGs: Strategic Employee Engagement Groups

SHRM: Society for Human Resource Management

S/I: Strategy/Innovation

SL: Senior Leader

SLA: Service Level Agreement

SLT: Senior Leadership Team

SMARTER: Specific, Measurable, Aligned, Realistic, Time-bound, Evaluated, Reviewed

SNAC: Staff Nurse Advisory Council

SO: Strategic Opportunities

SObj: Strategic Objectives

SP: Strategic Plan

SPC: Statistical Process Control

SPP: Strategic Planning Process

St: Students

Su: Suppliers

SWOT: Strengths, Weaknesses, Opportunities, and Threats

SWPD: Service and Work Process Design

T

TAT: Turnaround Time

TB: Tuberculosis

tPA: Tissue Plasminogen Activator

TRAC: Teams Realizing Awesome Care

TUP: The United Practice

TV: Television

U

US: United States

V

V: Volunteers

VBP: Value-Based Purchasing

VOC: Voice of the Customer

VP: Vice President

VPP: Voluntary Protection Program

W

WE CARE values: World-class medicine, Efficiency, Compassion, Accountability, Respect, Excellence

WF: Workforce

WHO: World Health Organization

Y

YTD: Year-to-Date

ORGANIZATIONAL PROFILE

Preface: Organizational Profile

P.1 Organizational Description

Copansburg Regional Health System (CRHS) is a large, not-for-profit, integrated delivery health care provider headquartered in Lexington, KY. Its service area and citizenry are diverse, ranging from the urban hustle of Lexington to gently rolling fields and farms of rural Kentucky and into Appalachia. The service area is centered around Lexington (stretching out in approximately a 50-mile radius), encompassing a population of more than 1 million residents. In the region, people can enjoy the benefits of a major metropolitan area and the serenity of a breeze in the bluegrass. Quality of life is a key driver of those who choose to live in this region, and CRHS plays a key role in the overall attractiveness of the area.

CRHS was formed in 2000 by the merger of two regional health care providers, Downton Health and Bluegrass Healthcare. Since 2000, CRHS has seen significant growth, driven both organically and through acquisition of additional hospitals in the region. In 2012, CRHS began using the Baldrige Excellence Framework® as a method to help it achieve a more systematic approach to leadership and management across its large network of facilities and services, which led to achieving the 2019 Excellence Award from the Kentucky Center for Performance Excellence. CRHS has learned much over the past decade and achieved tremendous improvement in its operations and results to the benefit of those it serves.

P.1a Organizational Environment

P.1a(1) CRHS **main product offerings**, referred to as *business units,* are designed to provide for holistic health care for the population it serves. This includes:

1. Inpatient and emergency care (37% of revenue) at seven hospitals, ranging from the largest hospital, Copansburg Medical Center – Lexington (CMCL), to two 8-bed micro-hospitals in Carlisle and Danville. CRHS service lines include cardiology, behavioral health/substance abuse, endocrinology/diabetes management, gastroenterology/ bariatrics, nephrology and dialysis, neurology, oncology, orthopedics, and women's and children's health, with programming varying depending on hospital size, complexity, and local population needs. CMCL is a teaching facility with an active residency program featuring 120 residents and is also a Level I trauma center.
2. Outpatient and post-acute services (36% of revenue) including hospital outpatient care, rehabilitation services at three locations, four urgent care centers (co-located with medical office buildings), home health, hospice, and durable medical equipment (DME)
3. A 750-member employed, multispecialty medical group; 120 physician residents; and a broader medical staff including 420 independent physician members (9% of revenue). The employed medical group directly supports the operation of all hospitals and outpatient services.
4. The CRHS health insurance plans (9% of revenue) provide products in the commercial market for local employers and also in the Medicare Advantage market. The insurance plans may increase in importance as CRHS grows in the future.
5. The 1,290 physicians on the medical staff and CRHS facilities form the region's largest accountable care organization (ACO) (7% of revenue), participating in Medicare's NextGen ACO program as well as multiple value-based contracts with private insurers. The ACO continues to be an entity that focuses on Medicare's triple aim of providing high-quality care, with high levels of patient satisfaction, in the most efficient way possible.
6. Joint venture diagnostic / treatment facilities (2% of revenue):
   - ✓ 3 joint venture* (JV) surgery centers (6 suites each)
   - ✓ 6 JV* imaging centers

   * The joint venture centers provide an important service for patients but are not in the scope of this application. By contractual agreement, CRHS is limited in control of daily operations and full deployment of processes and systems.

CRHS's hospitals and their related outpatient and post-acute services (home health, hospice, and DME) generate more than 70% of the system's revenue and employ most of the workforce, so they are of primary **relative importance**.

Delivery methods for services include:

- ✓ Direct (face-to-face) care in facilities or the mobile clinic
- ✓ Telehealth services, which expanded greatly during the pandemic
- ✓ Telephone services, including follow-up and education
- ✓ Web-based, primarily providing health information

P.1a(2) During the merger proceedings, the leadership teams and boards of the two hospitals began discussions about the desired **mission, vision, and values (MVV)** of the new combined regional health care system. From those discussions, the ultimate mission and vision of CRHS was born. Although the new leadership team and board review the mission and vision every three years as part of the full strategic planning process, they have remained remarkably unchanged since 2000 [P.1-1]. In 2002, new CRHS leadership team members embarked on a process to clearly define the **values** the organization uses each day in pursuit of the mission and vision. From this effort came CRHS's WE CARE values.

Figure P.1-1: Mission, Vision, Values, & Core Competencies	
Mission	To provide outstanding healthcare services that improve the wellness of those in our service area
Vision	To be among America's best health systems
Values	(WE CARE): **W**orld-class medicine, **E**fficiency, **C**ompassion, **A**ccountability, **R**espect, **E**xcellence
Core Competencies	Safe, high-quality clinical care Integrated care Efficiency in operations

The **culture** of CRHS has been intentionally built based on the hierarchy of needs identified by Abraham Maslow. CRHS seeks first to provide physiological health and a sense of safety for patients, families, and for the workforce. Safety and security include physical, emotional, and financial well-being. The next layer of the CRHS **culture** is a sense of teamwork, camaraderie, respect, trust, and relationship building – among the workforce as well as with patients. This enables creativity, problem-solving, critical-thinking, and innovation, which enhances quality of life for patients, families, the workforce, and the entire community. The CRHS culture was particularly crucial during the COVID pandemic – relatively few CRHS staff left for the more lucrative travel positions, and many who did opt to leave have since returned [5.1b(2)].

The mission, vision, and values (MVV), and culture create the **core competencies** (CCs) of safe, and high-quality care, and led to the development of a fully integrated and holistic system that efficiently serves the community both in sickness and in health. Under the integrated care model, CRHS is focused more on the wellness of the community than a typical hospital or health system [3.2a(1)].

P.1a(3) CRHS's **workforce segments, key engagement drivers, and changes they are experiencing** are noted in Figure P.1-2. The COVID pandemic created some workforce **changes**, including the increased use of temporary personnel (agency and travelers) and nonclinical employees working remotely. The pandemic also caused CRHS to redouble efforts around safety and wellness for the entire workforce.

Segments	Groups	Key Engagement Drivers	Results
Employees	Clinical (5,730) • Mid-level providers (600) • Registered Nurses (3,400) • Technicians (740) • Therapists (540) • Other (450)	Support of clinical practice Competitive compensation Appreciation (recognition) Wellness	7.3-21
	Non-Clinical (4,100)	Competitive compensation Appreciation (recognition) Wellness	7.3-24
Physicians	Independent Practice (420)	Ease of practice Staff competency Communication / collaboration	7.3-23
	Employed (750)	Support of clinical practice Competitive compensation Staff competence Wellness	7.3-22
	Residents / Interns (120)	Competitive compensation Staff competence Wellness	7.3-21
Students	Various Programs (140)	Staff competence	AOS
Volunteers	Adult (401)	Meaningful work Appreciation Wellness / healthy environment	AOS
	Teens (221)	Meaningful work Appreciation Opportunity to explore career	AOS
Contracted	Traveler / agency (varies)	Competitive compensation Appreciation (recognition)	AOS

Many nonclinical workers will remain "hybrid" – working some days from home and others at the facilities over the longer term. Use of temporary personnel is decreasing, with an increased focus on hiring students as they become credentialled to maintain stable **capacity.** CRHS is dedicated to ensuring students who received remote training during the pandemic have the required **capability** and competency. There are no key changes anticipated as we recover from the pandemic and emerge from the public health emergency.

P.1a(4) CRHS's **key facility assets** include seven hospitals (totaling 891 licensed bed capacity):

- ✓ Copansburg Medical Center – Lexington (CMCL) (600)
- ✓ Copansburg Hospital – Berea (CB) (150)
- ✓ Copansburg Hospital – Frankfort (CF) (50)
- ✓ Copansburg Rehab Hospital (CRH) (50)
- ✓ Copansburg Critical Access Hospital – Stanton (CS) (25)
- ✓ Copansburg Micro-hospital – Carlisle (CC) (8)
- ✓ Copansburg Micro-Hospital – Danville (CD) (8)

Other key facility assets include a new combined corporate office building, outpatient facilities including four medical office buildings, each with an urgent care center, and three outpatient rehabilitation therapy facilities.

Equipment assets and **technology** include a full spectrum of imaging equipment,including 10 MRI machines, three PET scanners, 35 CT machines, and five 3D mammography units. Advanced radiation oncology equipment includes a photon center, gamma knife, rapid arc, HDR, and stereotactic radiosurgery capabilities.

CRHS has e-ICU capabilities to support its rural hospitals, as well as state-of-the-art cardiology and neurosurgery equipment, including hybrid ORs for open heart and valve procedures; interventional radiology and neurology suites; and robotic assisted surgical capabilities at three hospitals. Telehealth services were significantly enhanced during COVID and remain available for patient convenience. CMCL also provides tele-behavioral health services to the other locations, with Douden Ambulance being able to transport patients with mental health issues safely to the behavioral health unit at CMCL as conditions warrant. A mobile clinic provides access to basic services to rural communities.

Nonphysical key assets are CRHS's Apex EMR (electronic medical records system and telehealth platform), its corporate health insurance plan, and the Medicare Advantage plan. Finally, both the residency curriculum and programming, and the accountable care analytics platform are CRHS's most significant pieces of **intellectual property.**

P.1a(5) U.S. health care is one of the most highly **regulated** environments in the world. The most significant federal regulators include the Centers for Medicare & Medicaid Services (CMS), Department of Labor (DoL), Occupational Safety & Health Administration (OSHA), Office for Civil Rights (OCR), Equal Employment Opportunity Commission (EEOC), Food and Drug Administration (FDA), Environmental Protection Agency (EPA), and the Internal Revenue Service.

In addition, the Commonwealth of Kentucky has state-level agencies with regulatory authority, including the Department of Health, Department of Insurance, Kentucky Medicaid / KCHIP Services, and the Department of Emergency Medical Services. There are also state licensure boards for most clinical practitioners.

There are specific regulations for specific services, such as The United Practice, American Surgeons Group, American Pathologists Group, Accreditation Council for Graduate Healthcare Education, Radiologists Group of America, and the Commission of Education Advancement.

In an effort to become more process-focused and implement the ISO 9001:2015 standards for quality management, CRHS transitioned to a different hospital accreditation organization at the end of 2021. The intent is for the entire organization to become ISO certified by 2024, with an enhanced focus on integration.

P.1b Organizational Relationships

P.1b(1) CRHS's highest-level **governance structure** is a volunteer, 16-member Board of Trustees (BOT). A Board of Directors (BOD) at each CRHS hospital reports to the BOT. BOT and BOD members serve staggered three-year terms and can be re-elected to serve up to three terms. Each BOT and BOD elects officers including the chair, vice chair, secretary, and treasurer. CRHS's president and CEO, Keith Turley, reports to the BOT.

The **leadership structure** includes the Executive Leadership Team (ELT), comprised of the president and CEO and his direct reports. Each business unit has a Senior Leadership Team (SLT) composed of the senior leader of the business unit and her or his direct reports. The corporate office provides key services for the organization, including strategic planning, marketing, finance, legal, risk management, accreditation, information technology, performance excellence, medical staff credentialing, materials management, security, facilities, biomedical services, and human resources. The Copansburg Foundation, governed by a 12-member community-based advisory board of volunteers provides critical support to CRHS by serving as ambassadors, conducting fundraising, and providing advice and feedback regarding services, but as a separate entity, is outside the scope of this application.

A key element of the **leadership and governance structure** is the inter-relationships among board and hospital committees. Each BOT and BOD member serves on at least one active committee with oversight for Quality, Finance, Governance, Risk Management, and Executive leadership. With the exception of the Executive committee, each business unit has a committee structure aligned with the board committees. Chairs of each committee at each business unit also meet monthly to share data, information, knowledge, and lessons learned.

- ✓ Quality: referred to as Safety, Quality, Process Improvement Committees (SQPIC) meet monthly to review and discuss scorecards, analyze high- and low-performance processes and patterns and trends, and deploy corrective action plans. Each department/unit is represented on SQPIC.
- ✓ Finance: Directors of business units meet monthly to analyze and discuss budget variances (both financial and volume-driven). A sub-committee at each hospital location is the Value Analysis Team (VAT) which provides clinical input for procurement and supply chain management.
- ✓ Governance: CRHS operates under a shared governance model. Each hospital patient care unit has a unit-based council to give clinicians more control over decision-making and resource allocation. These unit-based councils meet monthly in a hospital-based setting to roll-up issues, share effective processes, and evaluate patterns and trends. Medical Staff report through Medical Executive Committee.
- ✓ Risk Management: Risk managers and compliance officers meet bi-monthly (and as needed) to discuss the impact of regulatory changes, incident reports, and complaints/ grievances from patients.

The **key components of the Leadership System** [1.1-1] focus on the Baldrige Categories and the Quality Management System (QMS) of the ISO 9001:2015 standards. The QMS is a formal system that considers the organizational context and documents responsibilities, processes, and procedures for achieving objectives – essential this organizational profile, the strategic plan, and policies / procedures. The QMS helps coordinate and direct activities to meet customer and regulatory requirements and continually improve effectiveness and efficiency.

P.1b(2) Patients are the key **customers** at CRHS and are the center and focus of all activities and decisions. Care of the patients extends to their "circle of support." Referred to as *family* for simplicity, people in this circle are determined by the patient. CRHS encourages collaboration between the patient, family, and health care professionals; and honors individual and family strengths, cultures, traditions, and expertise.

Figure P.1-3 Patient Centered Care

In a cycle of refinement driven by a board retreat in 2017, CRHS added the broader community into the customer-centric model [Figure P.1-3] in order to increase the focus on community health and wellness. The growing concern regarding Kentucky's #46 ranking of the 50 states in prevention of hospital readmission, and in the bottom decile of many health indicators led to the Greater Lexington area embarking on an initiative to adopt the Communities of Excellence (COE) model. The intent is to raise the well-being of the entire region (as **key stakeholders**) through excellence in government, industry, healthcare, and education concurrently and collaboratively. This initiative was expanded in 2021 based on community needs for health information and reluctance to come to hospitals for screenings and care during the pandemic.

As described in 3.2b, secondary customer groups (families and community) are not surveyed regarding satisfaction and engagement. Other aspects of relationship building and customer engagement, such as listening, needs assessments, enhancement of services, and use of market data, demographics, and health indicators apply to the entire population.

Figure P.1-4 Customers

Group	Requirements	Results
Patients and family	Access to high-quality, safe care	7.1
	Efficiency and effectiveness	7.1
	Communication and collaborative care	7.4-1a
	Service excellence	7.2
	Value	7.5-16
Community	Access to high-quality, safe care	7.4-10
	Health promotion	7.4-9a
	Knowledge sharing	7.4-2
	Broad range of services	7.4-9a
	Societal responsibility	7.2-22

P.1b(3) CRHS's **key suppliers, partners, and collaborators** and their main roles in producing key health care services and other customer support services are listed in Figure P.1-5.

CRHS's **suppliers** provide CRHS with the supplies, equipment, pharmaceuticals, and services needed for core **operations**. CRHS key requirements of its suppliers are quality of products/services, availability of products/services, on-time delivery, and cost.

CRHS has four key equity partnerships and maintains at least 51% equity in each of these partnerships. It partners with more than 50 independent surgeons in three distinct JV surgery centers; and partners with a 40-member radiology group with six outpatient imaging centers. The JV structure provides a competitive advantage to CRHS, as physicians with an equity stake in these ventures are tightly aligned with CRHS and help CRHS drive performance and innovation in these services.

Figure P.1-5 Suppliers, Partners, and Collaborators		
Group	**Name and Role**	**Contribution**
Suppliers	• Bluebird & Hilltop *(medical supplies, equipment, and pharmaceuticals)* • Sarmac (*Imaging equipment)* • Ingleton, Marcus, J&M *(Surgical* supplies *and equipment)* • Apex *(Electronic health record)* • Amwell *(Group purchasing organization)*	• Supply/service improvement or innovation that result in better patient care • Cost effectiveness
Partners	• Wellmed *(emergency and anesthesia providers)* • Surgeons in surgery centers JV • Radiologists in imaging centers JV • Douden Ambulance *(transport)* • City of Lexington, including city government, schools, chamber of commerce, United Way, health department • Area Community Action Orgs.	• New/improved procedures, technologies, and processes • Community of Excellence initiative • Health care • Job placements
Collaborators	• University of Lexington School of Medicine *(medical students)* • University of Churchill Downs *(nursing, respiratory, technology, and pharmacy students)* • County Health Department • Regional FQHCs • KY office of Rural Health	• Skilled workforce members • Collaborate in special community health initiatives

Recognizing the tremendous improvement in operations that **CRHS** has achieved as a result of implementing the Baldrige framework, CRHS has partnered with several local organizations to improve the performance of the community using the COE Baldrige-based framework. CRHS serves as a backbone organization for this community improvement effort, currently in its third year, and the local schools have become highly engaged as well in the efforts to promote excellence.

Collaborators help CRHS with workforce recruitment, training, and with community health and safety initiatives. For example, a local college has enhanced CRHS's ability to recruit and retain personnel in key areas. CRHS has also worked with higher education and the health department on several innovative initiatives focused on community health.

Key **supply-network requirements** include alignment with the MVV of CRHS, and willingness to participate in improving effectiveness, efficiency, and seeking innovation.

There is a research department with an Institutional Review Board (IRB) that supports **innovation** in medical care, and the Performance Excellence and Strategy teams at the corporate level help identify strategic opportunities to determine those that are intelligent risks to pursue. The IRB frequently collaborates with other organizations to participate in clinical trials, particularly in oncology services.

P.2 Organizational Situation

P.2a Competitive Environment

P.2a(1) CRHS is the **largest provider** and market share leader for almost all clinical services in the region, a position that has been cultivated over time. There are some robust hospital competitors in the service area, including (beds):

- ✓ Rivertown University (450)
- ✓ University of Churchill Downs Medical Center (400)
- ✓ National Hospital Corporation (NHC) hospital (250)
- ✓ St. Paul's Hospital (200)
- ✓ Edwardia Hospital (150)

Competition in the outpatient setting includes those same hospitals and some for-profit entities such as Rivers Imaging Centers, Trulent Surgery Centers, Movement Physical Therapy, and PatientNow Urgent Care. Competition in the health insurance space comes from national health insurers such as Ryland, Xyrus, Norwood, Haferty, and Briars.

The **key differentiator** for CRHS is the truly comprehensive and holistic health care provided by the integrated business units – including a focus on wellness, not simply treating the sick and injured. This promotes a healthy community, and has been enhanced by CRHS engagement with other community leaders to collaborate on the Communities of Excellence initiative and promote understanding of the Baldrige Framework in the region. ISO has also become a **differentiator** for many of the manufacturing companies in the region – many of which are also ISO certified and understand the quality standards and rigor involved in achieving this designation.

P.2a(2) There are numerous **changes** in the regional healthcare market. As with most of the country, the Lexington market has slowly been consolidating, and rumors are frequent about the remaining independent hospitals joining other large health care systems. Two unaffiliated rural hospitals closed in 2021. This consolidation and uncertain future for some hospitals presents an opportunity for collaboration, and CRHS was able to reopen both rural facilities using the "micro-hospital" model – an Emergency Department with an 8-bed inpatient care unit to treat medical (non-surgical) conditions. This innovative model maintains access to some services in the communities where the local hospital closed. These two new hospitals also ensure that people living within a 50-mile radius of Lexington have access to quality care within a 20-minute drive of their home, frequently of particularly importance to those living in the Appalachian area, who often have fewer resources available to them, including transportation and internet access. Finally, a for-profit competitor is constructing a four-suite ambulatory surgery center (ASC) in Lexington, opening in 2023.

P.2a(3) Health care enjoys significant sources of **comparative data** both within and external to the industry, with the primary **limitation** being timeliness. Detailed competitor data can be difficult to obtain, and data was disrupted during the pandemic. The most significant sources of comparative data include CMS, Consumer Assessment of Healthcare Providers and Systems (CAHPS), Centers for Disease Control and Prevention (CDC), National Healthcare Safety Network (NHSN), Healthcare Effectiveness Data and Information Set (HEDIS), Agency for Healthcare Research and Quality (AHRQ), and the Bureau of Labor Statistics, which are all publicly reported databases. Additionally, CRHS subscribes to receive comparative data from the Kentucky Health Group, Kress Daney, the Upwood Organization, National Data Sort Corp., Carerank, LeapCore, the Human Resources Society, and the financial rating agencies.

P.2b Strategic Context

Each year, CRHS reviews and assesses its competitive position and context as part of the strategic planning process (SPP) [2.1-1]. Due to the dynamic market and healthcare industry in general, CRHS evaluates strategic **challenges, threats, advantages,** and **opportunities** for the system and for each business unit with each annual planning cycle. They key elements at the system level are provided in [P.2-1], with the specifics for each business unit available on site (AOS).

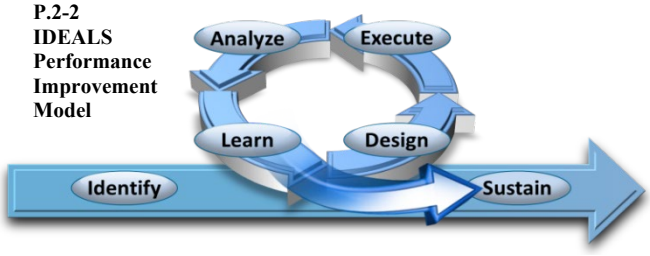
Figure P.2-1 Strategic Context
Strategic Challenges
1. Workforce shortages and burnout 2. Financial challenges – increasing costs / decreasing payments 3. Health disparities in communities served 4. Overall local poor health quality / high incidence of disease
Strategic Threats
1. Cybersecurity 2. Increased regulatory requirements
Strategic Advantages
1. Integrated health system – sharing of resources, economies of scale, and ability to provide holistic, comprehensive care 2. Integrated EHR across all inpatient and outpatient facilities 3. Market leadership 4. CRHS culture of teamwork and focus on resiliency 5. Engagement of the Lexington region in Communities of Excellence
Strategic Opportunities
1. Engaging the communities in wellness 2. Increasing access to care – both in-person and remote 3. Embedding resilience in operations – workforce support

P.2c Performance Improvement System

CRHS uses the Baldrige Framework as its overarching system to inspire performance excellence. All CRHS employees receive basic training on the Baldrige framework, particularly the driving motivation being holistic performance throughout the system. Over 50 leaders have received advanced Baldrige training, and 10-15 annually serve as examiners at the state or national levels. CRHS systematically analyzes Baldrige and other feedback reports to prioritize improvement projects. In 2021, CRHS leadership made a commitment to stop having Baldrige as an agenda item, and intentionally embed the framework into "how we provide care." This shift in focus better aligned with the culture and values of being excellent and sharing processes that drive exceptional results.

CRHS had previously adopted the Plan, Do, Check, Act (PDCA) **methodology** for continuous improvement, but evolved to IDEALS in 2022 (Figure P.2-2). This model substitutes *Design-Execute-Analyze-Learn* for PDCA and adds Identify (the need for an improvement, innovation, or service change) as an on-ramp for improvement efforts and *Sustain* (including an intentional plan for sharing lessons learned and knowledge gains) as an off-ramp. Staff are now more comfortable stopping projects when success has been achieved or the system would benefit from resources being reallocated to higher priorities. Champions conduct training for all individuals, and the knowledge is used for day-to-day improvement work at the department/unit level.

P.2-2 IDEALS Performance Improvement Model



An additional benefit of the transition to IDEALS has been facilitating CRHS to become more intentional in using the maturity model of the Baldrige framework. Specifically, building processes to ensure that the "Learn" step has data and information to guide decision-making helps to ensure that learning is possible. Embedded in the "Design" step is a formal statement of the "key intended outcome" (KIO) of the process / improvement, which drives the selection of the measure(s) of success. This approach to "management by fact" also enables decision-making about sharing of refinements and innovations throughout CRHS and drives informed allocation / re-allocation of resources.

At a system level, the SQPIC selects and sanctions larger-scale or more resource-intensive performance improvement projects. These projects are assigned to a TRAC (Teams Realizing Awesome Care). The TRACs report progress monthly to the SQPIC. Within TRAC team projects, Lean and other **improvement tools and methods** are used in the IDEALS format. SQPIC is also a venue for sharing progress toward goals, refinements, innovations, and for generating ideas for some improvement projects that may become stuck [6.1b & 6.2a]. Based on ISO standards, each meeting includes assignment of specific action items that will be accomplished prior to the next meeting, which has enhanced discussion and improved accountability.

CRHS has identified ten integrated leadership and management systems that are analyzed by the ELT on an annual basis as part of the environmental scan for strategic planning. The evaluation of the systems includes both effectiveness (based on key intended outcomes and results achieved), and efficiency (based on the return on investment of resources). These systems [with figure references] include:

1. Leadership [1.1-1]
2. Communication [1.1-2]
3. Strategic Planning [2.1-1]
4. Action Planning [2.2-1]
5. Customer Relationship Management [3.1-1]
6. Performance Measurement, Analysis, and Review [4.1-1]
7. Knowledge Management [4.2-1]
8. Workforce Management [5.1-1]
9. Operations Management and Improvement [6.1-1]
10. Safety and Security [6.2-1]

These are all managed through IDEALS, and each has at least one clearly defined KIO.

- ★ Lexington: Medical Center and Inpatient Rehab
- ★ Berea: Hospital
- ★ Frankfort: Hospital
- ★ Stanton: Critical Access Hospital
- ★ Carlisle: Micro-hospital
- ★ Danville: Micro-Hospital

The circle is approximately a 50-mile radius around Lexington, served by the mobile clinic.

RESPONSES ADDRESSING ALL CRITERIA ITEMS

Category 1: Leadership

1.1 Senior Leadership

The Leadership System (LS) for CRHS was evaluated and updated during 2021 as a key element in getting Baldrige "off the agenda and into the organization." The factors in the organizational profile, including the Mission, Vision, and Values, are the foundation of the LS – defining "who we are, what we do, and what is key" – and supports and focuses the strategic plan, measures of success, and overall operations. This "management by fact" foundation supports the workforce and leadership in decision-making and allocation of resources to best support the customers who are at the peak of the pyramid.

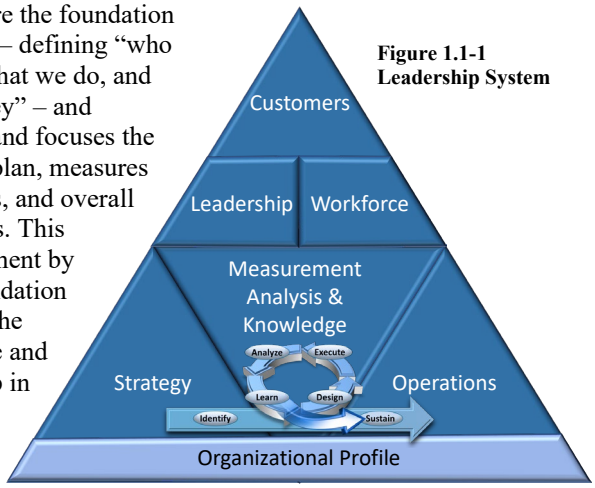


Figure 1.1-1 Leadership System

1.1a Mission, Vision, and Values

1.1a(1) When Downton Health and Bluegrass Healthcare merged to form CRHS in 2000, the mission and vision of the new regional health system were **set** by the combined leadership teams and boards of the two original hospitals. Based on the key intended outcome (KIO) of the Mission, Vision, and Values (MVV) [P.1-1] to promote organizational alignment, the MVV have been used to guide each new merger and acquisition. The MVV are discussed during leadership rounding to evaluate their ongoing relevance with the workforce (WF), and stakeholder focus groups are conducted as an input to each cycle of the strategic planning process to determine if any modifications are needed. The MVV are reviewed and refined as appropriate during Strategic Planning [2.1-1, step 5].

The ELT and SLTs systematically **deploy** the MVV to all stakeholders throughout the organization via the Leadership System (LS) [1.1-1] and via multiple communication methods [1.1-3] to the **WF, suppliers, partners, collaborators, patients, families, and key communities** (other stakeholders). Key mechanisms include:

- ✓ Prominent posting throughout the facilities
- ✓ Inclusion in the patient handbook
- ✓ Requirement for every potential WF candidate to agree to support and abide by the MVV prior to submitting an employment application
- ✓ Alignment of all individual performance evaluations
- ✓ Attestation included in all contracts *

* Also includes the Code of Ethical Standards of Behavior

Since 2018, executive and senior leaders (EL/SLs) have **personally presented** "*MVV in Action*" – real-life examples and stories of circumstances where the MVV clearly guided decision-making. These range from individual actions to corporate decision-making that demonstrate how the MVV were used in caring for patients, colleagues, and/or the communities, and are recounted to the WF during each key gathering/meeting and to patients, families, and the community during community forums, focus groups, and via the website and bulletins.

EL/SLs **personally demonstrate** their commitment to WE CARE in leading by example and emulating the values in all their interactions. EL/SLs highlight specific values that resonate with them at the beginning of their own division meetings and in business meetings with suppliers, partners, and collaborators.

EL/SLs further **demonstrate** their commitment to WE CARE by ensuring that decisions made align with the MVV. During rounding, SLs specifically focus on the values of compassion and respect in their interactions with all stakeholders. On a rotational basis, the SLs address the orientation sessions for new members of the WF, including employees, volunteers, students, medical staff, and board members to discuss the MVV and the LS, and share examples of the "*MVV in Action*" that convey the personal and profound impact of the MVV.

1.1a(2) To **promote legal and ethical behavior** and ingrain these characteristics throughout CRHS's organizational culture, the ELT established a Code of Ethical Standards of Behavior (CESB) that applies to the BOT/BODs, the entire WF, and all business operations, including suppliers, partners, and collaborators. EL/SLs demonstrate their **personal commitment** to legal and ethical behavior using multiple approaches, beginning with modeling the CESB and leading by example in their interactions with the WF, patients, families, partners, suppliers, and other stakeholders. In their commitment to these standards, as well as to transparency and accountability, EL/SLs openly discuss "close call" and "near miss" events to help raise awareness and provide opportunities for learning. When a medication event in a neighboring state made national headlines in 2022, CRHS incorporated "learning from the mistakes of others" into the process as part of the "Just Culture" initiative [1.1c1].

SLs also call out comments, behaviors, or actions that appear to cross the line and ensure that appropriate investigation and follow-up occurs. As a cycle of learning through COE, the Community Excellence Group (CEG) has identified how its members, inclusive of CRHS leadership, will demonstrate commitment to legal and ethical behavior through its Guiding Principles adopted in early 2020.

To further promote an organizational environment **requiring legal and ethical behavior**, the Medical Staff Code of Professional Behavior Policy was established by the Medical Executive Committee and applies to all medical staff members. Complaints of inappropriate or disruptive behavior are personally reviewed by the Chief of Staff and investigated and addressed within the Medical Staff governance. Issues such as bioethical medical care considerations are referred to the Bioethics Committee (a standing committee of the medical staff with multidisciplinary and SL representation). The Bioethics Committee provides a forum for discussion of clinical ethical considerations associated with CRHS's clinical, educational, and research activities.

1.1b Communication

CRHS's Communication System [1.1-2] provides the framework to **communicate** information across the various business unit locations, service lines, and stakeholders. It was updated to the IDEALS format in 2022. It starts with the KIO – the communication objective establishes "Who needs to know what, by when?" Integrated with this change, the "Analyze" and "Learn" steps (7 & 8) were made more intentional. Using the Kirkpatrick model [5.2c(3)], we evaluate communications not only through feedback on surveys, but also through discussions during rounding and huddles, behavior observations about understanding the messages, and organizational performance. For example, the effectiveness of messaging mechanisms regarding the COVID vaccination mandate for the entire WF by CMS were evaluated based on WF responses (getting vaccinated, requesting exemption, or asking questions of leadership). Full compliance was achieved well in advance of the deadline.

Identify
1. Communication objective (KIO)
2. Process ownership
Design
3. Communication strategy
4. Communication method(s)
5. Effectiveness analysis process
Execute
6. Implement strategy
Analyze
7. Measure, review, & analyze effectiveness
Learn
8. Evaluate effectiveness
9. Revise strategy as appropriate
Sustain
10. Reinforce message
11. Share best practices

Figure 1.1-2 Communication System (CS)

EL/SLs use multiple approaches to transparently **communicate and engage** the entire WF, patients, families, stakeholders, suppliers, partners, and collaborators with an emphasis on providing forums and mechanisms to **encourage frank, two-way communication** [1.1-3]. To reach as many staff members as possible, Round-the-Clock forums are scheduled each shift and are simultaneously livestreamed for viewing from any location. The base location is rotated to different care sites to increase visibility and engagement across the entire health system. The sessions are recorded and made available on the intranet. CRHS has intentionally created redundancy in its communication methods to reach as many stakeholders as possible, across multiple locations, work shifts, and levels of access. Combined, these approaches serve as the primary means for communicating **key decisions**, needs for organizational **change**, **motivating high performance,** sharing news and information impacting the organization, its patients and families, the WF, and other stakeholder groups.

Engaging the entire WF across multiple campuses is a high priority. CRHS continuously evaluates communication channels by analyzing data and information such as attendance/hits/read/watch rates and meeting effectiveness using evaluations and surveys. The communications team recommends changes to the appropriate communication process owner [step 2] based upon what the data reveals.

In a 2017 cycle of learning, a section of the CRHS intranet was set up to provide informational updates with summaries of meeting topics and follow-up to ensure the entire WF has access and is informed. **Key decisions** impacting the organization are further disseminated with the distribution of summaries and FAQs that are specifically geared to the stakeholder audience and used by leaders during department and business unit meetings. In 2019, CRHS incorporated stakeholder personas to better understand stakeholder groups and how they access information. The personas create reliable and realistic representations of stakeholders to support effective communication with each specific audience. This led to using short, monthly video messages from SLs to provide an easily accessed update. These proved especially effective during the pandemic, while people were not able to gather in person. As a result, CRHS continues to use video, both live-stream and recorded, as a key communication method.

Communication Method/Mode *(Conducted by…)*	Frequncy	In-Person	Electronic	Print	Workforce				Customer			Others			Purpose
					E	P	V	S	P	F	C	S	P	C	
Orientation-Onboarding *(SL)*	M	X			X	X	X	X							MVV
Round-the-Clock Forum *(CEO, EL, SL)*	Q	X	X		X	X	X	X				X	X	X	MVV, D, OC
Sr. Leader Rounding *(SL)*	D	X			X	X	X	X							MVV
Patient Safety Huddle *(SL)*	D	X			X	X	X	X							MVV
Nurse/Dept. Leader Rounding *(MM)*	D	X			X	X	X	X	X	X					MVV, D, OC
Unit/Department Meeting *(SL, MM)*	M	X			X	X	X	X							MVV, D, OC
Monthly Video Message *(CEO, SL)*	M		X		X	X	X	X	X	X	X	X	X	X	MVV, D, OC
Brown Bag It *(CEO, SL)*	M	X			X	X	X	X							MVV
CRHS Intranet *(CEO, EL, SL)*	D		X		X	X	X	X							MVV, D, OC
CRHS WE CARE (news) *(CEO, EL, SL)*	M		X	X	X	X	X	X	X	X	X	X	X	X	MVV, D, OC
General Med Staff Forum *(CEO, EL, SL)*	Q	X				X		X							MVV, D, OC
Medical Staff Orientation-Onboarding *(EL,SL)*	M	X				X									MVV
Medical Staff Department Meeting. *(SL)*	M	X				X		X							MVV, D, OC
Grand Rounds *(EL, SL)*	M	X	X		X	X	X	X				X	X	X	MVV
Medical Staff Bulletin *(EL, SL)*	M		X	X		X		X							MVV, D, OC
PFAC Meeting *(SL)*	M	X							X	X	X				MVV
Community Forum *(CEO, EL, SL)*	Q	X			X	X	X	X	X	X	X	X	X	X	MVV, D, OC
CRHS Community News *(CEO, EL, SL)*	Q		X	X	X	X	X	X	X	X	X	X	X	X	MVV, D, OC
Website *(CEO, EL, SL)*	D		X		X	X	X	X	X	X	X	X	X	X	MVV, D, OC
Focus Groups *(EL/SL)*	S	X							X	X	X				MVV, D, OC
S/P/C Quarterly Review *(EL/SL)*	Q			X								X	X	X	MVV, D, OC
Job Posting/Applications *(SL)*	D		X	X								X			MVV
Performance Evaluations *(EL,SL)*	A	X		X	X	X	X	X							MVV

By = CEO, EL (Executive Leaders), SL (Senior Leaders), MM (Middle Managers)
Workforce: E(Employees), P (Physicians), V (Volunteers), S (Students)
Customers: P (Patient), F (Family), C (Community)
Others: S (Suppliers), P (Partners), C (Collaborators)
Frequency= D (Daily), M (Monthly), Q (Quarterly), S (Semi-annual), A (Annual)
Purpose = MVV (Mission, Vision, Values); D (Decisions), OC (Organizational Change)

Figure 1.1-3 Communication Methods

1.1c Focus on Organizational Performance

1.1c(1) Using the LS [1.1-1], EL/SLs create an **environment for success** now and in the future, with the Mission Vision, and Values as the foundation and customers at the peak of the pyramid. EL/SLs set the direction through the selection of objectives and goals as part of the SPP [2.1-1, step 6]. Goals are cascaded throughout the organization via the development and deployment of action plans [2.2-1], measurement and assessment of performance to goals [4.1-1] and acting on the findings through the Operations Management & Improvement System (OMIS) [6.1-1]. A single action plan owner is designated for each action plan and may be supported by an SL champion and/or a clinical champion, as appropriate, to facilitate engagement and to help break down barriers to improvement. The cascading of action plans, performance metrics, and goals extends to departments and service units (with accountable leaders identified) and are captured in the employees' Performance and Professional Development Plan (PPDP) [5.1 & 5.2], so there is a clear line of sight from employee behaviors and personal goals to the strategic plan.

EL/SLs create and reinforce a **culture** that fosters the **engagement** of patients, families, and the entire WF, supported by the framework of the LS [1.1-1], which places the patient and family at the peak, first, with the health care team seeking to **engage** and partner with the patient and family in care decisions from admission through discharge. Next, during inpatient rounds, the health care team meets at the patient's bedside whenever appropriate, to understand preferences and to discuss progress and the plan of care. In ambulatory encounters, patient preferences are collected as part of the intake process and incorporated into the patient's health record. Leader rounding in all settings is focused on **WF engagement, safety, and diversity, equity, and inclusion** (DEI) – listening to their needs, concerns, and ideas.

With the value of respect and a deep commitment to patients, families, and communities, SLs strive to ingrain **equity** and **inclusion** throughout all patient care and WF approaches. First, this includes understanding the **diversity** of our communities and fostering DEI in the WF. In 2021, CRHS created a new position: Vice President, Diversity, Equity, and Inclusion, responsible for the development, implementation, and oversight of the DEI strategy and approaches to ensure integration into the organizational culture, care delivery systems, and all program offerings. A key focus is on creating cultural competence in care – although the Lexington area is not as diverse as much of the US (70% "white alone" compared with 60% nationally), and its citizens are among the best-educated in the country, 10% of the population was born outside of the US, and 13% do not speak English as their primary language. In 2022, the DEI initiative was expanded to include understanding, acceptance, and inclusion of all – such as personality types, generation, learning styles, gender, and even sleep patterns. The focus for 2023 is educating the WF on bias – including positive and negative, confirmation bias, unconscious bias, and bias based on incomplete facts.

SL commitment to a culture of **safety** (COS) and high-reliability principles are critical components of **creating an environment for success**. The Core Competency (CC) of safe, high-quality care is supported by the Just Culture, which emphasizes a systems approach, teamwork, transparency in operations, and a focus on learning with a nonpunitive approach to errors. The Tiered Huddle system and leadership rounds are integral to promoting the COS. In inpatient areas, Patient Safety Huddles are conducted during the charge-nurse handoff every morning. Patient issues, near-miss events, and complaints are communicated. As appropriate, issues and information are escalated to facility leadership at their mid-morning safety huddle and communicated to the corporate ELT before noon each day. During the pandemic, CRHS recognized the need to hold huddles more often due to the rapidly changing situation, and huddles were organized around "Sx3," the availability of Space, Staff, and Stuff, in addition to Safety issues. "Start the day" huddles were also implemented in non-hospital settings. These approaches provide leaders with real-time information to anticipate, understand, and prioritize issues requiring action. It is not uncommon for changes in patient volume, acuity, staffing, or supplies to result in changes to process or staff assignments throughout the day. The escalation to the entire system also helped address supply network issues and shortages.

During the pandemic, CRHS became more intentional about promoting **agility and resilience** among the WF and in the community. There was an intense focus on the mission and values, particularly promoting teamwork. Benchmarking with the airline industry, a "put your own oxygen mask on first, so you can better help others" initiative was launched. During rounds, leaders discussed that self-care was quite the opposite of being selfish, and SQPIC gathered information about healthy coping mechanisms used by various staff. Rather than bring food to support the staff, the community began bringing bubble bath, candles, books, music, etc. CRHS created a "Zen Den" at each facility, with a massage chair, soft lighting, and music, and implemented support group sessions for the WF in addition to the employee assistance program available.

The SQPIC and the TRAC model [6.1b(3)] cultivate **innovation** and **intelligent risk-taking** behavior by creating a safe environment for risk-taking across the organization. TRAC teams are encouraged to propose ideas and potential solutions that reflect intelligent risks. TRAC team members test the ideas, learn from them, and are encouraged to modify and try again. All attempts (fails and successes) are rewarded to motivate intelligent risk-taking and foster innovation.

The highly intentional process of assigning ownership to actions and ensuring Key Intended Outcomes (KIO) are defined and a venue is established for reporting process help to create **accountability and** promote **learning.**

EL/SLs **participate in succession planning** and the development of future organizational leaders through the CRHS's Leadership Development Program (LDP) (AOS). Within the LDP, EL/SLs and their direct reports identify individuals who exhibit high leadership potential and exemplify WE CARE as likely successors. EL/SLs and their direct reports will meet with the potential leaders directly to ascertain their interest in participating in the LDP [5.2c(3)] and then serve as mentors and advisors. Since COVID, many of the meetings and training sessions have been conducted online, which has been well-received by participants, mostly due to the savings in time and travel.

1.1c(2) EL/SLs create a **focus on action** to achieve the CRHS **mission and vision** through the LS and strategic planning – cascading aligned goals through all levels of the organization. Each goal is cascaded to applicable business units, service lines, departments, and individual members of the WF through the action planning process and individual PPDPs of the WF to ensure deployment. Progress and performance are evaluated and reviewed, with modifications made as needed. Division and department / service line leaders track results, posting and sharing the information with their staff members. This approach creates **accountability** at multiple levels: EL/SLs, department, service line leaders, and individual WF members.

Organizational goals are established during the SPP with consideration of the value created for customer groups and/or stakeholders [2.1-1, steps 1 and 6]. With the vision to be among America's best health systems, CRHS's CCs of Safe, High-Quality Clinical Care, Integrated Care, and Efficiency in Operations give priority to the processes and systems supporting the delivery of patient care, thus providing value to the patients, families, and stakeholder communities served. CRHS **balances value** for all patients, families, and stakeholders during the SPP, selecting goals and metrics that support each group and its key requirements [2.1-1, step 1].

SLs are **personally accountable** for business operations and results, participating in the monthly review and discussion of performance metrics and budget variance to **identify needed actions**/modifications based on results. SLs demonstrate personal accountability for specific action plans as executive owners, setting expectations, leading regular reviews of action plan progress, and assisting in breaking down barriers that may impede accomplishment of the plan.

Additionally, cross-functional alignment and **accountability** are achieved by working closely with medical staff members, suppliers, partners, and collaborators. Recognizing the role of medical staff members in achieving the key performance indicators (KPIs) for patient safety, clinical excellence, and financial performance, the SLs and medical staff leaders incorporated evidence-based practice standards as part of the peer review process in 2018 and the ongoing professional practice evaluation process [AOS]. In a 2019 cycle of learning, CRHS identified the opportunity to incorporate performance and service expectations within supplier, partner, and collaborator agreements that reflect alignment with CRHS's strategic goals. These are reviewed annually after the SPP to determine the need for revision.

1.2 Governance and Societal Contributions

1.2a Organizational Governance

The BOT is the governing body of the CRHS, responsible for general oversight of the quality of care and financial health of the system. The BOD of each business unit has full legal authority and responsibility for operations including compliance with legal, ethical, and licensure requirements, as well as representing the business unit to the community and representing the community to the organization.

1.2a(1) The BOT and BODs ensure responsible governance through the processes shown in Figure 1.2-1 and conduct quarterly meetings [4.1-2] to **review** key aspects of governance and ensure these aspects are achieved.

Aspect	Committee	Process
Accountability for senior leaders' actions	Full BOT/BODs Executive	Monitor organizational performance during quarterly reviews Personal interactions with community Evaluation of CEO / Provide input to evaluation of ELT/SLT PPDPs
Accountability for strategy	Full BOT/BODs	Approval of the CRHS strategic plan and associated business plans. Monitor data and information demonstrating progress toward accomplishing action plans
Fiscal accountability	Full BOT/BODs Finance and full BOT/BODs	Approval of the annual operating budget and 3-year capital budget (updated annually) Approval for all land acquisition, and mergers or acquisitions of hospitals. Ensures appropriate insurance coverage Monitoring financial performance, including significant budget variances Monitoring the bond ratings
Patient safety and health care quality	Quality and Full BOT/BODs Full BOT/BODs Full BOT/BODs	SQPIC reports and review of scorecards (Change-the-business and Run-the-business) Medical staff and independent practitioner credentialing, appointment, and re-appointment Approval of Medical Staff Bylaws during even numbered years
Transparency in operations	Full BOT/BODs Quality Audit (Finance subcommittee)	Just culture - reviews of safety incidents and near miss events Review information regarding any patient grievance Summary report of all claims denials from the CRHS health insurance plans
Selection of Members	Governance	Based on knowledge, skills, attributes, and demographic representation of the communities they serve Elements of the selection process include background checks, and disclosure of any conflicts of interest Disclosure policies are reviewed and a conflict-of-interest disclosure is updated annually
Independence in Audits	Full BOT/BODs Finance Audit (Finance subcommittee)	Independently engage the firm to conduct the annual audit, and directly receive the report of findings Participate in accreditation process and the new ISO9001:2015 internal and external audits Corporate compliance officer reports directly to the audit committees, including audit findings and any reports of improprieties received
Protection of stakeholder interests	Full BOT/BODs	Participate in the evaluation of the performance of contracted services and joint venture agreements Commission and receive the triennial community health needs assessment Board members also serve as two-way communication conduits for discussions about health care needs and hospital performance in community groups
Succession Planning	Full BOT/BODs Executive	Provide oversight and participation in the LDP, review annual report about LDP participation and feedback Reviews assignments for interim and coverage duties when a member of the ELT or SLT will be absent for more than 4 consecutive days, which is regarded as a developmental opportunity Track the performance and progress of those designated as potential successors for the CEO Provide recommendations regarding additional development to the board Provide one-to-one executive coaching for future leaders, based on specific areas of expertise

Figure 1.2-1 Key aspects of governance

In 2021, the board **selection** process was updated to promote board diversity – defined as gender, ethnicity/race, functional expertise (legal, medical, financial, etc.), and geographic region.

1.2a(2) The Executive Committee of the BOT **evaluates** the performance of the CRHS president and CEO, assessing performance and progress in meeting the strategic objectives and goals and overall organizational performance. The president and CEO **evaluates** the ELT, and the ELT evaluates the SLT based upon established goals, cascaded from the strategic plan as well as individual PPDP goals. The integration with the PPDP supports each leader's professional development while advancing his/her effectiveness. The base **compensation** for the president and CEO, EL, and SL is reviewed annually against similar positions in the industry to ensure competitiveness. This is augmented by an **incentive performance-based model** that rewards EL/SLs, teams, and individuals for progress toward or attainment of goals, including those cascaded and linked to the strategic goals. The ELT and SLT evaluate the effectiveness of the Leadership System annually during the strategic planning process by assessing organizational performance and analyzing Baldrige-based feedback reports.

At the direction of the BOT Governance Committee, BOT and Advisory Board members complete a **self-assessment** of board and individual effectiveness on an annual basis. A set of standardized assessment tools support benchmarking the results to other organizations' boards. The annual board **self-evaluation** is the basis for educational offerings in the subsequent year in order to **enhance board capabilities**. This process led to creating a Board Quality Committee in 2009 to ensure that quality and patient safety efforts were prioritized, and in 2012, the BOT recognized the need to receive training in quality and requested an annual update on national quality and patient safety trends. In 2016, based on board member feedback, a budget line item was added for board education. In 2020, the BOT/BOD self-evaluation identified an opportunity for improvement in ensuring that board members were made aware of significant care-related issues, so that they could proactively address any perception of **adverse impacts** of services. In 2022, the BOT supported the decision to implement the IDEALS framework and the Quality Committee now receives monthly reports from SQPIC, including a specific review of **progress on strategic objectives and action plans**. Also beginning in 2022, board members were oriented to the culture of safety and the concept of Just Culture, and information about specific incidents as well as any patterns or trends were added to the information the board reviews monthly.

1.2a(3) The BOT and BODs **review organizational performance** and progress on strategic objectives, goals, and action plans on a quarterly basis in their respective review venues [4.1-2]. Previously, boards were provided with data and reports during the meetings, aligned with the four areas of excellence in the strategic plan: Customer-focus (including outcomes and satisfaction), Workforce-focus, Finance-focus, and Process-focus [2.2-2]. When meetings became virtual due to COVID, reports were prepared and sent to boards at least one week prior to the board meeting for review – enabling meeting time to be spent in discussion of performance measures, particularly those that are not achieving the set goals. This process was continued when in-person meetings resumed, as it was a better use of board time and expertise. The boards review both "change-the-business" (CTB) and "run-the-business (RTB) measures [4.1a(1)].

1.2b Legal and Ethical Behavior

1.2b(1) CRHS addresses current and anticipated future, **legal**, **regulatory**, and **community** concerns with health care services and operations through multiple methods. The CRHS corporate office provides direction and support for legal, regulatory, and accreditation compliance. Each business unit has a compliance officer and an **ethics** committee with oversight for both business and healthcare concerns. The president and CEO and EL/SLs are actively involved at the regional, state, and national level as members of hospital association committees, accountable care collaboratives, health plan associations, and physician practice and advisory groups, in addition to their involvement in local community groups. These activities ensure that CRHS is well-informed and can **anticipate** future legal, regulatory issues and community concerns with health care services and operations. When issues are identified or concerns are raised, CRHS forms a taskforce with representation of key stakeholders to gather information, evaluate issues and risks, and identify a set of solutions from which leadership selects the best option.

CRHS includes key stakeholders in the planning and design of any new and/or expanded service to identify **potential public concerns** and **proactively** address any concerns that arise. Consistent with the COS and a high-reliability preoccupation with failure, CRHS seeks to anticipate potential risks related to its services. CRHS uses failure mode effects and analysis (FMEA) [6.1a(2)] to anticipate what could go wrong and to identify the failure points, the likelihood of occurrence, and the significance of each. This proactive approach allows CRHS to the determine what design changes are needed to avert or mitigate potential risks. During the 2022 transition to using ISO standards, the hazard vulnerability analysis (HVA) process [6.2-2] was formalized, and now includes seven plans [6.2c], in addition to the Information Security plan:

1. Life Safety Management
2. Safety Management
3. Security Management
4. Hazardous Material (Hazmat) Management
5. Emergency Management
6. Medical Equipment Management
7. Utility Management

Key compliance processes are managed through the CRHS Corporate Compliance Program (CCP), which includes:

- ✓ Annual risk assessment which informs the compliance plan, audit plan, monitoring activities, and training and education requirements
- ✓ Annual WF compliance training and education
- ✓ Compliance complaint hotline managed by the corporate Risk Management and Compliance Officer
- ✓ Contractual obligations for behaviors of **suppliers**

The scope of the CCP includes all CRHS business units (hospitals, health plan, home health/hospice, and physician practices). Legal, ethics, regulatory, and compliance (LERC)

audit data, as well as validated HIPAA complaints and compliance complaints, are reported to the Corporate Compliance Committee (CCC) and the Audit Committee of the Board. An action plan is required for areas performing below target, or if **breaches** are identified, followed by progress reports to the CCC until satisfactorily resolved. An Annual Report of LERC activities and results is provided to the CCC and Finance and Audit Committee of the BOT. CRHS maintains a Special Investigations Unit as required for health plan compliance. CRHS tracks multiple **measures** that reflect performance within LERC and accreditation processes with cross-functional stakeholders and impacts [1.2-2].

1.2b(2) CRHS leadership **promotes and ensures ethical behavior** in all interactions through multiple systematic approaches. These include:

- ✓ The CESB, applicable to the entire WF, is discussed during onboarding, reviewed and refined as appropriate, and signed annually by each WF member
- ✓ Established policies and procedures provide clear guidance and steps to take should a dilemma arise
- ✓ The CCP includes clear roles, responsibilities, and processes to prevent fraud and abuse
- ✓ Prompt investigation of breaches of standards of behavior and/or practice
- ✓ Quarterly queries of the List of Excluded Individuals and Entities to ensure strong partnerships
- ✓ Ongoing auditing, monitoring, event reporting, and complaint investigation
- ✓ Hotline reporting, which may be used by anyone, including the WF, patients, families, partners, suppliers, and other stakeholders

WF and business operations violations and **breaches** are addressed by the accountable EL. The medical staff president and Medical Executive Committee address any physician-related breaches in alignment with the medical staff rules and approach(es). All breaches are reported to the CCC, where events are analyzed and aggregated to determine the need for process change. Disciplinary action may be taken, as appropriate, and education is provided when the breach was due to a lack of understanding of the correct process, aligned with the Just Culture principles.

1.2c Societal Contributions

1.2c(1) The CRHS commitment to key communities served includes ensuring their representation and participation in community focus groups, and planning for new/ modified services, and establishing the **strategy**. This representation ensures that CRHS considers the key requirements and interests of communities in the selection of strategic goals, design of services, and implementation of action plans, all of which are integrated into **daily operations**. Through measures of effectiveness, feedback received through VOC/listening posts, and application of IDEALS, CRHS evaluates and determines the need for modification or course correction.

In addition, CRHS collaborates with local and regional community organizations, such as local schools, municipalities, Community Action, and other service organizations, to support and strengthen social and economic systems [1.2c[2]. It also partners with the City of Lexington to protect and improve the **environment** through "Live Green Lexington." Part of that commitment is to implement or improve an environmentally conscious practice each year. CRHS facilities have adopted energy efficiency methods since 2016, converting to LED lighting. In 2017, drinking fountains were replaced with filtered water bottle refilling stations and plastic bottles were eliminated from the cafeterias and catering services. In 2018, it began purchasing products made from recycled materials, whenever possible. In 2019, cafeterias began composting kitchen and food waste. In 2020–2021, new methods were paused due to the pandemic. The use of recyclables increased by 15% in 2022 [7.4-8].

Legal	Contract Review [all]	Required elements documented	100%	AOS
	Compliance Hotline [all]	Validated hotline calls	0	7.4-7
	Informed Consent [H, OP, MO, PA]	Violation	0	AOS
Ethics	Behavioral Standards [all]	Validated complaints/violations	0	7.4-7
	Conflict of Interest [EL, SL, BOT, AB]	Violation	0	7.4-7
	Patient Rights [all]	Violation of patient rights, privacy, confidentiality	0	7.4-7
	HIPAA Privacy and Security [all]	HIPAA Privacy and Security Violations	0	7.4-7
Regulatory - Compliance	Compliance: Coding Audit [all]	Coding Accuracy	95%	7.4-4a
	Compliance: Billing Audit [all]	Billing Discrepancy	95%	7.4-4c
	Compliance: Training [all]	Annual Compliance Training: Percent of WF	100%	7.4-7
	Environmental Safety [all]	OSHA Reporting Compliance	100%	AOS
	CMS Hospice Compliance	Hospice Eligibility & Documentation	100%	AOS
	Credentialing [all]	License, education, training verification	100%	AOS
	Sanction Screening [all]	Employees, physicians, partners, suppliers	None	AOS
	Vendor Audit [all]	Compliance obligations met	100%	AOS
Financial	External Audit [all]	Material findings, non-compliance	Unqualified	7.4a(2)
	CMS HAC [H]	Hospital Acquired Conditions (HAC) Penalty	None	AOS
	CMS Readmissions [H]	Readmissions Penalty	None	AOS
Accreditation	Blood Bank Accreditation	Accreditation (every 3 years)	Accreditation	7.4a(3)
	Clinical Lab Accreditation	Accreditation (every 3 years)	Accreditation	7.4a(3)
	Stroke Certification	Recertification (every 3 years)	Certification	7.4a(3)
	Orthopedic Certification	Recertification (every 3 years)	Certification	7.4a(3)
	Hospital Accreditation	Accreditation (every 3 years)	Accreditation	7.4a(3)
	Trauma Certification	Accreditation (every 3 years)	Certification	7.4a(3)
	Imaging Services	Accreditation – American College of Radiology	Accreditation	7.4a(3)
Surpassing regulatory and accreditation requirements		CMS 5-star, many Centers of Excellence, LeapCore Safety Grade A, Magnet Status, CHDMG Most Wired, Wooland Health Top 100, KY Best Place to Work, LEED/Practice Greenhealth, OSHA Voluntary Protection Program, and ISO 9001:2015 (goal for 2024)		7.4-6
MS=Medical Staff issues are addressed by Medical Staff governance and/or the appropriate Board H = Hospitals, OP=Outpatient, MO=Medical Offices, PA=Post-Acute, HI=Health Insurance				

Figure 1.2-2 Legal, Ethical, Regulatory, Compliance, and Accreditation / Certification Measures

CRHS recognized a greater opportunity to contribute to not only the health of the community, but also the s**ocial** well-being, education, **economy**, and general quality of life for its community by partnering with others in the community [P.1-4] to address these issues through Communities of Excellence (COE), based on the Baldrige framework. Serving as a backbone organization, the president and CEO named the VP of the ACO and Population Health to lead this effort for CRHS in 2019. Other key leaders in the community were invited to serve as part of the Community Excellence Group (CEG). To date, the CEG has developed its Community Strategy and Strategic Objectives and is establishing work groups to address the identified community priorities of "Live Green Lexington," health disparities in socio-economically disadvantaged areas, and community revitalization through access to health care, education, housing, and jobs. The pandemic underscored the disparities created by the lack of internet access in the Appalachia region served by CRHS. CRHS and the CEG are working together to support the Kentucky Broadband Initiative to close this "digital divide."

1.2c(2) Triennial Community Health Needs Assessment (CHNA) findings are used to identify unmet health and social needs within the community to **actively support and strengthen key communities.** Past CHNA results led to the launch of trauma services, the expansion of urgent care centers, and the mobile health clinic. CRHS has continued to provide behavioral health services and substance abuse treatment, while other hospitals have closed these services due to the regulatory burden and poor ROI. In addition to ongoing collaboration with community stakeholders as CRHS improves and grows its health care services, all EL/SLs are required to serve community groups and organizations – including as volunteers and on advisory committees or boards. Participating not only serves as a visible CRHS presence but also fosters an enhanced level of engagement by EL/SLs who often advocate on behalf of the communities served. In 2022, as activities resumed, the expectation was formalized to serve 5 hours per month. [See also 3.2]

Key communities are **identified** as those in which services are based – roughly a 50-mile radius around Lexington. To promote and build community health, CRHS offers a quarterly community health fair, the location of which is rotated and staffed by the hospitals, urgent care centers, and ambulatory sites within the community. The mobile clinic supports the health fairs, providing free health screening (blood pressure and diabetic screening), and CRHS partners with the local department of public health to provide free childhood immunizations, influenza immunizations during flu season, and COVID vaccinations and boosters. CRHS promotes healthy lifestyle choices, wellness, and nutrition via the website and newsletters which are available in waiting areas.

In recent years, CRHS has embarked on several initiatives to support its communities in new ways, which also further benefit the economic and social systems. In 2018, it began offering grants to encourage the WF to live near Copansburg Medical Center-Lexington (CMCL) to assist employees and support community revitalization. In 2019, CRHS and other organizations and businesses within the key communities came together to join the COE, which is helping CRHS and other members to recognize that its community is a complex ecosystem that requires a network of partnerships and new models to address community needs. CRHS is committed to leading and supporting these efforts. In **determining areas for organizational involvement**, priority is given to initiatives which align with the mission and vision of CRHS. Examples include the purchase, renovation, and re-opening of the closed hospitals in Carlisle and Danville as micro-hospitals to keep care in the community, and a significant focus on reduction of opioid use in the hospitals and in the community.

Category 2: Strategy

In the LS [1.1-1], Strategy is the "start point" for building the Baldrige Framework into the organization. The clear, unwavering focus on the MVV creates organizational alignment, and a culture based on a clear sense of purpose – CRHS cares about "what's right," not "who's right."

2.1 Strategy Development

2.1a Strategy Development Process

2.1a(1) The CRHS **Strategic planning process** (SPP) [2.1-1] begins annually in August. The **key participants** include the corporate ELT, business unit SLTs, and board members. Prior to 2017, strategic planning was a triennial event.

Identify
1. Stakeholders / Requirements & Expectations
2. Status of current plans
Design
3. Collect & analyze data & information
4. Identify strategic opportunities
5. Review / refine strategy foundational elements
Execute
6. Review / refine objectives, goals, & measures
7. Obtain BOT approval and schedule funding
8. Develop / deploy SMARTER business unit and action plans
Analyze
9. Measure / monitor progress / performance
10. Monitor for shifts
Learn
11. Evaluate effectiveness of planning process
12. Revise SPP / SPS as appropriate
Sustain
13. Modify plans as appropriate
14. Reward – Recognize – Hold accountable

Figure 2.1-1 Strategic Planning Process (SPP)

During the evaluation of the SPP, the ELT and SLTs decided to change the planning horizons and "refresh" the strategic plan annually, focusing on steps 2, 4, 6, 7, 9, 10, and 13 with goals for the **short-term horizon** of one year and then conduct full long-term planning (all activities) every three years for the **long-term (3 year) horizon**. Since 2019, CRHS also projects ultra-long-term (five-to ten-year) horizons specific to the IT and master facilities plans during the three-year cycle. Analysis of the success of those plans informed the need to begin planning for the highly resource-intensive aspects of CRHS further in advance to ensure that sufficient funds and other resources are available.

The one-year plan refresh enhances CRHS's **agility** as circumstances change, affords greater **resilience**, and makes resource allocation decisions aligned to the annual personnel and operations budgets.

Like the strategic plan, the capital budget is a three-year projection that is refreshed annually. The process engages senior leaders and the board in the formulation of the plan, while gathering inputs systematically to hear the "voice" of a much larger group of stakeholders, including customers, payors, suppliers, competitors, the community, and the WF.

The SPP addresses the **potential needs for change** through a formal environmental scan and review of data during step 3 (Design phase) of the SPP, following steps 1 and 2 which focus on determining and understanding key stakeholder requirements and expectations, the external environment, and current relative performance.

Step 1 includes the collection and analysis of qualitative and quantitative information from key stakeholders. Step 2 evaluates current performance levels and the progress on current action plans. Step 3 looks at the operating environment using a PESTLE+W format to evaluate political, economic, social, technological, legal, environmental, and WF considerations. The CHNA, required every three years, also provides a robust analysis of the current status and needs of the region served. The timing of the CHNA was shifted in 2018 to align with, and provide input to, the full SPP, rather than being timed with the SPP refresh. This drove the strategic decision to focus on the health of the community, rather than remaining focused only on those who use CRHS services. In 2021, the CHNA was integrated with the COE assessment to provide a more holistic approach to address health disparities and enhance community revitalization.

Steps 4–6 of the SPP are accomplished at a facilitated off-site retreat, held each September. **Prioritization** of change initiatives is based on alignment with and support of the MVV, as well as projections of resource needs of each initiative and expected availability of resources, including funding, WF time, space, equipment, etc. The tight integration of plans – from the top-level system plan, down through the plans for each business unit, service line, and department, to the development plans for each individual – enables a clear "line of sight" to keep plans integrated when a change needs to occur, promoting organizational agility and resilience. For example, the change to enable telehealth visits during the height of the COVID-19 pandemic has been integrated with initiatives to expand outreach into the community, particularly the more rural and socioeconomic-challenged portions of the region. Planning to use telehealth as a permanent tool enabled CRHS to "bounce forward" from the pandemic to help fulfill the mission to "improve the health of all citizens in the service area." As part of COE participation, CRHS has partnered with the Kentucky Broadband Initiative to expand Internet access and build a stronger digital infrastructure in urban and rural communities across the commonwealth [1.2c(1)].

Following the September retreat, BOT initial approval and funding is planned in step 7, and during step 8 of the SPP, the draft objectives and goals are provided to the leaders of each business unit, who then hold their own retreats, using the same facilitator for continuity and communication. At these retreats, the business units each develop or refine plans that align with and support the system-wide plan. After consensus is achieved regarding the integrated draft plans, the action planning phase begins. Action plans are highly specific regarding timelines, resource needs, and measurable milestones and targets for activities as well as performance. A key change in 2021-2022 was an intentional focus on *key intended outcomes* (KIO) – after determining "why" the resources should be committed, it is easier to decide how success should be measured. A "side effect" of this process step has also been to stimulate innovation [2.2a(6)].

2.1a(2) Relevant data are **collected and analyzed** through the SPP steps 1–3 [2.1a(1)]. Analysis includes trending, projections, and comparisons with goals and competitor performance. This model helps to ensure that **potential changes** and disruptions are identified, particularly in **technology**, **innovations**, **regulations**, and other aspects of the **external environment** that are likely to impact health care services and operations, including the HVAs in 1.2b(1).

The environmental scan previously was based on gathering data and brainstorming. In 2019, CRHS began to ask board members and senior leaders to systematically reach out to their social groups, such as churches, sporting groups, scouting, etc., as informal focus groups to better understand the needs of the community and position the board members as "ambassadors" of CRHS. When the plan is completed, it is shared and discussed with the same social groups. Even during the pandemic, most board members were able to engage with their groups virtually, and specifically focused on community needs – for physical health and emotional well-being.

A key element of CRHS's process evaluation and improvement is achieving the appropriate **balance** between converting collected data into usable information through analysis, without introducing bias through the filtering of data and information. In 2020, when the planning process was conducted remotely due to COVID, all data were presented electronically. This new method of data presentation enabled "drill down" to multiple levels and layers of data, as well as a more robust segmented analysis through embedded hyperlinks, and the process was retained as an improvement.

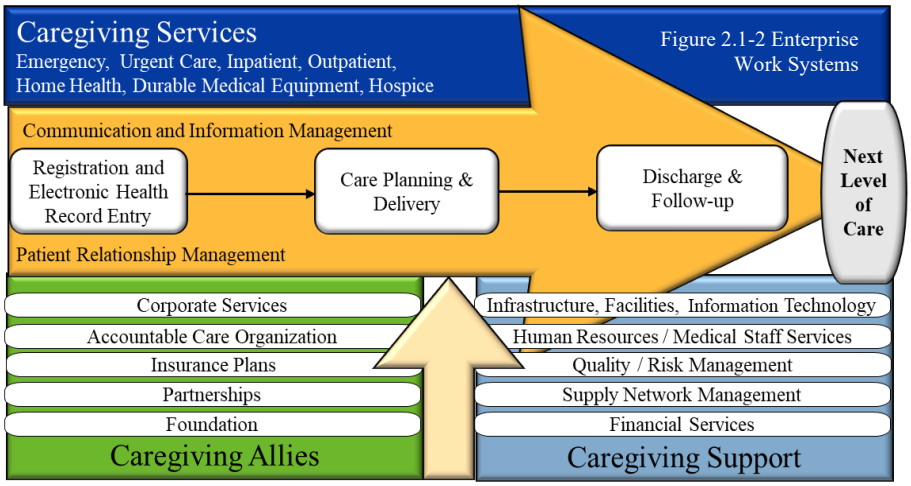
Key strategic **challenges and advantages** are determined through a consensus process during step 5. Since 2018, the planning team has used an expert planning facilitator during the SPP retreat to engage participants in "courageous conversations" that get below the surface and identify benefits and pressures that exert a decisive influence on success. The robust environmental scan and use of a facilitator also help to identify **potential blind spots** in the planning process and information.

The **ability to execute** the strategic plan is managed through integration of the APP [2.2-1] (steps 4-5) with the budgeting process [2.2a(3)]. The timing of the SPP was shifted in 2013 to draft the strategic plan, business unit plans, and action plans by mid-October, just prior to the annual budget cycle kick-off in November, with approval at the December board meetings.

2.1a(3) The SPP **stimulates and incorporates innovation** and **identifies strategic opportunities** through systematic review of BARs from all sectors and the environmental scan process [2.1-1 step 3]. Discussion of processes by the Category teams during the review of current award recipients and after attending Quest for Excellence® stimulates ideas for innovation. Three years ago, benchmarking with an award recipient led to the creation of a "Shark Tank" program [4.2c] & [7-5-19]. Throughout the year, members of the WF are encouraged to submit poster presentations to the team of Category champions. Those opportunities that represent the best cost-benefit potential are presented to "the sharks." The

innovative ideas and strategic opportunities are prioritized using a matrix, including criteria of resource requirements, anticipated benefits, and ability to execute. Items decided to be "above the cut" are considered to be **intelligent risks** and selected for implementation and included in the formal action planning process (APP). The person or team that generated the idea receives a cash prize. Those that fall "below the cut" on the matrix are held in the pipeline for the future.

The current **strategic opportunities** [P.2-1] were amplified in the SPP cycle held during the COVID pandemic. The environmental scan revealed disparities in Internet accessibility, particularly in rural areas. This created issues during the pandemic when people were expected to participate in work and education activities and receive health care services through remote access.



2.1a(4) In both **strategy development** and daily operations, decisions about which key processes will be **accomplished internally,** and which will be **outsourced** to external suppliers, partners, and collaborators, are made by the SLT and grounded in the MVV, with a focus on providing the most efficient and effective care for community members. CRHS leadership firmly believes that "what is best for the community will be best for CRHS" – in the long-term, even if not in the short-term. For example, in 2017–2018, a major investment was made to enter the insurance market by offering a Medicare Advantage Program (MAP) to provide better health services to the community. In 2019, the program was expanded to offer plans to the commercial market.

Capacity and Capability (C&C), including **core competencies** – of CRHS, suppliers, partners, and collaborators – are the key factors used to decide whether to outsource processes. The key intended outcome is to close gaps in high-quality services offered to the community. When a gap is identified, a cost-benefit analysis is done and presented during the SPP retreat. If the team determines that the new initiative represents an intelligent risk, further due diligence is conducted, and then a business plan and associated action plans are developed. Plans address needed **future** core competencies and work systems such as the MAP insurance. If the new initiative requires expansion of C&C, additional personnel may be hired and/or education provided to current personnel. Should changes not fit within the current work systems [2.1-2] new work systems are developed [6.1a & b] to coordinate internal work processes and external resources.

2.1b Strategic Objectives

2.1b(1) Key **strategic objectives**, along with their most important related **goals**, example **action plans**, and **timetables**, are shown in [2.2-2]. Remaining goals, action plans, and timetables are AOS. Key **changes** planned in health care services, customers, market, and operations include further outreach to impact community health, including tele-health services, use of the mobile medical unit, and screening/ education events. There are no key changes planned for supplier and partner networks.

2.1b(2) Strategic objectives **balance** varying and competing organizational and stakeholder needs primarily through the budgeting process in step 4 of the APP [2.2-1]. In 2018, based on advice from the SPP facilitator, CRHS adopted a "top-down/ bottom-up" approach to strategic planning and action planning (2.2a[2]). Prior to finalizing the strategic plan, a discussion is held with the board and each business unit to achieve consensus that all **strategic challenges** have been addressed, and that the plan sufficiently leverages **core competencies** and **strategic advantages** and gives due consideration to strategic opportunities. The board and leadership team also engage in discussion to ensure that the plan **balances the needs** of all key stakeholders.

The **balance of short-and long-term planning horizons** is primarily addressed through the three budgets: personnel, operations, and capital. The Copansburg Foundation assists in funding many of the long-term horizon items, using a capital campaign process for major initiatives. Additionally, the capital budget includes investment accounts that are grown for many years in anticipation of funding major projects from the long-or ultra-long-term plans. Opening the micro-hospitals in Carlisle and Danville is an example of a strategic opportunity that required capital funds within a short-term planning horizon that was brought to fruition in order to close gaps in care for the community.

Step 8 of the SPP [2.1-1] and APP [2.2-1] Steps 7–13 begin after the budget is finalized and continue until the planning cycle begins for the following year. These *execute, analyze, and learn* phases of strategic planning and action planning integrate with the measurement system [Category 4] and innovation/ improvement systems [Category 6] to provide a solid foundation in the LS [1.1-1]. The *learn and sustain* phases of the SPP and APP identify **needed changes** to processes and systems – including the SPS and APS – based on the results being achieved.

There are no **key changes** identified for the current planning horizon. CRHS leadership determined that, as the pandemic transitions to endemic status, the best course of action is to create some sense of normalcy, recovery, and stability. The focus is on continuing to "do what we do, even better!"

2.2 Strategy Implementation

Action plans are drafted in step 8 of the SPP, in September and October – just prior to the beginning of the budget cycle. Although a single step in the SPP, the APP is a multi-stage / multi-step system [2.2-1] with key short-and long-term **action plans** related to strategic objectives [2.2-2].

2.2a Action Plan Development and Deployment

2.2a(1) Action plans are **developed** in a series of facilitated workshops, with the KIO being an integrated set of detailed plans documented on a standard template (AOS). This template designates the specific owner of the plan, the alignment support to strategic objective(s) and goal(s), a plan of actions and milestones (POAM), resource requirements, and measures of success.

Identify
1. Key Intended Outcome(s) of plan
2. Plan ownership
3. Stakeholders/Requirements & Expectations
Design
4. SMARTER* plan and needed resources
5. Specific Plan of Actions and Milestones
6. Measures of success
Execute
7. Implement plan
Analyze
8. Measure, review, & analyze progress and performance improvement
Learn
9. Evaluate effectiveness of each plan
10. Revise AP as appropriate
11. Evaluate effectiveness of APP / APS
Sustain
12. Reinforce progress of plans
13. Share best practices
* Specific, Measurable, Aligned, Realistic, Time-bound, Evaluated, Reviewed

Figure 2.2-1 Action Planning Process (APP)

A 2018 refinement was to convert SMART into SMARTER – including how the plan will be *evaluated* for progress and success, and in which management venue(s) the progress will be *reviewed*. An additional refinement in 2020 was to require action plan owners to identify stakeholders who may be impacted by the success of a plan, especially if the impact could be negative. For example, the shifting of services from inpatient to outpatient and decreasing length of stay may cause some job changes for the WF. This identification step enables the action plan owner to engage these key stakeholders early so that plans can be embraced, rather than resisted. In 2022, identification of the KIO was added to the template.

2.2a(2) Although each action plan has a single owner to promote accountability, the creation, implementation, and **deployment** of plans [2.1-1 step 8] is usually accomplished by groups. Occasionally, existing teams or committees will implement a plan. On occasions when substantial resources are required, or a plan is deemed to be strategically significant, the plans are designated as a "Strategic Action Plan" and will have an EL/SL member as the plan owner. This process will usually have a specific team that includes senior staff, other WF members, and key **suppliers, partners, and collaborators,** as appropriate. There is an expectation that each department, business unit, and service line will be working on at least one action plan, but no more than five. This helps engage the entire WF in propelling the CRHS toward its vision, while not becoming overextended in change.

The addition of the *evaluated* and *reviewed* elements for action planning ensures that key outcomes of those action plans are **sustained**. Action plans are integrated with the scorecard and dashboard systems (Category 4) and improvement system (Category 6). Typically, once action plans are fully implemented and "completed," tracking of measures is gradually tapered in frequency and/or sample size until the activities associated with the plan become a habit—and part of "the Copansburg Way." As long as tracking demonstrates sustainability, investment in ongoing monitoring is gradually shifted to other priorities.

2.2a(3) CRHS ensures that **financial and other resources** support the achievement of action plans through integration of the plans with the budgeting process. The action plan template includes requirements for all types of resources, including funds, staff time, space, and equipment, and includes analysis of the costs and benefits to calculate the overall financial impact of each plan. The budget process allocates these resources to support the plans. If insufficient resources are available, plans are negotiated – and occasionally may be scaled back, slowed down, or tabled for future consideration. Each business unit administrator and board have the overarching perspective of all plans within their business unit to allocate resources to provide appropriate balance, with the corporate ELT and board having oversight of all plans.

The structure of the action plan template clearly identifies costs and **risks** associated with the plans, including any potential negative impact of the plan being successfully achieved, so that risks can be anticipated and mitigated. Progress on the plan and the associated performance measures are evaluated in the specified venue, no less than quarterly, to ensure **viability** and progress – from both financial and operational perspectives. The POAM also includes when support department resources will be required to avoid multiple action plans simultaneously requiring support from IT, HR, facilities, etc., exceeding their capacity. This aids in action plan achievement while **meeting current obligations**.

2.2a(4) **Workforce plans** to support strategic objectives and action plans typically revolve around capacity and/or capability. These needs are managed through the "resources needed" section of the action plan template. For example, the requirement for commercial driver's licensed (CDL) personnel was identified as a capability need in the action plan to purchase the mobile medical unit. The initial plan was to hire "drivers," but CRHS discovered that some nursing personnel had maintained CDL from prior careers and were interested in transitioning to a role to provide care in the mobile unit. Over time, CRHS has achieved the status where everyone who staffs the mobile unit is CDL licensed, providing maximum flexibility in scheduling and enabling the mobile unit to operate full time. This was key to achieving COVID vaccination success in the region [7.1-15]. Current plans do not impact capability or capacity, other than recruitment and support to address SC#1 – Workforce shortages and burnout.

2.2a(5) **Key measures** [2.2-2], based on KIO are used to **track** the achievement and effectiveness of action plans. The **action plan measurement** reinforces organizational alignment in two primary approaches: First, based on a non-health care BAR, each action plan includes determining the "key intended outcome" prior to identifying the measures and metrics that will be tracked. Second, the action plan numbering system underscores the alignment of the plan(s) that support strategic objectives and goals.

The supporting action plans are regarded as "leading indicators" of accomplishing the strategic objectives and meeting the goals. If action plan timing goals and performance targets are being met, but the progress toward accomplishing the strategic objective is not on glide slope, this is regarded as a trigger to evaluate the need for analysis and **modification**, or possibly the **creation** of new action plans.

Action plan and strategic plan measures are designated as "change-the-business" measures, and are tracked on the appropriate scorecards (department, business unit, and/or corporate levels), along with "run-the-business" measures – includes analysis of the costs and benefits to calculate the overall financial impact of each plan.

2.2a(6) Performance **projections** [2.2-2] are included in the POAM on the action plan template as targets across the **short- and longer-term** planning horizons for strategic objectives and goals. Projections are calculated based on the trajectory of the historic trend for both CRHS and comparison/competitor organizations. If projections uncover **gaps** where performance is lagging, a cost-benefit analysis is conducted to prioritize closing the gap through innovation. If closing the gap is an intelligent risk and wise use of resources, a strategic action

Objective	Goals/Action Plans	Key Performance Measures	Business Unit	ST/LT-Projection	SC/SA/SO	Results
Achieve top decile in Customer-focused excellence	Increase outreach to disadvantaged communities	Impact on community health	All, except Hospice	Multiple Measures	ABD /ACD / BC	7.4-9 + AOS
	Enhance culturally competent care – Diversity/Equity/Inclusion	Reputation score Consumer Preference	All	4.5 / 4.5 50.3% / 50.8%	ABD /ABCD / ABC	7.2-22 7.5-16
	Improve community health	% follow-up after screening Cancer Stage I at diagnosis	All, except Hospice	Multiple Measures 35% / 37%	ABCD /ABCD / ABC	AOS 7.4-9b
	Top Decile satisfaction	Willingness to Recommend Net Promoter score	All	Multiple Measures 62 / 63	AD /ABCD / BC	7.2a(2) 7.2-19
	Top Decile healthcare outcomes	CMS Core Measures HEDIS measures	All, except Hospice	Multiple Measures	BD /ABCD / ABC	7.1a(1)
Achieve top decile in Workforce-focused excellence	Achieve top Decile WF engagement	Engagement Score (segmented)	All	Multiple Measures	A /C / ABC	7.3a(3)
	Re-establish/grow volunteer presence	% of Total WF Hours per volunteer (weekly avg)	1	4.7% / 5.2% 4 / 4.5	A /C / ABC	7.3-8 7.3-9
	Recruit physicians	Primary care panel size Patients per Hospitalist	1,2,3,5	2500 / 2200 17 / 15	A /C / ABC	AOS
	Build WF resilience	WF wellness score Physician burnout	All	195 / 220 31% / 29%	D / A / A	AOS
	Decrease WF vacancies	WF Retention Regrettable losses Time to fill vacancies	All	>75%<95% 6.3% / < 5% Varies	A /C	7.3-19 AOS 7.3-7
	Balance WF profile with that of the community (DEI)	Diversity variance	All	4-10% / <5%	ABD / BC	7.3-6
Achieve top decile in Financial excellence	Achieve operating margin of 5%	Operating Margin	All	4.4% / 5.2%	BC /ACD / A	7.5-2
	Increase community support	Other Community Benefit	All	$525K / $550K	D /AD / ABC	7.4-10
	Improve cash position	Days Cash on Hand	All	260 / 270 days	BC /AC / A	7.5-4
Achieve top decile in Process excellence	Enhance access (telehealth and available appointments)	% within 15 days (Primary care) % within 30 days (Specialist care)	2,3	47% / 57% 45% / 52%	CD /ABC / ABC	AOS
	Implement cybersecurity framework	External Score	All	250 / 600	CD /ABD / B	AOS
	Enhance communication	% Very Satisfied (WF) % Very Satisfied (Patients)	All	4.4-4.6 / >4.5 89% / 91%	ACD /ABCD / ABC	7.4-1a AOS

Strategic Advantages:

A. System scale helps create a cost advantage over competitors.
B. Integrated electronic medical record for all entities in the system makes for a convenient experience for healthcare providers and patients and supports telehealth.
C. Market share leadership allows for smoother development and deployment of new business lines.
D. Resilience, as displayed in our organization's incredible response to the pandemic of 2020-21.

Strategic Challenges:

A. WF burnout and shortages in nursing, technologists, and some physician specialties inhibit growth
B. National and state healthcare payment changes threaten revenue and rural access.
C. Increasing costs in pharmaceuticals, cybersecurity, and emergency preparedness threaten cost advantage.
D. Difficulty in reducing health disparities in socioeconomically disadvantaged urban and rural communities.

Strategic Opportunities:

A. Embedding resilience in operations.
B. Increasing connectivity in rural and urban socioeconomically disadvantaged areas.
C. Increase health care access throughout the service area.

Applicable Business Units:

1. Hospitals (including acute care, critical access, and emergency services)
2. Outpatient diagnostics and treatment (including joint ventures, ambulatory surgery, rehab services, urgent care centers, and mobile clinic)
3. Medical offices (including employed physicians and medical staff)
4. Post-acute care (including Home health, Hospice, and Durable medical equipment)
5. Health insurance plans (including accountable care organization)

Figure 2.2-2 Excerpt of Strategic Objectives, Goals, Action Plans, and Results

plan may be created [2.2a(2)], SQPIC may charter an improvement TRAC, or a "new DEAL" project may be launched. The vision always compels reaching for top-decile performance, which typically places CRHS above local competitors. When CRHS supports staff participation in conferences, participants are required to identify the "top-three" learnings to share upon their return. This has helped close many gaps.

2.2b Action Plan Modification

Once approved, the action plan owner and the resource provider (SL Champion or head of the system or business unit) sign the plan. Signed plans are considered covenantal agreements – the KIOs will be accomplished in exchange for the identified resources being provided, and resources are provided in exchange for accomplishing the KIOs. When the POAM or targets are not achieved, the plan must be **evaluated and modified** as appropriate. Tracking performance [2.2a(5)] enables CRHS to recognize and respond when plan modification is needed. The adoption of the ISO 9001:2015 standards has also enhanced the proactive / risk-based mindset of leadership and the WF.

When circumstances change, either externally or internally, that **require rapid execution** of new plans, a mid-cycle action plan is created using the same processes and is approved and signed rather than waiting until the next planning cycle. A contingency fund is included in the budget process, should resource requirements exceed the approved budget.

Category 3: Customers

In the LS [1.1-1], Customers are the "peak of the pyramid" – the reason for the existence of the organization. Although "customers" include the community overall and the patient families [P.1-3], the primary focus for development and deployment is on the patients.

3.1 Customer Expectations

3.1a Listening to Patients and Other Customers

Satisfying customer requirements and expectations is critical to success. The Customer Relationship System (CRS) [3.1-1] and information gathered from various listening methods [3.1-2] provide the actionable information for corrective actions – both service recovery and systemic improvements. System-wide opportunities are referred to the SQPIC for review and decision to assign or not assign a project to the TRAC. All types of change go through the IDEALS process. IDEALS is also used to drive change within the CRS itself through the system review completed as an input into the strategic plan.

3.1a(1) CRHS uses various Voice-of-the-Customer methods [3.1-2] to **listen to, interact with, and observe** patients and other customers to obtain actionable information. These listening methods gather data from patients and families, prior to service (e.g., making appointments, completing paperwork at arrival, waiting for service), during service (e.g., in-patient, emergency room, outpatient), and post-service (e.g., follow-up, future care) in order to evaluate the entire **experience of care**. CRHS has intentionally created processes to understand and respond to the **service** and **support** needs of families as well as patients and the community, such as the CHNA.

Identify
1. Customer groups / segments
2. Requirements & expectations of each
Design
3. Outreach process to each group
4. Communication method(s) to each group
5. Processes to enable customers to seek services
6. Training for workforce to service excellence
Execute
7. Provide products / services to standard
8. Listen, interact, learn – obtain actionable information
9. Resolve complaints / service recovery
Analyze
10. Track/analyze data & information (patterns & trends)
Learn
11. Evaluate effectiveness
12. Revise processes as appropriate
Sustain
13. Reward – recognize – hold accountable
14. Share best practices

Figure 3.1-1 Customer Relationship System (CRS)

Methods of listening vary depending on the **type of customer** and the **service phase**. For example, waiting areas (such as where families wait while a loved one is in surgery or where a patient waits to see the physician) have electronic "sounding boards." These tablets enable family and patients to write compliments and concerns anonymously. Each day, these comments are reviewed and stored in a database. At the end of each week, data are evaluated, aggregated, and categorized, with results fed into potential waiting-room improvements.

An example of a recent improvement is the addition of a wait-time board. Patients are given a number when they check in, and a display board tells the number being serviced and the expected wait times for others. This helps set expectations for patients and family members. Electronic boards also indicate patient status time in pre-operative, operating room, and post-operative areas.

A new and innovative system to **support** the inpatient experience was launched in 2022. The *Be-well* system uses a wireless keyboard to connect to a large screen TV in each inpatient room. Patients (and families) can watch TV or educational materials, either of interest to them or assigned by the nursing staff. They can also secure message physicians or nurses with questions, requests, or feedback and opt for the question to be answered via the network, or the next time the clinician is in the room with them. Patients also can record their level of pain or other symptoms, either requesting intervention or follow-up after intervention. Information gathered from *Be-well*, including patient under-standing of education, is recorded in the Electronic Health Record (EHR).

CRHS uses data from rounding and a quick daily four-question survey about timeliness, quality, temperature, and taste of meals. Automation of these methods two years ago enabled CRHS to respond **immediately** to individual needs and make systemic improvements to processes across multiple facilities.

Telehealth is an expanding service and a key area of consideration when developing listening methods and improving CRHS's understanding of needs and expectations. During virtual video meetings. these sessions, CRHS physicians and nurses gather data about ease of understanding, clarity of instructions, and other patient and family needs.

CRHS **supports** physician groups that refer patients to its facilities for service, ensuring good communication about services available and follow-up regarding the care provided to patients. Understanding needs and expectations is how CRHS obtains and maintains

business. Data are gathered about the types and numbers of patients being served and to ensure capacity to meet current and future demands. For example, mental health, substance abuse, and obesity populations are expanding, and have specific requirements for safe and effective care, including safety processes, specialized equipment, and staff training to overcome potential bias.

CRHS uses comparative data as the basis for most outreach, transparently providing information to the public about the extensive services, quality of care, low rates of hospital acquired conditions (HAC) such as infections and complications, and high levels of satisfaction in order to **support** decision-making about where to receive care. This has proved successful in attracting and retaining patients across the entire system. The insurance business unit has comparatively high Healthcare Effectiveness Data and Information Set (HEDIS) scores, which is appealing to those seeking wellness and improved health, but who are not currently ill. The Accountable Care Organization (ACO) providers also attempt to conduct "exit interviews" with patients who have not been seen for over 2 years, to understand their non-responsiveness and try to re-engage them in wellness and receiving care from CRHS.

3.1a(2) CRHS uses its multiple listening posts, partnerships [P.1-5], and public data sources to gather actionable information from **potential and competitors' customers**. CRHS gathers various types of data throughout the year, while analyzing some quarterly and all at least annually. The CRS and all listening mechanisms are individually and collectively analyzed annually during the SPP to ensure that the process is optimized regarding a) the questions being asked, b) the populations surveyed (including sample sizes), c) the frequency, and d) demographics collected for segmentation.

CRHS reaches **former customers** through after-service surveys and telephone follow-ups. **Potential customers** are often reached through outreach activities such as the website, Lookbook, consumer surveys, focus groups, community events (fairs and farmer markets), and other venues. While these methods are ongoing, data are aggregated monthly and annually to detect trends and assess performance. In 2019, CRHS contracted with a marketing company to provide targeted advertising within Lookbook and various websites. This increased website unique visitors by 12% [7.2-21] over the previous year and showed significant promise based on the 2020 customer survey where 10% of first-time customers said they heard about CRHS online.

Competitor data are difficult to acquire directly. As a result, much of these data are acquired through reviews of research studies, national health care data, and COE. CAHPS Surveys provide satisfaction data on customers and customers of competitors, as well as comparison data to help identify relative strengths and opportunities. Areas of strength are used in planning outreach efforts.

3.1b Patient and Other Customer Segmentation and Service Offerings

3.1b(1) Customer requirements and expectations and market data are the main drivers in **determining customer groups and market segments**. Each year, customer satisfaction and Consumer Preference Survey data are evaluated to detect shifts in preferences, types of service, and service delivery methods. CRHS's success in identifying new segments and markets is based on a willingness to use data to detect differences in customers and identify segments and special populations. Data are evaluated to make fact-based decisions and facilitate change using IDEALS. For example, over the past three years, there has been a significant shift toward technology use, particularly related to COVID. Heavy Wi-Fi users, a special population within each existing group, prefer electronic communications over face-to-face. This technology shift has helped CRHS to identify an entirely new segment of customers. Similar to the shift from stores to online shopping, a growing number of customers expect services from the comfort of their home. Understanding this new segment and the special populations within it (elderly, home-bound, and

Methods and Comparisons	Patients																					Family						Ins Plans
	In			Out			ED			Mobile	HH			Tele			Hospice			DME			In	Out	ED	HH	Hospice	Mobile	
	B	D	A	B	D	A	B	D	A	D	B	D	A	B	D	A	B	D	A	B	D	A							
Comparisons																													
Kress Daney			X			X			X				X			X						X						
CAHPS			X			X			X	X			X			X		X			X	X				X		X
Methods																													
CHNA	X		X	X		X	X	X		X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	
Social media	X	X	X	X		X	X		X		X	X	X	X		X	X	X		X	X	X	X	X		X	X	X	X
Complaints	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	X	X
PFACs	X		X	X		X	X		X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X	X	
Rounding/Direct																													
Leader		X																					X	X					
Physicians		X			X			X		X	X				X		X			X			X	X					
Nurses	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X		X	X		X	X	X	X	X		
Support staff		X			X			X		X		X						X					X	X	X				
Telephone			X			X			X	X																			X
Be-well		X																					X						
Wait times	X	X	X	X	X	X	X	X	X	X													X	X					
Sounding Board	X			X			X																X	X					
Follow-up			X			X			X	X			X			X							X	X		X	X		
Focus groups			X			X			X				X			X									X	X	X		X
Comm. Fora			X			X			X	X			X			X							X	X	X	X	X		X

B (before), D (during), A (after) the encounter
In (Inpatient), Out (Outpatient), ED (Emergency Department), HH (Home Health), Tele (Telehealth), DME (Durable Medical Equipment), Ins Plans (Insurance)

Figure 3.1-2 Voice of the Customer - Key Patient and Family Listening Methods

busy technology-dependent users) helped CRHS develop and **emphasize** a robust telehealth program that meets key patient, family, and community needs for value, access, and high-quality care, and **pursue** this market segment for growth. In the Eastern area of the CRHS service area, Wi-Fi is not as readily available – and that population does not like to venture far from their homes. Opening the micro-hospitals in Carlisle and Danville, associated with Emergency Department care and primary care physician practices, contributes to their wellness and expedites treatment of basic illnesses and injuries.

3.1b(2) **Determining service offerings** begins with analysis of customer requirements and **expectations**, opportunities in meeting requirements and expectations, and health needs as identified in the CHNA. Products and services meeting or exceeding current needs and expectations are kept/enhanced. Emerging preferences (such as home services through increased use of technology) and dissatisfiers (current preferences that are not being met) present opportunities for new products and services. All potential opportunities are evaluated for alignment with the mission, vision, and CCs, and subsequently, a risk: benefit analysis is conducted. This initial step in IDEALS enables leadership to determine how the opportunity fits within the current product/service mix and if it could be delivered internally or through a partnership or joint venture. If the results of the analysis are favorable, the information and supporting data are forwarded to senior leadership and the board with a recommendation regarding creation of an action plan to pursue the new service.

Market research (services offered by competitors and national comparison data) also provides data that is analyzed as input regarding **adaptation** of services. For example, a competitor created billboards in town displaying their ED wait times. CRHS decided to place estimated wait times for each ED and urgent care center on the website, rather than billboards. Additionally, when a patient signs into an ED or urgent care center, they were given a randomly selected number, and a display board, refreshed every 3 minutes, shows the estimated wait time, with a disclaimer that patients are seen based on the severity of their condition, not the order of arrival. This provides patients and family members with an estimated wait time, reducing stress, and has had a positive impact on the Net Promoter Score [7.2-19 & 20]. The system was subsequently adapted for all waiting rooms.

The innovative *Seekers Program* looks specifically at customers of others and of underserved groups. Through the work of the Seekers Program, CRHS is identifying and bringing in special populations and expanding its service delivery methods, thereby increasing market share, and providing new opportunities.

The holistic nature of CRHS also promotes better understanding of the market to **identify and adapt offerings** to better serve the community. The insurance plans and ACO have access to predictive analytics and actuarial methods to predict population health and move in the direction of Institute for HealthCare Improvement (IHI) *triple aim* of providing high-quality care, with high levels of patient satisfaction, in the most efficient way possible. This knowledge assists CRHS in creating or enhancing offerings that promote health in the community. Although this could create an adverse financial impact for CRHS, since most funding is through surgical care, wellness is a financial gain for the insurance plans, resulting in a net-sum benefit to the system, and clear MVV alignment.

3.2 Customer Engagement

Since 2013, CRHS has had multiple processes in place to build a more patient-focused culture by clearly understanding requirements and expectations and enhance the **patient experience** of care, based on research demonstrating that patient engagement with a primary care provider and an insurance plan enhances their well-being and health.

3.2a Patient and Other Customer Experience

3.2a(1) The Patient Experience Officer (PEO) is the executive champion for building a **patient focused culture**. In-depth training is provided initially to the entire WF, with annual refresher information, to deploy key elements of the systematic approach to **building relationships**, including:

1. Demonstrate caring for the person and their needs
2. Listen to concerns and include patient preferences
3. Explain the issues, treatments, and recommendations in a way that ensures the patient understands
4. Demonstrate teamwork, respect, and confidence in others who are providing care
5. Make the experience as easy and efficient as possible

Feedback from surveys and interactions provides valuable data and information about **requirements and expectations** of patients, families, and the community. Service offerings and staff training are focused on meeting needs and providing a positive experience at any CRHS encounter.

For example, like many health systems, CRHS implemented a *patient navigator* program for oncology patients in 2012, based on studies of the improved outcomes, especially in breast cancer patients. The program was expanded to the transplant and bariatric surgery populations in 2014, cardiac patients in 2015, total joint replacement patients in 2017, all complex orthopedic patients in 2018, and the diabetic, dialysis, and complex wound care patients in 2019. Expansion was paused during COVID but expanded to the mental health / substance abuse patients in 2022. The navigators have had a major impact on raising satisfaction scores, in addition to improving outcomes. Additionally, all patients are encouraged to sign up for a personalized "My Health" Patient Portal account, where health information and test results, provider information, secure communication, prescription information, scheduling, and bill-pay capabilities can be accessed. Providers also access the portal, aiding in care coordination.

CRHS's goal is to **build relationships** by consistently exceeding expectations the first time and every time. In the first communication with a potential customer and every subsequent customer interaction, CRHS personnel are discussing, observing, understanding, and responding to needs. Relationships are built over time through multiple positive interactions and customer awareness, leading to community engagement – with CRHS and with their own health. The consistently exceptional experience, and full deployment of systems and processes across all CRHS facilities and offerings establishes and enhances the CRHS **brand** beyond just logo and color palette recognition.

Method	Phase (Access / Support)	Patient Type					Family *	Ins	Medical Offices Telehealth
		In	Out	ED	Mobile	Home Hospice			
Telephone									
Nurse follow-up	S	X	X	X	X				X
Call in (question or appointment)	A/S	X	X	X	X	X		X	X
Computer									
Website	A/S	X	X	X	X	X	X	X	X
Telehealth	A/S	X	X	X	X				X
Marketing	A	X	X	X	X	X	X	X	X
Patient portal	S	X	X		X	X	X	X	X
Self-scheduling	A/S		X		X				X
Face-to-face									
Facility tours	A	X	X						
Visit	A/S	X	X	X	X	X	X	X	X
Navigators	S	X	X			X	X		
Outreach events	A	X	X	X	X		X		

Figure 3.2-1 Mechanisms for access, information, and support (*with permission")

3.2a(2) **Access** and **support** are basic drivers of satisfaction and engagement. Customer satisfaction drivers are determined through multiple regression analyses of survey results, with specific survey questions correlated with overall satisfaction questions to identify those areas with the highest correlation. This analysis is repeated every two years to identify possible shifts in drivers or shifts in the level of priority among drivers. For the "access" driver, the options available to enable access are identified through focus group interviews and two questions on most of the surveys, asking, "How did you hear about us?" and "How did you obtain the information you needed?" CRHS uses these data (annual analysis) to develop, strengthen, or eliminate access methods throughout the organization.

The result is to add access options/methods [3.2-1] to maximize options and provide all segments of patients and their families (with permission) with the ability to choose the mode that best suits their needs. Patient self-scheduling is the latest enhancement to access. Benchmarking with other service industries in 2019, CRHS engaged a software firm to enable patients to select the type of physician office visit they desire, the location or provider, and find a convenient time slot to book an appointment. The service was expanded to other outpatient services in 2022. All paperwork is also available for completion and submission online, a process that started during COVID to minimize the time people spend in facilities.

The Seekers Program [3.1b(2)] is instrumental in identifying and refining unique **access** needs of specific customer segments. For example, potential insurance customers want to know costs, key services, and if the physicians and facilities they want are covered. CRHS leverages these types of information as key inputs to the "Identify" and "Design" steps in IDEALS, which it uses to translate needs into access options and outreach materials. When working with customer information, PEO often leads cross-functional teams (operations, facilities, care-providers, etc.) through the analysis to ensure that recommendations and solutions are feasible, measured, and effective.

3.2a(3) CRHS has a mature **Complaint/Grievance Management System** [3.2-2] with multiple sources of input, a high-level process flow, quick response (actionable), and periodic analyses (aggregated/evaluated) to identify systemic issues that could be addressed through process improvement or redesign. The process begins when a customer (patient, family member, insurance member, other) has a complaint and makes it known. Step 1 is to understand the issue and either take responsibility to resolve the issue or pass it to the appropriate staff. If the complaint can be fixed in real-time, it is resolved quickly (step 2) and then logged into the Complaint Management System to be tracked. If the issue cannot be satisfactorily resolved quickly, it is then logged into the system and assigned to the appropriate staff for action. Once resolved, the customer is informed, and the issue is closed in the system (step 4). In step 5, complaints are aggregated by the PEO and analyzed monthly in SQPIC to identify potential systemic issues that may be addressed through a TRAC team or action plan. Each year, the Complaint Management System is evaluated by SQPIC for potential improvements.

The Complaint Management System is used throughout all services provided by CRHS and is integrated through a corporate database. CRHS meets or exceeds requirements set by CMS for handling grievances. A single system enables analysis of data by location, complaint Category, etc., for analysis and for assessing the impact of improvements. A key improvement to this system occurred in 2018 when CRHS added the step of documenting complaints that are resolved in real-time. Documentation of these real-time corrective actions has had multiple benefits. CRHS can now aggregate and analyze quick corrective actions. Often, these types of actions can lead to relatively simple, low-cost process improvements. Improvements are then shared across the organization, resulting in fewer complaints [7.2-23], improved performance,

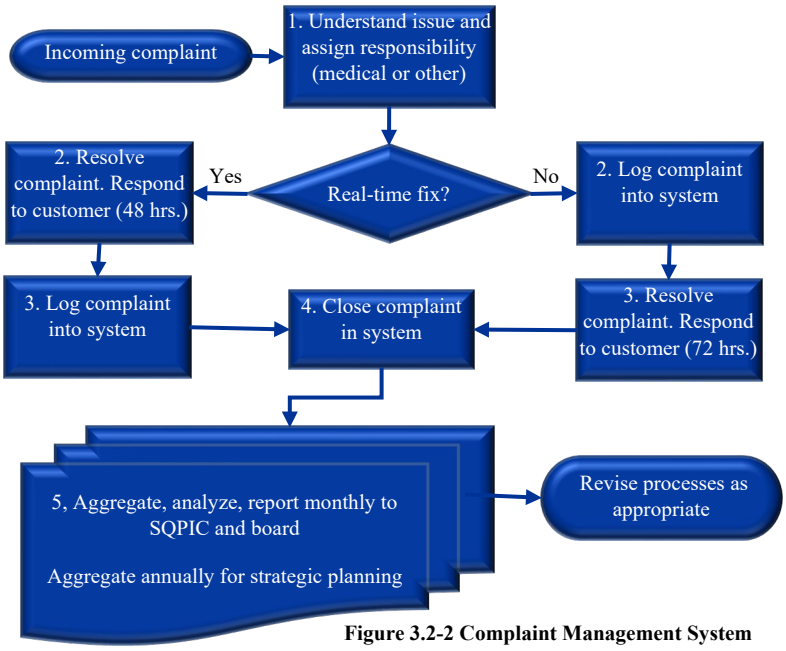


Figure 3.2-2 Complaint Management System

and higher survey scores. Software tracking also ensures that complaints are **resolved promptly and effectively.** Leadership ensures that the customer is **satisfied** by ensuring that a personal follow-up is conducted by the appropriate leader or manager to help ensure service recovery and that the customer has no unresolved issues. These steps help ensure enhanced **confidence,** and improved **satisfaction and engagement**.

The more complex, time-consuming corrective actions are also aggregated and evaluated. These issues and proposed recommendations are forwarded to SLTs for consideration of corrective action plans to ensure that **similar complaints** are avoided.

3.2a(4) Variances in the accessibility of health care services mean that certain groups and locations are less likely to receive appropriate health care and are more likely to have unfavorable health care outcomes. CRHS leadership is sensitive to these variances and has implemented multiple processes to ensure **fair treatment** using the IDEALS framework. Traditional approaches included survey and patient demographics. This provided some information but gave an incomplete picture of the service area. In 2018, the ELT charged the PEO with going beyond simply identifying underserved areas to identifying underserved people and the reasons they were underserved. The PEO led a 12-month study to assess and quantify the extent of this opportunity. The reasons special populations within customer groups were underserved varied, including religion, culture, distrust, location, and work schedules. The PEO provided the CRHS WF with extensive training about social determinants of health and culturally competent care.

In 2019, senior leadership expanded educational outreach activities, which helped to educate some potential customers about health care opportunities and benefits; however, it did not significantly close the gap. In 2020, senior leadership approved the creation of the Seekers Program to research and identify underserviced populations, and to engage, understand, and reduce barriers to minimize the risk of unequal treatment.

Throughout the pandemic, the mobile clinic became much more active [7.4.9a] – with an emphasis on the underserved populations and regions. CRHS was very intentional about publicizing the cleaning process for the mobile clinic, the services offered, and the quality of care. Fair treatment was also added as a question on the satisfaction survey to ensure that the changes in processes had improved the perceptions of fair treatment, in addition to analyzing outcomes and wellness indicators to ensure that disparities were adequately addressed.

3.2b Determination of Patient and Other Customer Satisfaction, Dissatisfaction, and Engagement

Most **satisfaction and engagement** metrics for CRHS's customers are determined through surveys. The number of questions, types of questions, and timing of survey administration vary depending on the customer group. CRHS uses Net Promoter Scores to assess engagement [7.2-19 & 20].

Patient surveys are tracked and aggregated for analysis by each business unit. Surveys are administered on a continuous basis and results can be as often as weekly, most departments and units aggregate and post updated results monthly. A follow-up survey is sent to inpatients and their families approximately two weeks after discharge from any service. Responses are aggregated monthly (for actionable process improvements) and annually (for larger, more complex systemic improvements) through the SQPIC. In 2017, CRHS began offering patients who provided their email addresses with electronic surveys (more convenient for them and less costly for CRHS). This improvement was implemented across all business units in 2018.

Family member engagement is almost as important as patient engagement. Key family requirements are high-quality care, safe care, and service excellence. Surveys are designed to assess these requirements for each of the main service lines. While the basic requirements are constant across different services, such as inpatient or home health, each has unique quality features. Family member surveys [7.2-20] are collected at the point-of-service, using either a self-service kiosk or a paper survey. Comparison information is not available for this group.

Health plan members and patients served in medical offices are also surveyed to ensure that their needs are being met. Health plan surveys are administered in much the same manner as the hospital surveys, but conducted annually, rather than following an episode of care. Medical staff offices use self-service kiosks for patients to provide feedback in a star-rating as well as comments. There is a strong correlation in health plans and medical staff satisfaction. A favorable relationship with independent medical offices often translates into more health plan members and more customers when the need arises. Taken together, these surveys and the Complaint Management System capture critical **satisfaction, dissatisfaction**, and loyalty data.

Engagement is assessed through "willing to recommend" questions on surveys and through event counts. Prior to 2015, CRHS measured engagement through the number of hits on social media, the website, patient portals, and other access points. A Baldrige feedback report identified that these methods may not be strong indicators of engagement. As a result, CRHS began tracking events, which are considered meaningful interactions where the customer is actively engaged (e.g., ask a question, set up an appointment, comment on a service, etc.). As a result, the counts decreased (approximately 30%) [AOS], but CRHS's ability to assess effectiveness and the types of issues customers have has improved significantly. For example, by using this new methodology, CRHS is better able to target times for system updates, providing customers with access when they want it, not when it is convenient for CRHS. This has reduced the number of complaints regarding online systems [AOS], and improved CRHS's ability to respond to inquiries.

CRHS has entered into a data exchange agreement to share some selected, similar types of customer data (wait times, in-service overall satisfaction, and satisfaction with follow-up activities). Specifics about the type and way the supporting services are delivered are not shared; however, this information provides CRHS with information regarding general areas of strength and opportunity.

Category 4: Measurement, Analysis, and Knowledge Management

In the LS [1.1-1], Measurement bridges the space between strategy and improvement, monitoring relative performance and informing decision-making about resource allocation for implementing change and innovation.

4.1 Measurement, Analysis, Review, and Improvement of Organizational Performance

4.1a Performance Measurement

CRHS measures, analyzes, reviews, and improves performance through the Performance Measurement, Analysis, and Review System (PMARS) [4.1-1]. The "main brain" of PMARS is a sophisticated, automated health informatics system – Data Driven Improvement (DDI). This data warehouse provides real-time results for key performance indicators such as length of stay (LOS), patient satisfaction, employee engagement, as well as scorecards posted in all departments in all hospitals. To bolster public confidence in CRHS safety during COVID, automated dashboards are also posted on the website. All business units develop their own dashboards specific to their operations. SLs track overall organizational performance through reviews [4.1b] using both scorecards and graphs.

Identify
1. Determine "change the business" measures of success
2. Determine "run the business" measures to monitor
3. Determine appropriate comparative / benchmark data
4. Determine appropriate grouping / segmentation
Design
5. Establish goals & performance projections & targets
6. Establish venue(s) for review / discussion
7. Effectiveness analysis process
Execute
8. Select, collect, align, & integrate data and information
9. Track daily operations and overall performance
Analyze
10. Measure, review, and analyze organizational performance and capabilities
Learn
11. Evaluate progress & develop priorities for opportunities
12. Revise plans / goals as appropriate
Sustain
13. Reward – Recognize – Hold Accountable
13. Share best practices

Figure 4.1-1 Performance Measurement, Analysis, and Review System (PMARS)

4.1a(1) CRHS **selects** data in two segments. *Change-the-business* (CTB) measures are aligned with the KIOs of the **strategic plan, action plans**, TRAC initiatives, and other process improvement activities. *Run-the-business* (RTB) measures are not being actively "worked" for improvement or innovation but are monitored for any variance in expected performance or other indicator that **adjustments in measures or processes** may be required. When possible, CRHS **collects** data through automated processes, such as database queries across clinical, financial, and other systems. Manual collection processes are used to populate databases when data are not available electronically. DDI enables a myriad of reports to be extracted for analysis.

Alignment and **integration** are reinforced through a set of dashboards that are cascaded from the system's strategic scorecard. CRHS tracks progress on achieving its strategic objectives and associated action plans through applicable reviews [4.1b] using the DIKW model. *Data* are transformed into *Information* through analysis. Information becomes *Knowledge* as it is put into practical use, and Knowledge becomes *Wisdom* as expertise is gained. In 2019, in a cycle of evaluation and improvement, CRHS upgraded DDI to present most KPIs as both color-coded tables and graphs in statistical process control (SPC) format with automated projections in order to strengthen the ability to convert data to information and respond to trends. **KPIs are a blend of CTB measures [2.2-2] and RTB measures**, noted as such on various results figures in Category 7. Additional KPIs are AOS, with examples of how they are used on scorecards and dashboards.

4.1a(2) CRHS selects **comparative data** regarding health care outcomes, customer satisfaction, employee engagement, leadership and governance, and financial and marketplace outcomes. To assess performance and progress, desired comparative data are top decile, top quartile, and verified benchmarks of world-class performance. Each KPI has an owner, who is required to seek relevant comparisons that are the highest performance available. The sources of comparisons are shown with the reports generated by DDI. In 2022, DDI was enhanced to include hyperlinks to update the comparison data on a quarterly basis, and to run a report of any "broken" links to keep the comparisons current and accurate.

4.1b Performance Analysis, Review, & Improvement

4.1b(1) Using the DIKW model, SLs use designated forums to **review** and **analyze** *data* that indicates performance and capabilities [4.1-2]. KPI and AP owners report their results along with relevant **comparative** data, and the analyses are discussed to convert the data into *information* and ensure conclusions are valid. These reviews contribute to CRHS's organizational *knowledge* and promote measurement agility. The areas of excellence in the strategic plan – Customer, Workforce, Finance, and Process – are used as a Balanced Scorecard approach for the WF, leadership. the boards, and the community to evaluate performance in both CTB and RTB measures. Application of the knowledge by SQPIC and TRAC and the "Learn" phase of IDEALS, create SMEs and advance *wisdom.*

A modified stoplight color-coding system is used in a table display for all measures, in addition to graphs showing trends and projections to aid in rapid analysis. At CRHS, red indicates that help is required beyond the scope of the process owner. Resources typically include ideas, or additional "space, staff, or stuff" – the CRHS "Sx3." Yellow indicates that the current status is adequate, but trends or projections indicate that additional resources will be required over the short-term horizon. Green indicates that the current status and predictable future are within tolerance limits. Blue indicates that results exceed expectations – either in performance or timing. There may be resources to share for the benefit of the system – particularly ideas. Blue and red measures are the primary topics of discussion at SQPIC, ELT/SLT, BOT/BOD, and PFAC meetings, aiding in transparency and accountability at all levels of the organization. The comprehensive set of measures are designed to enable rapid and holistic understanding of organizational performance relative to competitors and industry leaders in key areas of performance.

CRHS **projects** future performance by extrapolating trend data presented in the review forums [4.1-2]. If there is an

Purpose	Topic	Venue	Freq.	Who
Performance Review	Quality, Clinical Concerns, Safety	Unit Huddle	D	Unit staff
	Sx3, Safety, Escalation issues	Leadership Huddle	D	SLT / MM
	Staffing ratios	Bed tracking	Shift	Managers
	Discharge Planning, UR, Patient progress/concerns	Unit Multi-disciplinary rounds	D	Caregivers, patient, family
	Medical staff issues (record completion, peer review, blood utilization)	Med Exec Committee	M	Physician leaders
	HAI, Sepsis, Hand Hygiene, Antimicrobial use	Infection Control Committee	M	Clinician members
	Clinical Quality Indicators (Stroke, Sepsis, HAC, HAI, HAPU)	SLT/ELT meeting	M	ELT / SLT
	Patient Satisfaction / complaints	SQPIC, SLT/ELT meeting	M	Quality reps, SLT
	WF issues (turnover rates, rounding findings, injuries, etc.)	SLT/ELT meeting	M	ELT / SLT
	Budget Reviews and Variance	SLT/ELT meeting	M	ELT / SLT
	WF issues	Board meetings	Q	Board members, ELT/SLT
	Corporate Compliance	Board meetings	Q	Board members, ELT/SLT
	Quality Measures	Board meetings	Q	Board members, ELT/SLT
	Risk Management	Board meetings	Q	Board members, ELT/SLT
	Finance Review	Board meetings	Q	Board members, ELT/SLT
	Progress of action plans	Board meetings	Q	Board members, ELT/SLT
	Strategic plan / Action Plan environmental scan	ELT/SLT/Boards	A	Board members, ELT/SLT
	Audit findings – Internal / External / ISO	Audit Committee	A	Committee Members
	Operational and capital budget	Finance Committee / Boards	A	Committee Members
Performance Analysis	RCA for variances/ trends	Leaders, SQPIC, TRAC	PRN	Committee Members
	Observation Status and LOS	Unit Rounds	D	Clinicians, UR staff
	Patient Experience Reports	Units, ELT/SLT, SQPIC	M	Quality reps, SLT
	Budget Variances	1:1 meetings	M	Managers and Finance
	WF Feedback	ELT/SLT meeting	M	ELT / SLT
	Action Plan Evaluation	SQPIC and ELT/SLT meeting	M	Quality reps, SLT
	Clinical Benchmarks Evaluation	SQPIC and ELT/SLT meeting	M	Quality reps, SLT
	Financial Trends	Board meetings	M	Board members, ELT/SLT
	Strategic Drivers	Board meetings	A	Board members, ELT/SLT
	Environmental Scan (PESTLE+W)	Boards, ELT/SLT and MM	A	Board members, Leaders
Information Used / Decisions made	Service Recovery	"On the spot"	PRN	PEO, leaders
	Operational Adjustments	SQPIC, SLT/ELT meeting	M / PRN	Quality reps, SLT
	Medical Reviews	Med Exec Committee	M	Physician leaders
	Resource Allocation / Re-allocation	ELT/SLT meeting	M	ELT / SLT
	Modify Action Plans / Operational adjustments	ELT/SLT meeting	M	ELT / SLT
	WF Recognition	ELT/SLT meeting	M	ELT / SLT

Figure 4.1-2 Review Venues

expected disruption to the process, such as an improvement project, an impending change in a regulation, or the environment, the projection is adjusted accordingly. In the case of the pandemic, with comparative data changing on a rapidly, CRHS adjusted some KPI projections daily.

4.1b(2) CRHS **uses findings** from the performance reviews to develop **priorities** for continuous improvement based on trend data. When the current performance or the trended rate of change is not sufficient to project achievement of a goal or a strategic objective in the timetable identified, innovative solutions are sought to provide a breakthrough change, and an action plan is created [2.2]. Prioritization matrices, focused on costs and benefits are a key tool.

4.2 Information and Knowledge Management

4.2a Data and Information

4.2a(1) CRHS uses the Knowledge Management System (KMS) [4.2-1] to ensure the **quality** of organizational data and information through training on how to input and analyze data. At CRHS, virtually all data is electronic, and ISO clause 7.5 principles have helped drive processes that are created, updated, and controlled to ensure **accuracy and validity, integrity and reliability, and currency.** For example, both DDI and the EHR have embedded "rules" that prevent the entry of data in error (for instance, prescription for an antibiotic for a patient with a known, documented allergy to it). Any documents that are printed from any electronic source include a footer stating that print versions may not be current / accurate, and to please refer to the electronic version. CRHS ensures **accuracy** and **integrity** through training and system checks and balances. This is done through the limiting of text box fields in its EHR. In 2018, in a cycle of evaluation and improvement, a TRAC team of clinicians and IT subject matter experts (SME) developed standardized data dictionaries to ensure accuracy of comparisons. The data flow from the EHR and DDI is real time to all integrated systems, which ensures data **currency**. CRHS also reviews and edits social media posts about the organization as needed. In 2022, the EHR was more tightly integrated with the MyHealth patient portal to support the ACO in promoting health.

Identify
1. Knowledge requirement
2. Sources of potential information
Design
3. Select "best fit" sources and comparisons
4. Select "most appropriate" segmentation
5. Effectiveness analysis process
Execute
6. Collect information
7. Verify / ensure quality (accuracy, validity)
Analyze
8. Convert information to knowledge
9. Use knowledge to promote organizational learning
Learn
10. Evaluate effectiveness
11. Revise strategy and training as appropriate
Sustain
12. Reinforce message
13. Share best practices

Figure 4.2-1 Knowledge Management System (KMS)

4.2a(2) CRHS ensures **availability** of data and information first by identifying the data and information required for each position and granting appropriate role-based access. **Suppliers, partners, and collaborators** are granted role-based access. Availability of data and information is managed through a robust information technology plan that includes cloud-based, secure hosting of all mission-critical software. CRHS uses redundant systems to systematically remove single points of failure. All data and systems are backed up every 12 hours as a precaution against cloud server disruption, malware, or ransomware attacks.

In 2015, CRHS implemented an electronic, visual bed management system that gives family members data **availability** to track their patients (with a secure patient identification number) through the various stages of pre-op, in surgery, post-op recovery, and transfer to an in-patient room. This is deployed to each hospital. In 2019, CRHS implemented an innovative online scheduling program that allows patients to book their own physician office appointments at the date and time most convenient for them. The program was expanded to outpatient services such as diagnostic tests and pre-surgery testing, and mobile clinic appointments in 2022. MyHealth patient portal makes data and information **available** to the patients and other providers, facilitating communication.

Customer and WF surveys include questions about the **user-friendliness and reliability** of systems and supplier contract reviews provide feedback to the vendors and support staff of each system (AOS).

4.2a(3) CRHS uses the IDEALS-based Safety & Security System (SSS) [6.2-1] and the NIST Cybersecurity Framework to **manage security and cybersecurity of data and information**. Reduction of cybersecurity risk an ongoing initiative, particularly with recent increases in ransomware and malware attacks. The system Chief Information Officer (CIO) has overall responsibility for cybersecurity, in collaboration with the CIO for each business unit. **Awareness** of emerging security and cybersecurity threats is maintained through participation in networking groups, literature and news reviews, and through hosted group discussion e-mail services.

Security policies define operational and employee requirements and disciplinary actions for noncompliance to ensure that the **WF understands** and fulfills security and cybersecurity roles and responsibilities. Training is provided annually, and periodic CIO "phishing expeditions" test employee responses [AOS]. Phishing testing promotes awareness of security and cyber-threats – re-education is required for those who fall prey. **Supplier and partner** roles and responsibilities are included in the contracting and Bizplus credentialing processes. **Patients** are provided with "just-in-time" information on the landing page of the patient portal. The entire WF, contractors, suppliers, and others with access to sensitive information and data must complete security and Health Insurance Portability and Accountability Act (HIPAA) training during onboarding and annually thereafter. This training is updated each year to highlight current cyber threats. Identified emergent threats are communicated through the CIO and the business unit CIOs.

Information technology and operational systems are identified as **key** and prioritized based on a criteria-based prioritization matrix (AOS). Processes to ensure **security** of sensitive data (such as protected health information [PHI]) include limiting access to data and information to those authorized to do so based on their job responsibilities. All workstations (including laptops) have anti-virus software and encryption. Downloads to nonencrypted storage devices are prohibited and monitored.

Device **security** is monitored when accessing organization IM systems, and devices are denied connections when equipment is noncompliant. Periodic vulnerability scans are performed on all servers and web-based applications. Systems with vulnerabilities must be mitigated within 30 days with noncompliance resulting in disconnection. An annual security audit is conducted by a third party and is the basis for the IT Security Plan. Break Glass audits are conducted to identify unauthorized access to patient records.

Additional **security** measures include forced password changes every six months, two-factor authentication, badge entry to facilities, security cameras, and spam detection. Any email correspondence containing protected health is encrypted using secure mail. The weekly online security and safety blotter report contains results on phishing testing using a case study and current issues of which to be aware. Daily server backups to the cloud have replaced many redundant servers, resulting in cost efficiencies.

4.2b Organizational Knowledge

4.2b(1) CRHS **builds and manages** organizational knowledge [4.2-1] utilizing DDI. Starting with a knowledge officer and implemented through a Knowledge Management Team comprised of clinical analysts and IT experts, each business unit and department identifies data, information, and knowledge critical to success. On an annual basis, IT runs a "report of reports" for each report user to evaluate: a) the ongoing need for the report, b) the accuracy of the data dictionary, and c) the appropriateness of the comparisons. In 2010, CRHS had a homemade database when it started the KMS, but it quickly became cumbersome. In 2015, in a cycle of evaluation and improvement, it implemented a TalkPoint site that has its hierarchy based on the Performance Management Institute's taxonomy of processes. The TalkPoint site now houses DDI. In 2019, CRHS added a mandatory DEAL *Learn* loop [4.2-1 steps 10 and 11] to ensure the KMS remains current and relevant.

The multiple venues and opportunities to participate in improvement activities provide a systematic approach to **collecting and transferring knowledge** among the WF and developing subject matter experts. In alignment with the organizational values, all members of the WF (with the exception of students) are evaluated on their personal support of the WE CARE values. This prompts participation in improvement projects [AOS] at their department / unit level, particularly related to World-class medicine, Efficiency, and Excellence. Each department / unit has representation on SQPIC, which is regarded as a developmental opportunity and may be part of the PPDP considered in succession planning. Members of the paid WF who are supported by CRHS to attend conferences or who receive tuition reimbursement are also expected to share the knowledge they gained – frequently

in the form of creating a poster presentation that is rotated throughout the cafeterias at each location.

In 2015, CRHS implemented a Simulation Laboratory (SIM Lab) to facilitate teamwork by providing a venue for multi-disciplinary learning and **transferring knowledge**. Participants include all segments of the WF with the exception of the volunteers. Clinical practice scenarios have been developed ranging from simple (but problem-prone such as proper body mechanics in patient transfers) to complex (such as trauma and advanced cardiac life support). The SIM lab was an effective venue to offer student experiences during COVID, when most non-essential personnel were not permitted to be at the hospitals.

CRHS **blends and correlates data** to build new knowledge through the extensive use of disparate data from across the entire system – hospitals, insurance plans, the ACO, and the CHNA to gain insights into the health needs of the community. For example, by analyzing claims data, it identified that pain management among its oncology patients is a concern and that many patients were seeking alternative medicine approaches such as acupuncture, aroma therapy, and homeopathic remedies. Based on this learning, CRHS developed an alternative medicine program within the cancer center. Segmented data revealed that the Appalachian region remains underserved and lower-scoring on HEDIS measures, which led to the Seekers Program [3.1b(2)].

In 2021, CRHS adopted two approaches used by a 2020 BAR to **collect, transfer, and use** knowledge assets. The first approach is Communities of Practice (COPs), which connects employees with common interests in health care areas to come together in a virtual forum to exchange ideas, literature searches, active research, and more to further the understanding of the focus. CRHS currently has twelve COPs with areas of focus including patient-centered care, palliative care, diabetes management, post-partum depression, attention-deficit/hyperactivity disorder, and administrative functions (HR, finance, IT, etc.). One COP specifically deals with clinician resiliency, peer support, and healthy coping mechanisms in the era of COVID [5.1b].

The second approach was a more intentional outreach to **suppliers, partners, collaborators, and patients, families, and the community.** Representation from each of these stakeholder groups is now systematically considered with each AP and TRAC charter, and the recommendations from each PFAC are logged and tracked to more frequently "get to yes."

4.2b(2) As part of the review of organizational performance [4.1b], CRHS **identifies** departments, units, or individual physicians who are achieving **high-performing results**, evidenced by "blue" on the scorecards. Patterned after the Baldrige process, "how" and "what" questions are used to ask the departments to describe and document processes, practices, equipment, and/or technology that contribute to those results. SMEs then conduct training to fully deploy the processes, as appropriate, throughout the system. External best-practices are **identified** when obtaining certifications, attendance at continuing education conferences, Quest for Excellence®, reference materials such as online Cottervoy procedures, and the wide variety of students, family medicine residents, and nurse residents. These are captured at the unit level and deployed through SQPIC to other appropriate areas.

In 2020, in a cycle of evaluation and improvement, SLs added a contest for the submission of administrative best practices since the majority had been directed toward clinical practices. "Traffic" to each submitted best practice was monitored for three months, and the submitters of the most sought-after best practices were recognized in the next town hall meeting and given a gift card to a local bookstore.

4.2c Pursuit of Innovation

CRHS **identifies** opportunities for innovation through the Identify phase of the IDEALS improvement system. For example, new discoveries, best practice sharing ideas, or decreasing performance in any of the key organizational performance systems [P.2c] would automatically call for analyses to be conducted to determine applicability and innovation opportunities. The Research division includes an Institutional Review Board and supports innovation in medical care.

Department and higher-level meetings require **innovation** to be on each agenda to promote discussions and recognition of opportunities. The criteria for innovation are simple: The idea solves a problem in a unique or new way or takes the organization to the next level of performance. The department leadership and process improvement team evaluate ideas and may seek approval to implement (no/low cost) or refer to the next level for review. Those suggestions that rise to higher-level meetings for discussion at leader and SL meetings are also displayed with the submitter's name. Once identified, CRHS determined which opportunities for innovation to pursue by using a risk: benefit analysis conducted by the appropriate department or individual; and if deemed appropriate, then the action planning process [2.2-1] is used to ensure sufficient financial and other resources are identified and made available [2.2-1, step 4]. Once deemed ready for incorporation or deployment within CRHS via the PMARS [4.1-1], innovations are **deployed** to the WF and to key suppliers, partners, and collaborators through the CS [1.1-2]. If deemed inappropriate, or the opportunity fails to meet implementation criteria, the decision to discontinue pursuing the opportunity is made between the action plan owner and the resource provider, and an action plan review is conducted to identify any opportunities for improvement.

In 2019, CRHS created a "Shark Tank" program [2.1a(3)], adapted from a benchmarking partner – just in time for use in the pandemic. The entire WF is invited to submit ideas for improvement or innovation in storyboard/poster format. Ideas are judged against predetermined criteria with the highest scoring ideas selected for implementation. The winners are recognized at the annual Celebration of Excellence [6.1b(4)]. See Figure 7.5-19 for examples of ideas recognized.

Category 5: Workforce

In the LS [1.1-1], the Workforce and Leadership are both supported by Strategy [Cat 2], Measurement [Cat 4], and Operations [Cat 6] – promoting a culture of "management by fact" and a sense of purpose driven by the MVV.

5.1 Workforce Environment

5.1a Workforce Capability and Capacity

5.1a(1) CRHS sends representatives to Quest to identify best practices, often with specific issues in mind. After struggling for several years with optimizing capacity, leaders found that several BARs seemed to have better ways to assess capability and capacity (C&C). These ideas were brought back and augmented with research into other industries in 2015 to intentionally integrate a Capability and Capacity Model (CCM) into the Workforce Management System [5.1-1], which has been refined over several years. Initially developed to address the strategic challenge of workforce shortages, the model predicts short- and long-term variable needs. The model is now used for caregiving staff [2.1-2] and caregiving support staff such as transporters and environmental staff. Other support staff members are more fixed in nature over normal volumes, such as accounting, finance, HR, IT, etc. The model determines capacity based on surgery schedules and past and projected census/service volumes at one year, one quarter, one month, and one week, with more detailed plans to address shorter-term needs. A weekly meeting confirms needs for the following week so the WF schedule can be finalized, and part-time and PRN staff members can be scheduled.

Identify
1. Current workforce capability / capacity
2. Future workforce capability / capacity needs
3. Needed knowledge, skills, attributes, etc.
Design
4. Create / revise job descriptions to close gaps
Execute
5. Obtain hiring approval
6. Recruit
7. Interview and select
8. Hire
9. Onboard and integrate into workforce
10. Provide services and benefits
11. Manage work and performance
12. Facilitate learning / development / career progression
Analyze
13. Assess performance / developmental needs
14. Assess engagement and satisfaction
Learn
15. Evaluate effectiveness of key workforce processes
16. Revise strategy as appropriate
Sustain
17. Reward – recognize – hold accountable
18. Promote – encourage – discipline
19. Retire – depart – terminate

Figure 5.1-1 Workforce Management System (WMS)

The CCM was deployed first to the medical center and then over the next three years to the other hospitals, then to other business units. It is effective at predicting capacity needs in areas that have fluctuating census, as staffing is based on observed productivity ratios. For example, an environmental services or physical facilities worker assignment is based on square footage and the specific use of the space; coders and billers on number of accounts per hour; etc. Annualized data from the CCM is integrated into the SPP [2.2-1], as part of the "W" in the PESTLE+W environmental scan process. Due to WF shortages amplified by the pandemic, the model was simplified and integrated into the daily Sx3 assessments of *space, staff, and stuff* [1.1c(1) and 4.1b(1)]. Having this model in place enabled CRHS leadership to evaluate productivity when some work was managed remotely during COVID. Workers who maintained productivity have been permitted to continue remote work up to 75% of their total hours – helping to achieve work-life balance while developing relationships with co-workers.

The **capability** part of the model is used in all business units, including those that have more stable and/ or fixed capacity, such as hospice, home health care, the health plan, and DME. Capacity is evaluated annually by comparing predicted and budgeted labor to actual. Root cause analysis (RCA) is conducted when the capacity variance is greater than 10% and findings are used to improve the model.

Capabilities (knowledge, skills, abilities, specialties, and certifications) are assessed annually by unit/department leaders during the Performance and Professional Development Plan (PPDP) review. In addition to considering the capabilities of their direct reports, unit/department leaders also evaluate changes expected in their functional and service lines, such as purchase of new equipment, planned expansion of a service line, etc. This information is rolled up and used as an input to step 3 in strategic planning [2.1-1] and shared with the staff development office to plan additional training. Since both C&C are integrated with the SPP, CRHS has rarely been faced with a talent shortage, even during COVID.

During the pandemic some caregivers were "poached" for higher salaries, resulting in temporary shortages of physicians, respiratory therapists, and critical care nurses. Most of these were "lured back" by 2022 [5.1b(2)], and current variances are within tolerance.

In addition to the CCM variance, other C&C metrics include physician C&C, employees cross-trained, WF retention, average time to fill, volunteer presence, and nurses with BSNs or higher [7.3-1 through 7.3-10] The CCM and other efforts have been instrumental in helping CRHS achieve the action plans to recruit physicians and re-engage/increase the presence of volunteers [7.3-26].

5.1a(2) HR and the hiring manager share responsibility for **hiring** the best-qualified candidates while keeping the **diversity** of the patient and hiring community in mind – not only in physical attributes, but also in educational background, experience, thought processes, personality types, learning styles, etc. HR is responsible for tracking current WF profile demographic statistics, comparing them with the patient and hiring profile in the areas served, and annually updating a diversity report (AOS) showing how aligned the system is with patient and hiring communities. A workforce plan [2.2a(4)] is developed annually to attract and recruit needed members of the WF based on workload projections and the WF portion of the annual budget. The diversity report was developed at the system level initially and then expanded and deployed to each business unit. In another cycle of improvement in 2018, the report was expanded to the work unit level to increase unit/department leaders' accountability. The goal is to have work units within 5% of the diversity of the community. This is more difficult to achieve for smaller and specialized work units. Training is conducted with all managers and those who participate in the peer interview process regarding bias, especially unconscious bias, and the tendency to "hire a person like me."

CRHS does insist on hiring "like us" regarding candidates whose values align with WE CARE. HR first recruits from

CRHS's own student trainees, interns, and residents for the professions and skills needed, based on their known **fit** with the organizational culture. Welcoming back student volunteers and Explorer program participants in 2021 helped fill non-licensure positions. These entry-level positions qualify for tuition reimbursement, and many of our licensed personnel have used them as a means to achieve their career goals.

CRHS also recruits from universities, schools, and programs that train in the skills needed and that themselves serve a diverse student population. For caregiving support and allied staff, recruitment focuses on state and local employment offices, which helps ensure that staff members reflect the hiring community. Recruiting ads are run in both English- and Spanish-speaking media. Positions are also posted internally. As a recent innovation, CRHS has partnered with local Community Action Organizations (CAO), which aids communities in job placements, early childhood education (Head Start), and wellness activities. The partnership includes mutually beneficial job training, with likely placement at a CRHS facility, and subsidized childcare for WF members.

In order to **ensure fit with the culture,** potential hires are usually interviewed by the hiring leader, another leader, and two co-workers. The hiring team comes to consensus on each applicant. In a cycle of improvement after reviewing an adverse trend in first-year retention, behavior- based interviews were researched and added in 2018. The interview focuses not on behaviors candidates exhibit during the interview, but on behaviors that they have exhibited in past situations. The behavior-based questions align with CRHS's values and are also used during physician recruitment. A modified behavior-based interview is used for volunteers. First-year retention has improved as a result of incorporating behavior-based interviews [7.3-20].

To help address the challenge of shortages in nursing, technologists, and some physician specialties, CRHS has stepped up recruiting efforts for these positions and has partnered with some specialty groups for tele-neurology, tele-dermatology, and other difficult-to-recruit specialties that can be supported remotely. CRHS works with nearby nursing programs to identify ways to remove barriers for potential nursing students. Being the backbone organization for the COE, which has a goal of making the community a great place to live, will also enhance CRHS's ability to recruit long-term.

Onboarding is a three-day program consisting of two days of introduction to the organization led by HR and SLs. Two SLs lead a half-day session on the MVV, CCs, ethical behavior, and DEI. This is followed by a one-day structured orientation to the hiring department. Thirty days after hire, new employees attend a session on valuing diversity and are encouraged to take the one-day class on Lean and CI tools. Onboarding is the same for all new employees—those based in hospitals as well as those based in other business units. Non-employee physicians, volunteers, and students have a similar orientation (although shorter), and volunteers and physicians receive diversity training after 30 days. New nursing graduates are partnered with an experienced nurse during the first 60 days. Nurses in specialty areas such as the OR, critical care, etc. require a longer orientation. Most new hires have a 90-day probationary period, after which their leader conducts their first PPDP.

5.1a(3) CRHS **balances the needs** of the WF with its own needs and **prevents reductions** through a disciplined position control process, cross-training, the Take-a-Break Program, and other processes to enhance flexibility while retaining its high-performing WF. The CCM is used to predict capacity and capability one year in advance. A key element of the budgeting process is projection of changes in patient volumes that could drive an increase or decrease in capacity needs. When the CCM predicts growth in the need for C&C, a cross-functional FTE Committee reviews requests to ensure they are justified and to determine whether these capabilities already exist somewhere else in the organization rather than hire externally. The committee also determines if anticipated reductions in other areas may provide an opportunity for training staff members for reassignment. Once the need is confirmed, the committee considers all needed aspects, from physical space, IT needs, parking capacity, and additional training and development.

To increase flexibility, in 2018, CRHS began cross-training the non-physician WF to support and temporarily work in two different departments with a goal to have 100% cross-trained by 2023 [7.3-4]. Departments are selected based on employee preference and functional needs. Nurses and CNAs work on at least two different units during the year to become familiar with those employees and unique circumstances. Volunteers participate in this as well; most volunteers have a favorite role, but CRHS has them serve in two other roles throughout each year. Working in different departments is already part of the student curriculum. During the pandemic, when volunteers were not in the hospitals, CRHS cross-trained those who were willing in caregiver support and caregiver ally roles, keeping them engaged.

To meet the diverse needs of the WF as well as the organization, the Take-a-Break Program allows non-union employees to go on furlough or contingency status when the census or other circumstances dictate that they are temporarily not needed, either PT or FT. Opportunities are communicated to the classification of employees impacted, for example, when surgery activities were shuttered during the pandemic. If more employees want to take advantage than needs dictate, longer-tenured employees get first choice. "Breaks are unpaid leaves of short duration from a few weeks to a few months, which about 10% of the WF has taken advantage of over the years since they became available. While on "break," they may be called in to cover, as needed, if available. There have been no involuntary reductions in force since the program started and no furloughs during the pandemic. CRHS is working with union leaders to develop a similar program for its unionized members in the future.

Since COVID, shortages have been more of a challenge than preparing for reductions. When necessary, CRHS has limited patient capacity to ensure safe care with adequate staff and address the strategic challenge of workforce burnout. Ongoing residency and clinical training programs have helped address shortages and recruitment. Preparation of the WF for **changes** is primarily managed clear, transparent communication [1.1-2], Action Planning [2.2-1], and IDEALS [6.1-1].

5.1a(4) Caregiving WF members are **organized and managed** functionally under unit/department leaders and assigned to Interdisciplinary Teams to focus on the delivery of high-quality care. Caregiving support and allied employees are organized under unit/department leaders in functional departments to further develop their functional skills and focus on efficiency of operations. WF members may also nominate themselves to join a COP.

To **capitalize on CCs**, unit/department leaders are expected to deliver a safety message and the importance of reducing waste and rework at least once a week; most deliver these messages in daily huddles at the unit performance improvement boards. ELT/SLT members reinforce the CCs in their communications as well, typically tying each message to a CC and/or WE CARE value. Efficiency in Operations is reinforced through the expectation that employees routinely participate in IDEALS activities at their worksites. During the introduction of Lean tools in 2018, employees were asked to work together to develop standard work, which has translated to Standard Operating Procedures placed in TalkPoint for easy reference and document control. Many include process maps.

Agility, resilience, and patient-focus were reinforced through cross-training [5.1a(3)], which proved invaluable during the pandemic when the caregiving WF worked nearly nonstop, and caregiving support and allied WF members filled in where possible to relieve clinical staff. Tasks included administering COVID tests and developing a process to clean and re-use PPE during shortages, conducting screening activities at entry points, as well as many other tasks.

Another impact of the pandemic that necessitated agility and resilience was the transition of employees and some support staff members to work remotely from home. While there were initially concerns about potentially lower productivity, effectiveness, and engagement, data alleviated the concerns. A Pandemic Task Force was quickly established to address all aspects of the pandemic, including **addressing staff needs** by starting first with the safety of caregiving employees, and then it moved on to ensure remote employees had what they needed to work safely at home with encrypted hospital-issued laptops. Employees were authorized to take home their ergonomic desk chairs and other supplies necessary to support their remote work. Many IT systems already allowed remote connecting, and access was updated to ensure that employees working remotely were not hampered in their ability to be effective outside of CRHS's facilities. Unit/department leaders were trained in how to keep employees engaged and continued to hold daily huddles, even if at times these were video conferences or simple chats. A number of unit/department leaders reported that employees were more productive, not less, likely due to the elimination of movement time within the facilities to get to and from the daily huddles.

As pandemic restrictions eased in 2021 and vaccines were widely available, it was determined that some employees could continue to work remotely, while others would adopt a hybrid solution. As a system, CRHS determined that maintaining the most flexibility as possible would be the default to better meet the diverse needs of the WF. Unit/department leaders share their plans with their leader and HR generalists to assess risks and identify any obstacles. Currently, about half of the non-caregiving WF work remotely, primarily in a hybrid mode. Feedback from the WF indicated that working on-site at least part of the time fostered healthy work relationships and opportunities to seek and provide support to co-workers. CRHS is evaluating space needs as remote work becomes more permanent. The space available is planned to expand patient care capacity.

5.1b Workplace Climate

5.1b(1) Workplace **health** is incorporated in CRHS's CCs and focus on safety for patients and staff members. All WF members are enrolled in Copansburg Wellness after 90 days and encouraged to take advantage of the free offerings. A discount on health insurance premiums is available to employees who meet biometric objectives, such as blood pressure, weight, blood sugar, and are non-smoking. Non-employee physicians, residents, volunteers, and students are not enrolled in Copansburg Wellness, but have full access to fitness centers and other free clubs and courses. The Wellness Committee identifies, develops, and communicates offerings.

Emotional health is as important as physical health. Because burnout was already a concern for physicians and some nursing staff members prior to the pandemic, CRHS added considerably to the wellness program benefits in ways that the WF suggested would be helpful, many tailored to specific WF segments based on their input about their own "oxygen mask" preferences [1.1c(1)]

CRHS is focused on helping employees pursue work/life balance, with unit/department leaders encouraging their direct reports to take appropriate time off. In January 2021, in recognition of the extraordinary resilience demonstrated by employees during the pandemic, CRHS made a special award of 16 additional hours of vacation time and encouraged employees to use them as early in the year as work allowed. CRHS also implemented a short Wellness Pulse Survey that it administered quarterly during the pandemic and into 2021 to monitor progress on this issue.

Accessibility is ensured for patients and the WF through full compliance with ADA regulations. Reasonable accommodations, such as low-vision computer monitors, specific ergonomic furniture, or specific working hours are made whenever feasible. Performance measures for the work environment [5.1-3] are tracked on a regular basis [AOS].

Measure	Goal
CDC Worksite Wellness score	220
OSHA VPP Star status	Maintain
Physician Burnout	<30%
Wellness participation	≥90%
Influenza vaccine compliance	100% *
COVID vaccine compliance	100% *
TB Test Compliance	100%
Emergency Responders	20
Accommodation Requests Met	≥90%
* Medical/religions exemptions per policy	

Figure 5.1-3 Measures and Goals

5.1b(2) Employees can take advantage of cafeteria-style **benefit** plans to choose those that best fit their needs. The basic plan provides access to health and dental care, a health savings account, life and disability insurance, and 403(b) tax-deferred retirement account. The enhanced plan costs more to employees, but offers access to these benefits and more, including vision care and legal services. Vaccinations are mandated for the entire WF for COVID and influenza, with allowances for religions and medical exemptions. Additional

vaccinations and are offered at no-cost on a voluntary basis. In 2022, the free vaccination program was extended to WF families to promote community wellness.

Additional **services** for all employees include tuition reimbursement and certification support upon request, as well as membership in a local credit union, if desired. The entire WF receives negotiated discounts for home and auto insurance as well as various merchants, free membership at a local fitness center chain, discounts in the cafeteria and gift shop, and discounts on childcare. The entire WF is also eligible for the employee assistance program, offering up to three free sessions with a counselor or psychologist to promote emotional health.

An innovative **policy** CRHS has implemented is making financial subsidies available to purchase a home in the twelve blocks surrounding each medical center. This enhances the stability of the community and offers employees an opportunity to live close to work. Piloted in Lexington, where the hospital was in a community that was beginning to experience blight, the *Home to Work* Program has now been expanded to the area surrounding each hospital campus. Employees receive an amortized annual benefit equal to 5% of the purchase price, which is not to exceed $60,000. If they stay in the home for twenty years, the home could be effectively paid off. The cost to the medical center averages $2,200 for every employee who takes advantage of the program (average cost of a home in the neighborhood is $44,000). The region has many single-family houses, but few apartments. To provide a similar benefit to residents and students (who need housing support more than many), the medical center purchased a small apartment building nearby. Units are offered to residents and students at cost, and there has been a waiting list since this Home-to-Work Program was launched.

When some of the WF resigned during COVID to take highly lucrative travel positions, CRHS wanted to make it easy for them to come back "home" and implemented **policies** that returning with 12 months would not be counted as a break in service, and the benefits associated with tenure (pay scale, vacation accrual, etc.) would be retained. Many chose to return. To promote **fairness**, mitigate the risk of resentment from those who stayed and reward their desired behavior of loyalty and engagement, leadership decided to award a quarterly cash bonus to any member of the WF for continuous service during the declared public health emergency. Patterned after military "hazardous duty pay," the bonus was based on a percentage of salary. A "system-wide traveler" program was also implemented, with a slightly higher pay scale. These members of the WF agree to work at any CRHS facility, to fill a gap for a day or for a 6–12-week assignment.

CRHS periodically benchmarks total rewards best practices through the Human Resource Society (HRS) and Great Work Environment (GWE). Compensation is targeted at 5% above median compensation in CRHS's service area for each classification. A compensation study is completed every three years with targeted demographics analysis used to address diverse WF members and different WF groups and segments in order to promote **fairness**.

5.2 Workforce Engagement

When asked "why do you work at CRHS," most of the WF initially describe the reasons they chose a healthcare career – the personal meaning they derive from helping people through injury and/or illness or in helping promote well-being. Leadership understands that there are also key factors in why each person chooses CRHS, and their specific position within the system. Most of the responses align to the culture, the support they receive, the relationships they have, their ability to accomplish their work to their satisfaction, … in short, they choose CRHS because the deeply rooted WE CARE values enable them to achieve the personal meaning they seek.

5.2a Assessment of Workforce Engagement

5.2a(1) The Upwood WF survey is administered annually, and CRHS has added specific questions to evaluate **engagement**. The survey asks respondents about the extent of agreement with statements, as well as how important that statement is to them. The most important statements, key WF engagement drivers, are re-validated through focus groups every three years. The drivers have been consistent during re-validations in 2015, 2018, and 2021, including at the height of the pandemic. Sufficient demographics are collected for the responses to be segmented, and also to identify differing drivers of engagement that may signal a new specific segment. For example, data from the 2018 survey showed that employees with young children at home had different work-life balance requirements, particularly if they were single parents. Key drivers of engagement [P.1-2] have been determined for all major WF **segments**.

5.2a(2) The Upwood Survey is one process in step 14 of the WMS [5.1-1]. This **formal** method of assessment of WF satisfaction and engagement is sent to the entire WF, including volunteers. The method **differs** for volunteers and students and non-employed physicians. The survey for volunteers is shorter and is conducted at a different time of year. Students are surveyed at the conclusion of their experience. Physicians are surveyed by a third party by telephone. These segments are not questioned about non-applicable factors, such as pay or benefits.

All unit/department leaders are expected to work with their teams to capture actionable information – first to encourage participation in the survey, and then to develop an action plan to address both engagement and satisfaction survey results. Key to WF engagement and willingness to provide honest feedback is ensuring they feel heard. CRHS formalized an "intentional response" cycle [5.2-1] to formalize the process. If work unit survey results do not improve for a leader over a two-year period, HR will assign a leadership coach.

Figure 5.2-1
Intentional response to feedback

Other measures and indicators used to assess and improve WF engagement include WF turnover (**retention**), absenteeism, on-the-job injuries, and filings of unfair labor practices with the union. Indicators of positive engagement include participation on teams, demonstrated interest in improvement activities, attendance at unit meetings, participation in the career ladder program [5.2c(4)], and successful achievement of PPDP goals. Leaders **use** these indicators to better understand the level of engagement of each employee and initiate "courageous conversations" when engagement is lagging. For example, during COVID, leaders were coached to be more vigilant about early indicators of burnout and stress and encourage the WF to use the EAP and other tools to de-stress and stay healthy.

In 2021, turnover was segmented into "regrettable losses" and "other losses," to better evaluate **retention** strategies. Regrettable losses do not include losses of staff that retention strategies would not or could not impact, such as terminations, retirements, spousal transfers, etc.

5.2b Organizational Culture

The most important way CRHS **fosters the organizational culture** it values is to ensure that every leader, from executive leaders down to supervisors, role models the culture and desired behaviors. It makes clear that this same behavior is expected of every member of the WF. In addition to regularly scheduled staff meetings and town halls, daily huddles (of 5 to 15 minutes) by unit/department leaders on each shift reinforce the message of the day linked to culture (e.g., the vision, WE CARE, improvement ideas, weekly safety message). All ideas are welcome, and employees are expected to work together to solve problems in their work units and develop standard work.

In 2020, CRHS formed a system-wide **Diversity, Equity, and Inclusion** Committee (DEIC) to identify issues, programs, and initiatives to promote DEI and ensure that full benefit is achieved from the **ideas** and understanding the perceptions of the diverse WF. In 2021, CRHS established Strategic Employee Engagement Groups (SEEGs). Employees may request the establishment of a SEEG by completing a charter template – including purpose, scope, frequency of meetings, and specific ground rules. SEEGs must be approved by the SLT and have an executive champion.

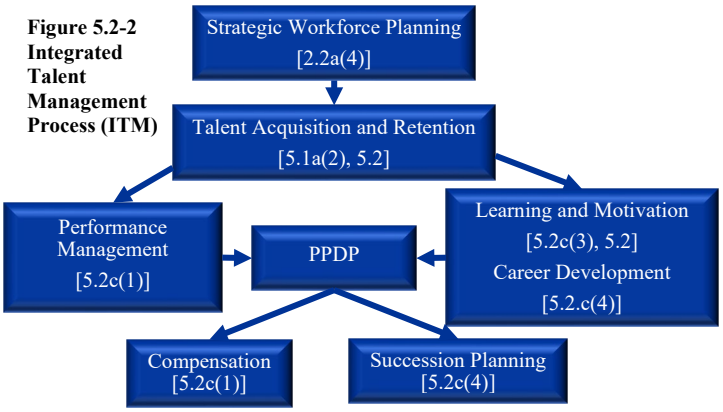
SEEGs generally are formed around WF segments and are a key effort to approach DEI and a sense of belonging in a more proactive manner. CRHS currently has six SEEGs: African-American, Asian-American, LGBTQ, Hispanic, Latino, People with Disabilities, and Mothers with Young Children. SEEGs find commonalities across disciplines, business units, and shifts – which breaks down silos and helps **empower** the WF through relationship building and enhanced understanding of various perspectives. In 2022, when in-person meetings were resumed, SEEGs began offering Town-hall style discussions to promote understanding and foster inclusion.

Diversity considerations also include learning styles, personality types, generation, and most recently – whether remote or onsite workplace.

5.2c Performance Management and Development

5.2c(1) Performance management is integrated with the Workforce Management System [5.1-1] at step 11. CRHS adopted Integrated Talent Management (ITM) [5.2-2] in 2017 after being frustrated with the length and complexity of the existing performance management process, as well as its lack of integration and focus on professional development. It researched best practices and found successful organizations outside of health care had adopted this model.

Figure 5.2-2 Integrated Talent Management Process (ITM)



As part of adopting ITM, the PPDP aligns and integrates **performance, development**, reward (and **compensation**) and **succession planning**. In the performance evaluation section of the PPDP, goals are set that integrate with department, business unit, and corporate strategic objectives and goals. In this way, every employee has a clear line of sight to strategic objectives and action plans. If goals are met, employees are eligible for the **incentive** plan. If goals are exceeded, the incentive is increased to help create a clearer systems perspective and focus on results and success.

Leadership evaluations include factors related to evaluating **intelligent risks** and contributed to innovation. Employees are evaluated on IDEALS/Lean activities and safety initiatives to which they contributed, and the contribution of ideas in the daily huddles. They are also evaluated on behaving in accordance with the WE CARE values to reinforce the concept that while results are important, how results are achieved must also be in balance.

The evaluation process requires self-evaluation and a discussion with their direct supervisor. Volunteers receive feedback and recognition with an annual lunch and gift cards. When volunteers were fully re-engaged in 2022, a new process was implemented to recognize their days worked in addition to the total hours. The certificate includes the total miles traveled between their home and the facility they serve, so that they can claim the mileage on their tax return.

5.2c(2) Annually after the SPP, HR analyzes the workforce plan, identifies the necessary KSAs, and creates an action plan to close any gaps. For those that are best suited to a training experience, courses are developed and made available to employees, volunteers, and students, as appropriate. Both online and in-person venues are used, as appropriate for the content. The WF is highly encouraged to take the one-day course on IDEALS, as well as Lean and CI tools. Annual courses are required in **ethical** behavior (both **health care** and **business)**, HIPAA, safety, WE CARE, and current-year strategic objectives. A short refresher on Valuing Diversity is also required. Prior to the launch of the annual Upwood WF

survey, an online course is prepared detailing the changes that have been made in response to the prior year survey findings [5.2-1]. This has improved participation rates on the survey as well as satisfaction and engagement.

In a cycle of CI, all course descriptions now note the learning objectives and ideal background and experiences of learners who want to register for the course. Course evaluations are reviewed after each class and also annually across multiple classes delivered that year. As a result, courses have been revised, added, and dropped.

During the PPDP process, after evaluating their current year performance, the employee and people leader discuss future development. Systematically understanding aspirations had been evaluated as a gap – leaders asked about goals in each PPDP, but support to achieving goals was anecdotal. In 2018, CRHS adapted the Ability, Agility, Aspiration, Engagement, and Exposure (A3E2) approach by adding a third E, Emotional Intelligence (now, A3E3), because of its importance to CRHS's leadership style. Since CRHS adopted A3E3, employees are more satisfied with the development they receive and their relationships with their leaders [AOS]. The PPDP is not intended to necessarily be completed in one year. Deficits in performing the current role are the first priority. From there, the employee and leader can develop the plan for the next year and beyond to make progress on development priorities. Development not achieved or mastered in one year is rolled over to the next and the PPDP is refined/updated accordingly.

5.2c(3) Career ladders have now been developed for all positions. This structured process began in nursing and enables **career development** and pay increases, in addition to merit and longevity, by an individual making gains in KSAs. This may include participation on TRAC teams, committees, or IDEALS projects, obtaining a degree or certification, or becoming a mentor/preceptor. Unit/department leaders are expected to encourage all employees to follow the career ladder and seek opportunities and development as part of the PPDP. Ladders enable employees to enhance current competencies and develop new ones, while either seeking promotion or remaining in the current position. Ladders do not automatically lead to promotion; some employees may not be a good fit for leadership, but still want to grow capability, competencies, KSAs, and compensation in their current role.

Managers and above are required to identify three potential **successors**; if three are not identified within the department, or the department is so small that this is not practical, HR assists with identifying persons outside the department. The Leadership Development Program (LDP) was developed in 2016 after benchmarking top workplaces for leader development and GWE and HRS organizations, and it is evaluated every year, using the 5-level Kirkpatrick model. Every course includes a participant satisfaction evaluation (Level 1) and pre/post-test of knowledge (Level 2). The attendees' unit/department leaders are required to submit a short evaluation 90 days after the course regarding expected behavior or process changes associated with course content (Level 3). The staff development department within HR correlates courses with strategic goals and objectives and monitors course participation with **changes in organizational results** (Level 4), and the Finance Department calculates the financial ROI of key courses (Level 5). The process was enhanced to intentionally include levels 3-5 in 2020, and results are AOS. This **correlation** informs changes in individual courses and in full curricula, such as certification preparation courses and leadership development. WF who have participated in certification preparation courses have enjoyed a 96% pass rate on exams since 2019 [AOS].

LDP is targeted to high-performing potential leaders and those identified as potential successors. The Physician Leadership Academy is a similar development program for physicians, launched in 2018 for physicians who would like to serve as chairpersons or take a more active administrative role. LDP focuses on leadership behaviors to support the culture and on emotional and social intelligence, to recognize bias, and support DEI. Potential successors develop a plan with their leaders to enroll in the LDP [7.3-28] and gain the necessary experiences (e.g., assignments in other areas, serving on TRAC teams, leading action plans, serving as interim leaders, participating in external courses and conferences, and others). Participants may also request a mentor other than their unit/business leader. These high-potential development plans are usually three years in duration, with increasingly visible and challenging assignments in year three. About a third of current SLs are graduates of the LDP [7.3-29]. Directors and above have opportunities to also request an external executive coach.

5.2c(4) HR reviews **performance review** results and investigates unusual patterns such as a rater tending toward especially high or low ratings, or rating variability correlated with specific segments. Performance evaluations must be signed off by next-level leaders. Data are tracked on the demographics of the WF identified as potential successors and participating in **development** activities such as the career ladders and the LDP and compared to the **groups** and **segments** in the diversity report. If lack of correlation is identified, HR works with the leader to determine underlying causes, e.g., unintentional bias. The DEIC and SEEGs also promote DEI through discussion of summary information about diversity and helping to identify potential bias.

Category 6: Operations

In the LS [1.1-1], Operations (improvement) is the third foundational category with Planning [Cat 2] and Measurement [Cat 4] supporting Leadership [Cat 1] and the Workforce [Cat 5] to promote exceptional customer care [Cat 3].

6.1 Work Processes

6.1a Service and Process Design

6.1a(1) CRHS **designs, manages, improves, and innovates** health care services and work processes using the IDEALS framework identified in the Operations Management and Improvement System (OMIS) [6.1-1]. This system improves operational effectiveness and efficiency to deliver value to patients and other customers and to achieve ongoing organizational success. **Health care service requirements** are **determined** during the *Identify* phase of the OMIS. Inputs include VOC mechanisms (e.g., Kress Daney, complaints, etc.), current performance results, stakeholder input, strategic objectives, regulatory requirements, regulatory changes, audit

findings, technology changes, benchmarks, research, supplier/ partner input, feedback from assessments, and best practices.

6.1a(2) The OMIS and IDEALS are used to **design** health care services to **meet the requirements** of key stakeholders [step 4]. This process is evaluated each year for effectiveness and has been updated and improved multiple times based on leader and process owner feedback. It was aligned to the PDCA process in 2017 and updated to IDEALS in 2022 to become more intentional about the *Identify* phase to ensure all requirements are identified and addressed, the *Learn* phase to promote evaluation and improvement, and the *Sustain* phase as an "off-ramp" to conserve and re-allocate resources as appropriate.

Identify
1. Opportunity for improvement or need for new service/process
2. Process / improvement ownership
Design
3. Improvements to existing processes
4. New processes to meet requirements and expectations
5. Innovative solutions, as appropriate
Execute
6. Implement changes (consider pilot / small scale)
Analyze
7. Measure effectiveness of change (in-process or outcome)
Learn
8. Evaluate effectiveness
9. Course corrections, as appropriate
Sustain
10. Reinforce changes / improvements
11. Share best practices

Figure 6.1-1 Operations Management and Improvement System (OMIS)

During the conversion to ISO in 2022, the Failure Modes and Effects Analysis (FMEA) was also enhanced to address Clause 10 – Improvement. This clause requires improving products and services to meet requirements as well as to address future needs and expectations; correcting, preventing, or reducing undesired effects; and improving the performance and effectiveness of the organization overall.

The *Design* phase of the OMIS considers identified requirements and potential innovation, particularly from other sectors. The DIKW model [4.1b] promotes management-by-fact including analysis of current and trended organizational performance (**organizational knowledge**) and service excellence, and the use of **evidence-based medicine**. In the quest for innovative solutions [6.1-1 step 5], teams incorporate **new technology** and **agility** into the design. ISO has formalized the **consideration of risk,** in many circumstances using a formal hazard vulnerability analysis [1.2b(2)].

6.1a(3) Key health care **work processes and support processes** within each work system [2.1-2] are determined based upon the requirements for appropriate delivery of care [6.1a(1)] and evidence-based care. **Key work processes are** Inpatient Care, Outpatient Care, Emergency Care, and Post-Acute Care/DME for Caregiving Services. **Requirements** are based on the IHI triple-aim [3.1b(2)] for efficiency and effectiveness: Improving the patient experience of care (including quality and satisfaction); improving the health of populations; and reducing the per capita cost of health care.

Key Caregiving **Support processes** include Finance, Supply Chain Management (SCM), Facilities Management (FM), Workforce Services, and Information Management (IM). Key Caregiving Allies support processes include Corporate Services, ACO, Insurance Plans, and Partnerships. **Requirements** also revolve around efficiency, effectiveness, safety, and regulatory requirements.

6.1a(4) Processes are **designed** by teams representing key stakeholder perspectives using the DMADV (Define, Measure, Analyze, Design, Verify) process. The *Define* phase is extensive – frequently drawing on TRAC teams and other SMEs to clearly understand requirements of customers, stakeholders, other interested parties, and regulatory bodies, as well as resource constraints. *Measure* includes establishing goals that consider the resources available and the constraints, including **new technology** and **organizational knowledge**. The *Analyze* phase includes consideration of **risk** (including environmental and societal impact, hazard vulnerability, and the potential benefits) to mitigate or obviate risks in the *Design* phase. The *Verify* phase builds in agility, frequently by conducting a pilot test of the new process and revising as needed.

6.1b Process Management and Improvement

6.1b(1) Process maps, policies, procedures, and work instructions have been defined as **controls** for all key processes and are used to ensure that day-to-day operations **meet key process requirements**. These tools are evaluated at least every two years for needed updates, typically by process owners or users. **Key performance** in-process and outcomes **measures** [6.1-1 Step 7] are used to **control and improve** work processes, aligned with **customer requirements** and **quality outcomes**, and defined as top-decile performance. Any processes not meeting targets are also reviewed at the time by the process owner for further action, as appropriate.

6.1b(2) Understanding **individual patient expectations and preferences** begins with admissions (inpatient), scheduling (outpatient), intake (emergency/ urgent care) and referral (post-acute care), and/or enrollment (health plans/ACO). A multi-disciplinary care plan (MCP) is created for inpatients and a treatment plan is created for rehab and therapy patients. Patients also provide input into the plan through the *Be-well* system [3.1a(1)]. Examples of patient expectations, requirements, and preferences include language, preferred name, people with whom information may be shared, allergies, food preferences, etc. Plans reside in the EHR and are viewable and editable by everyone on the caregiver team.

Patient **expectations and preferences** are discussed during each stage of the patient relationship. Care plans in the inpatient, home care, rehab, and hospice settings include discussion of expectations that include patients and families, Rounding, advance directives, and informed consent are used to explain health care service delivery processes and likely outcomes to help **set realistic patient expectations**. Participants with the health plans and ACOs also have an individualized plan for wellness that includes risk-based recommendations for screenings, vaccinations, and wellness interventions. This wellness-focused plan includes discussion about **patient preferences** in the outpatient delivery of health care, where **patient decision-making** and patient choices are key to success.

As a result of caregiver feedback about not being able to quickly find Advance Directive information, a TRAC team was assigned to work with a group of hospitalists and

palliative physicians. Previously, information could be in the EHR or in paper forms, making it difficult to find when needed. Directives are now scanned immediately into a designated place in the EHR, and a clickable link is displayed on a side-banner on all screens.

Reassessments are done throughout the delivery of care with input from the patient and the patient's family and documented in the MCP. Communication of the MCP with inpatients is facilitated and reinforced using white boards in patient rooms and rounding by caregivers. White board content is standardized to include information about the patient, the care providers, expectations, medication, and the treatment timeline to promote standard care and enhance communication. In 2022, magnetic overlays for the white boards were made available in the five top languages to aid in communication with patients and families. Inpatients use the *Be-well* system [3.1a(1)] to directly control many preferences and enhance communication. The system is used to order meals for themselves and their families, and to connect to video translation services, available through a contracted vendor 24/7. Normally, CRHS has open visiting hours, but when inpatient units were off limits to visitors during the pandemic, the system served to promote communication with family and friends through an interface with most phones.

MyHealth is the mechanism used to keep plans **current** in the outpatient setting. Patients are encouraged to update the information in *MyHealth* prior to each visit (in-person or virtual) with any provider, including questions and preferences.

6.1b(3) The Baldrige Excellence Framework® is the overall system that inspires excellence at CRHS. All employees receive basic training on the Baldrige framework. More than fifty system leaders have received additional training in the Baldrige Criteria. At least a dozen serve as Baldrige Examiners at the national level and for the Kentucky Center for Performance Excellence. The annual application provides for a systematic review of CRHS as an organization, and the feedback report is used as an input to initiate performance improvement (PI) projects.

Work and support processes are **improved** using IDEALS – which enables any improvement tools (Lean, SixSigma, Appreciative Inquiry, etc.) to be selected based on the type of improvement (problem solving or process improvement). All new employees are required to complete a one-day class to familiarize themselves with Baldrige, IDEALS, and other process improvement tools.

More complex processes with many stakeholders can be referred to the SQPIC where projects are assigned to a formal TRAC team for facilitation of a cross-functional improvement team and expert coaching of the improvement project. Each TRAC is staffed by experienced practitioners who use IDEALS and Baldrige to coach and manage projects. The focus on using champions rather than exclusive project managers enhances the flexibility of TRAC teams to facilitate the improvement process, implement solutions that address root causes, share best practices, and enhance sustainability. TRAC teams report project progress and results monthly to the SQPIC. The system SQPIC convenes a semiannual Convergence of Excellence where problems, solutions, and successes are shared. An outcome of the Convergence of Excellence is to disseminate best practices and reduce variability throughout the system. An annual system-wide Celebration of Excellence solicits PI project submissions to highlight and promote a focus on improvement and includes awards for teams that demonstrate successful projects meeting the excellence criteria (details AOS).

Internal ISO audits are the most recent process added to **improve** health care services and performance, enhance core competencies, and reduce variability. Internal auditors work across the key work systems and all business units to evaluate processes for variability in results and process deployment to enable identification and standardization to processes that yield the best results.

6.2. Operational Effectiveness

CRHS leadership has focused on the core competencies of safe, high-quality (**effective**) clinical care and **efficiency** in operations since beginning to use the Baldrige framework in 2012. Since entering the health plan market and forming the ACO, effectiveness has been re-defined to focus on wellness and the well-being of the community. Partnering with other organizations using the Communities of Excellence framework has further broadened the scope of outreach for the well-being of the community to include the additional aspects of education, economics, and other social determinants of health.

6.2a Operational Efficiency and Effectiveness

CRHS's routine focus on Lean methods, performance measures, and reviews of scorecards and dashboards calls attention to opportunities for improvement of operational processes to manage the **cost**, **efficiency**, and **effectiveness** of operations and create accountability. IDEALS is used in process modification or redesign [6.1-1].

The use of electronic checklists in rounding and the formalization of internal audits for ISO help **minimize the cost** of formal audits. CRHS **prevents rework and errors** by standardization of processes and procedures – then assessing organizational knowledge and competency annually as inputs to the strategic planning process; and conducting internal audits to ensure that processes are being followed. Appropriate sample sizes and use of criteria to decrease sample size and/or frequency of auditing helps to **minimize the cost** of inspections, tests and process, and performance audits. Many results graphs have transitioned to SPC charts to allow common-cause variance while focusing on studying and correcting special-cause variance to perform within limits.

When an error occurs, the RCA process includes a review facilitated by a champion from the SLT to identify opportunities for improvement and corrective actions to avoid future issues. Periodic process reviews require **waste analysis** from a customer perspective. This customer focus played a big part in the increase in patient satisfaction scores [7.2-7 through 10] going back to 2018 when Lean was adopted. Identification of process waste is a goal for all staff members and is included in applicable job descriptions. Beginning in 2018, all new buildings and clinical facilities, major renovations, and reconfigurations must be reviewed for a focus on Lean

principles to eliminate or reduce waste. For example, the construction plans to renovate the two facilities to re-open as micro-hospitals were LEED Certified. In 2019, CRHS realized $19 million in annual operating room cost reductions [AOS] because of process redesign and process waste removal.

Champions seek projects that create a "triple win" aligned with the IHI "triple aim" [3.1b(2)] to **balance the need for cost control and efficiency with the needs of patients**. This is accomplished primarily by engaging patients and families in care – including goal setting, motivation, and education toward healthy behaviors and self-care. This improves population health and well-being, which reduces healthcare costs. Costs are also reduced by patient centered improvements [AOS] in efficiency and effectiveness.

6.2b Supply-Network Management

CRHS centralizes management of the **supply network** through the Group Purchasing Organization (GPO) for coordination of the purchase of supplies, equipment, contract negotiations for services, supplies, and pricing. The GPO can secure competitive pricing for more than 80% of supplies and services and adds value in handling the screening and evaluation for these suppliers. When the best value cannot be obtained through GPO, or for non-GPO suppliers, SCM uses its internal supplier management process. In 2018, CRHS created a revised supplier evaluation process that uses a decision matrix customized to product requirements with participation of users. The GPO saved the organization more $80 million in the cost of pharmaceuticals in 2019, a strategic challenge. In 2022, the GPO assisted in reducing chargemaster listings for orthopedic surgery to reduce costs.

Suppliers are **selected** using a criteria-based evaluation that includes requirements, cost, outcomes, and quality. CRHS works with the GPO to define criteria that supports the MVV, strategic objectives, and customer satisfaction drivers. Vendors are credentialed through Bizplus to ensure **alignment** and qualifications. Key **requirements** for suppliers are quality, availability, and cost, and performance expectations are **communicated** through the contracting process and through SCM reviews.

Alignment and **collaboration** within the CRHS supplier network are accomplished through supplier credentialing and the monthly supply chain reviews. The supply chain review is attended by representatives from each CRHS entity. The team analyzes performance **measures** and results to recognize issues and opportunities for new programs. In 2017, CRHS transitioned to a quarterly supplier report card to review performance with each supplier, using the KIO to help them improve, and developing corrective action plans to **deal with poorly performing suppliers**.

Probability	
Likelihood	Likely that event will occur
Impact	
Human	Possibility of death or injury
Property	Physical losses and damages
Business	Interruption of services
Preparedness / Resources	
Internal	Preplanning & prevention resources
External	Community/mutual aid available

Figure 6.2-2 Hazard Vulnerability Criteria

A Value Analysis Team was chartered in 2005 including SCM, clinicians, quality, and compliance personnel to evaluate new items and approve substitutions in the event of shortages. This team ensures that all items have FDA approval, as appropriate, are acceptable for use, and the manufacturer instructions for use are known. Unapproved items are not permitted within the organization to control cost and variation.

During the early stages of the pandemic, weekly and often daily meetings were needed to address issues specific to the COVID-affected supply chains to quickly move supplies from one facility to another based on projected need. This **agility** was incorporated into daily operations to reduce inventory throughout the system. SCM collaborated with Marketing and Communication in the early stages of COVID to procure donations from various groups outside health care for PPE. Because of these agile efforts along with GPO support and innovation, CRHS never ran out of PPE or other essential equipment. In fact, CRHS was able to assist two unaffiliated rural hospitals with obtaining supplies in the spirit of regional cooperation and to best serve the community. Confidence in the supply network greatly boosted trust and **resilience** of all stakeholders.

6.2c Safety, Business Continuity, Resilience and Risk Management

6.2c(1) CRHS has committed to providing a **safe and secure operating environment** for the WF and all who are in any facility under any circumstances or conditions. The change to ISO has helped CRHS become more intentional and proactive in identifying and addressing risks before they cause any harm. The Office of Safety and Business Continuity (OSBC) at the system level oversees and coordinates all parts of the SSS [6.2-1], which includes each of the seven required plans [1.2b(1)] to maintain a healthy, safe, secure, and compliant work environment. Every plan is reviewed and refreshed annually, and includes an HVA, risk assessment matrix [6.2-2], priorities determined using established criteria, mitigation plan, and a continuity of operations plan. Each risk factor is rated on a scale of 0-3, and overall score is determined by multiplying the probability by the sum of impact factors, less the sum of preparedness factors. FMEAs provide a proactive focus on risk management and mitigation in process design and redesign, thereby reducing the cost associated with process failures.

Identify
1. Hazards/Risks/Vulnerabilities
2. Potential organizational impact
Design
3. Mitigation strategies
4. Prevention / management plans
5. Continuity of operations plans
6. Recovery plans
Execute
7. Provide training
8. Conduct drills/Respond to events
9. Coordinate with other responders
Analyze
10. Measure effectiveness
Learn
11. Evaluate effectiveness
12. Revise plans as appropriate
Sustain
13. Reinforce message
14. Share best practices

Figure 6.2-1 Safety & Security System (SSS)

Systematic processes to ensure **workforce safety** include preemployment screening, safety training at NEO aligned with job requirements, and policies and procedures. Audits are conducted to assess safety and compliance to requirements, and adverse audit findings require action plans that include RCA, correction, corrective action, and prevention using IDEALS. Incidents and near

misses also require RCA and action plans. The 2018 evaluation resulted in the formation of an Employee Safety Council comprised of safety officers from each business unit and an employee representative from each facility. Council members meet quarterly to provide VOC, identify high-risk activities and processes, and provide suggestions for improving safety and implementing best practices. In 2022, the role of safety champion was added to the career ladder program [5.2c(3)], and volunteer champions were appointed at the unit/department level.

Other safety programs that support WF and **operating safety** include badge access, emergency call boxes at all campuses, on-demand security escort service to cars and transportation locations, and "save your back" training. Ergonomic assessments are available on request for all employees. An online weekly security and safety blotter is used to report incidents internally and externally. Crime prevention and self-defense training are offered to employees, and workplace violence and active shooter training are required. Additional COVID safety precautions were implemented system-wide by occupational health to protect the WF and include daily temperature checks, daily online monitoring (remote workers), free COVID testing, and quarantine procedures.

Security is ensured through the security department and physical access design and controls. An extensive system of cameras monitors all facilities, and most areas are restricted to badge or keypad access only. Security officers make frequent rounds through all facilities and are available on request to escort anyone to their vehicle, particularly at night. Special provisions are made in the Behavioral Health unit, where patients and visitors are carefully screened prior to entry to ensure no contraband or weapons are brought in. Signage prohibiting any weapons are prominently posted at each public entrance. Based on ISO and accreditation requirements, the security department formalized Hazard Vulnerability Assessments (HVA) for Safety Management and Security Management [6.2-2]. The HVAs resulted in a comprehensive list of risks, for which mitigation plans were created based on a prioritization matrix of likelihood, potential impact, and cost to mitigate.

6.2c(2) The comprehensive CRHS safety program ensures the highest levels in **patient safety**. The Patient Safety Officer heads the Environment of Safety (EOS) process, with coordinators for each business line, and champions at each nursing unit and clinical department. Monthly patient safety audits are conducted at each business line and findings are shared at department meetings and the multi-tier daily safety huddles. All patient safety events and near misses require **RCA** with action plans, and the Good Catch Program highlights WF members who recognize errors and defects before they cause **harm**. Good Catch stories are published in the monthly newsletter to raise awareness of safety.

ISO corrective action plans require analysis of "where similar conditions exist" to be proactive about prevention. A dashboard on the system and business line websites displays patient safety results. Patient safety results are reviewed at monthly SQPIC meetings, and those areas not meeting target or demonstrating adverse trends are referred to TRAC teams for investigation and action planning.

The 2015 analysis and review of patient safety events pointed to a root cause of lack of communication. To promote patient safety and promote effective communication and teamwork, all patient care positions, including providers, now require annual patient-focused training. This training and a focus on CRHS's CC of Safe, High-Quality Care, have resulted in consistent improvement on the quarterly Culture of Safety (COS) Survey in the areas of Teamwork Across Units and Overall Perception of Safety at each entity. In 2021, the COS Survey was further deployed to the Medical Staff, volunteers, and students based on Baldrige feedback.

When harm does happen, CRHS has a culture of transparency to discuss the event with all key stakeholders, including the patient and family. The key focus is on reduction of the impact of harm and prevention of future instances, in addition to service and patient **recovery**. As required, serious safety events are reported to appropriate regulatory authorities in order to prevent similar situations at other organizations.

6.2c(3) OSBC uses the SSS [6.1-2] to ensure that CRHS **anticipates** and **prepares for disasters, emergencies, and disruptions** to maximize survival, minimize injury, preserve property, provide for restoration of support structures and processes, quickly resume operations, and aid in recovery. These processes have been tested and improved through analysis of actual events (e.g., tornado activity is 88% greater in KY than the overall US), and drills conducted as a system and in collaboration with state, regional, and city emergency entities and agencies. CRHS is a member of Lexington Squared Away and the Kentucky Crisis Association. When local and regional drills and disaster simulations reveal gaps in planning action plans are required and feedback is provided to the OBSC.

The HVA and the associated action plans for mitigation and recovery specifically considers people (including **patients and other customers,** and all other people on organizational facilities), property, and **business** needs. Reliance on the **WF** becomes critical during a crisis or disaster. The employees designated as critical (primarily patient care and facilities staff) are expected to report for work despite personal issues, especially during the pandemic. CRHS seeks to also support the WF families. Based on feedback, CRHS expanded support to include childcare, pet care, transportation, housing, and food for essential staff members during emergencies.

Other **employee** support services include hoteling, mental health support, and supporting both the WF and local restaurants to provide meals for working employees to take home. The regional PPE status board set up by the supply chain mitigated the scarcity of PPE for CRHS and other health care providers and COVID testing sites in CRHS's service area. IM rapidly deployed laptops and conducted training on virtual collaboration tools for staff members who began working remotely. These processes promoted greater collaboration across all entities to enhance work processes made difficult with physical distancing and continue to increase productivity and efficiency.

The importance of **suppliers** and **partners** was underscored during the pandemic, particularly with supply chain disruptions, and the CRHS response to COVID demonstrated

the effectiveness of the SSS as it transitioned from an expected short-term crisis to the indefinite, long-term, new way of conducting business. The CRHS COVID Command Center, established in March 2020, worked with all organization entities, along with community, state, and regional health care organizations, and suppliers and partners to assess and respond to daily changing needs. Consideration of KIOs drove the establishment of the COVID Units (medical and critical care), safety precautions, and creation of a regional bed status monitoring team to support surges, and innovative procurement of PPE and other needed supplies. As the availability of vaccines started to become a reality at the end of 2020, the CPT planned logistics and implemented a regional vaccination site and partnered with local churches, synagogues, and mosques to set up neighborhood sites that significantly contributed to the 81% fully vaccinated rate regionally, compared with 57% state-wide and 66% nationally [7.1-15]. This effort was greatly enhanced by the relationships and **partnerships** established through COE.

6.2c(4) **Risk management** is integrated with the ISO accreditation, safety, quality, and compliance systems. Risk managers are on staff at each hospital and participate in the HVA assessments [6.2-2] using the SSS [6.2-1]. Risk managers also participate with the Value Analysis Teams to evaluate new technology and supplies and have direct access to legal counsel when needed. Risk managers are all trained in RCA and FMEA and regularly present actual scenarios or fictitious case studies at SQPIC for discussion and training.

Category 7: Results

In 2012, when CRHS made the strategic decision to adopt the Baldrige framework, leadership assigned an administrative "champion" for each of the seven categories. Each champion systematically reviews applications of Baldrige Award Recipients (BARs) to evaluate processes and identify potential improvement opportunities for CRHS. Champions and leaders attend the Baldrige Quest for Excellence® Conference to get ideas on how to evaluate and refine processes, approaches, and systems, done at the outset of each strategic planning cycle. In 2020, an improvement was made so that a champion is no longer assigned to Category 7 – each process category champion now "owns" the results associated with the processes – yielding better integration.

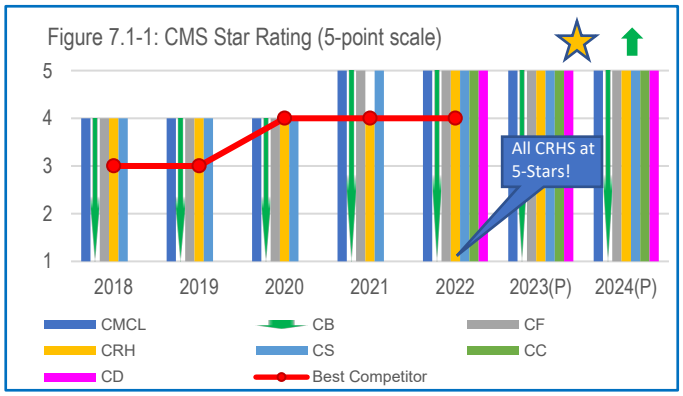
Because of our desire to continuously learn, improve, and innovate, we consistently compare our results with the best performing local competitors in each measure for which we have local comparative data and have provided those data. Where segmented data for our organization shows variance, we will show those segments, but not present segmented results when there is little variability to get the most value-added feedback from the Baldrige examiner team. CRHS elements are shown in clustered columns, while comparative data are shown using lines.

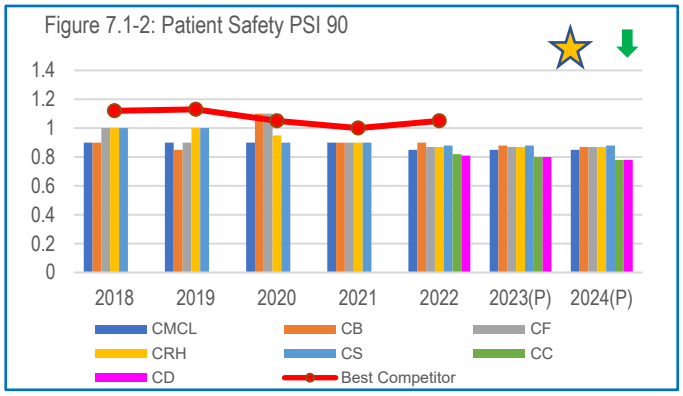
Each results figure has either a green arrow showing desired direction, or a green-shaded beneficial performance range for the measure, as appropriate. Key performance measures associated with strategic goals and objectives (Change-the-business) are indicated with a gold star, all other measures are monitored and evaluated as "Run-the-business" metrics, either at the department / business unit level, or at SQPIC [4.1b(1)] and used as inputs to strategic planning [2.1a(1)]. An icon is shown when a storyboard is AOS for a specific innovation.

7.1 Health Care and Process Results

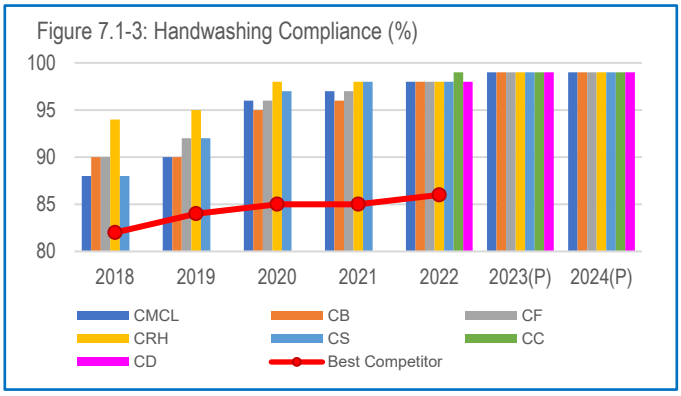
7.1a Health Care and Customer-Focused Service Results

CMS publishes an overall star rating for hospitals on a quarterly basis. All CRHS hospitals achieved 5-stars Q1 of 2022 and maintained that elite **quality** and satisfaction status – achieved by only 14% of US hospitals [7.1-1]. The PSI 90 is a composite overview of hospital-level **quality** related to a set of potentially preventable hospital-related events associated with harmful outcomes for patients [7.1-2].

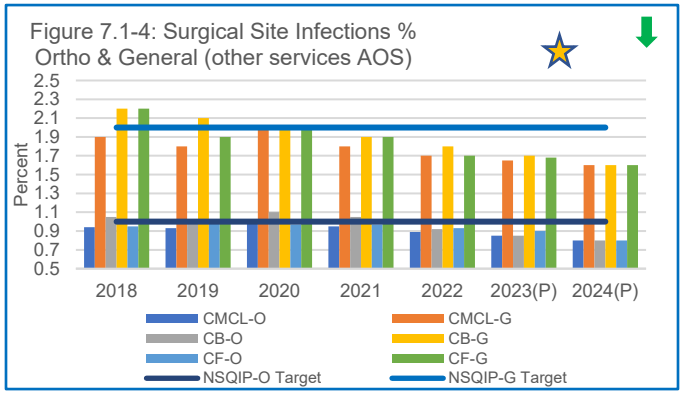




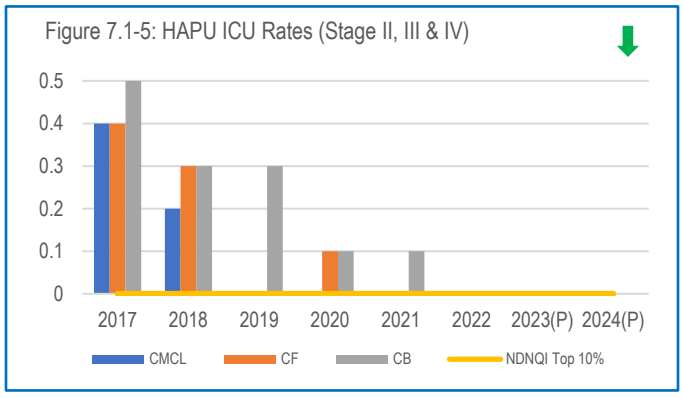
One key element in safely caring for patients and decreasing harm, specifically transmission of infections, is appropriate handwashing [7.1-3]. Compliance is observed by trained "mystery shoppers" and validated by product utilization rates per patient bed day of care.



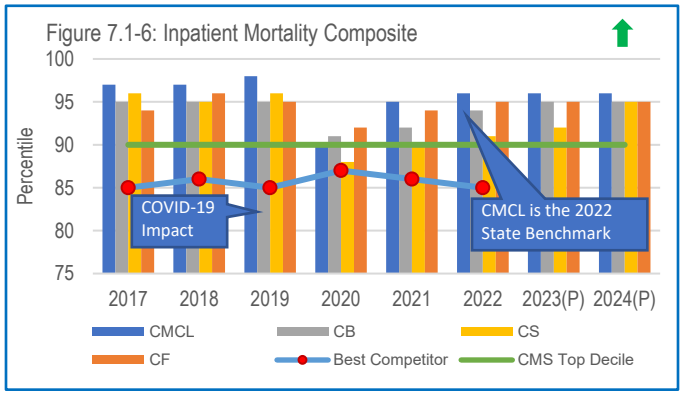
CRHS makes extensive use of evidence-based care bundles published by IHI – practices that when performed collectively and reliably, have been proven to improve patient outcomes. Compliance rates for specific bundles are AOS – high compliance has contributed to improved patient safety. The low incidence of surgical site infections [7.1-4] is presented as an example. Incidence of catheter-associated urinary tract infection and central line associated blood stream infection are similarly low, and the entire CRHS system has not had any ventilator associated pneumonia cases for at least three years.

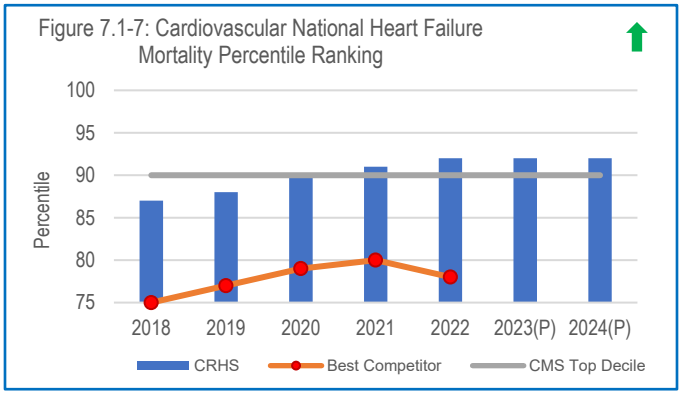


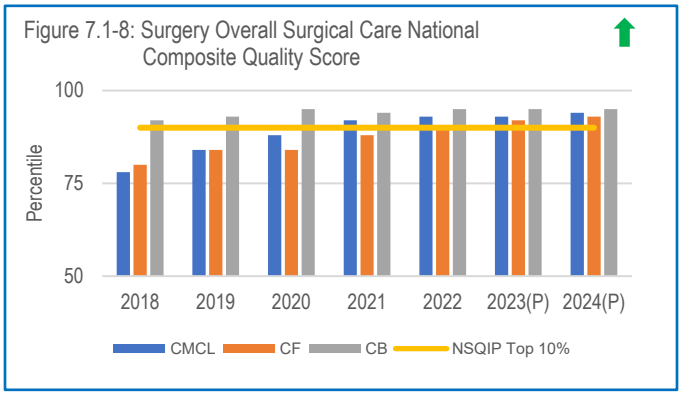
Pressure Ulcer rates have also decreased throughout the system with non-critical care units (including the rehab hospital) achieving no skin breakdown beyond a stage I for the past five years. The ICUs all achieved 0 in 2022 [7.1-5].

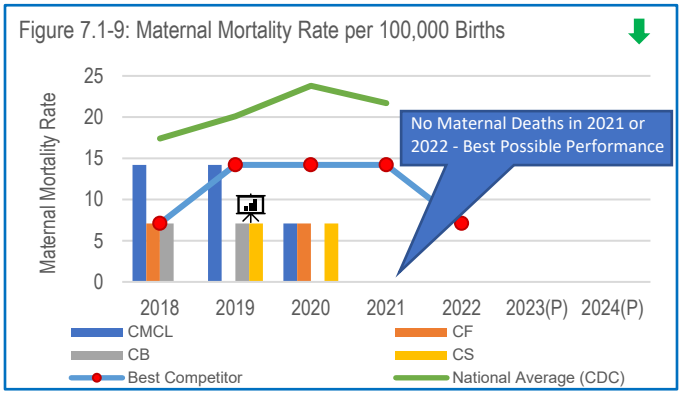


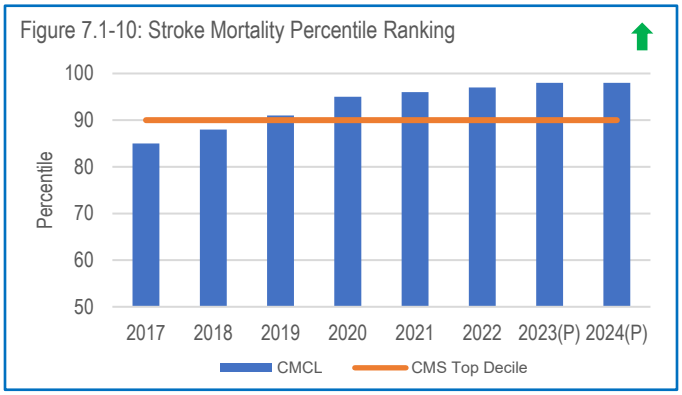
Lowering harm is one contributing factor in the favorably high percentile ranking for overall inpatient **mortality**, which indicates a very low mortality rate normalized for expected mortality based on case mix index / severity of illness. The percentile ranking for the main hospitals as a composite [7.1-6] and for specialty segments [7.1-7 through 10], have achieved national top decile, and exceed competitors. Results for other specialties and the smaller hospitals are AOS.



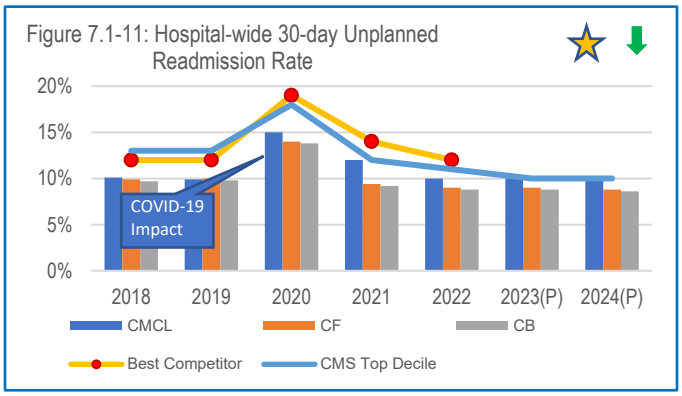




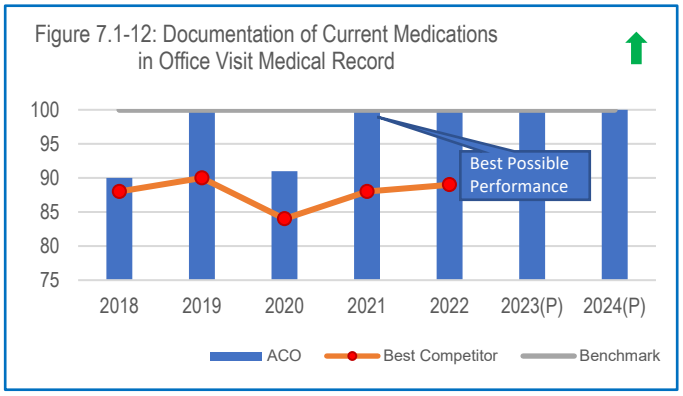


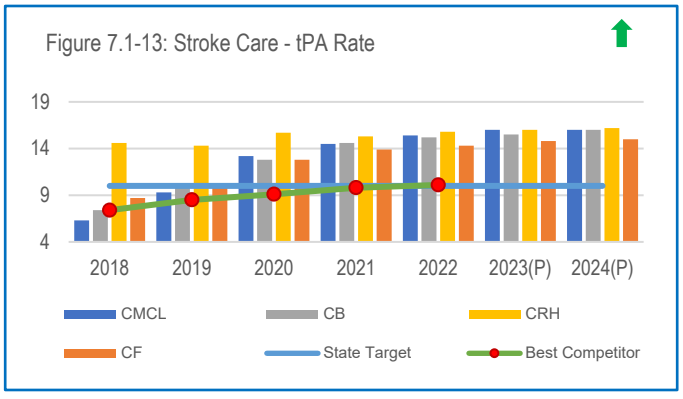


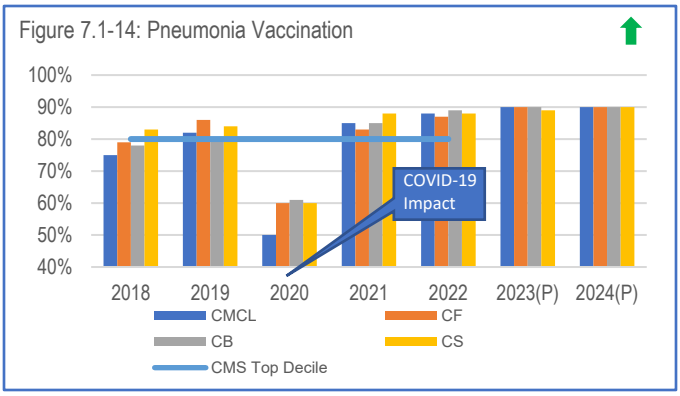
Robust care planning and patient-centered care [6.1b(2)], as well as follow-up after discharge, contribute to the low rate of unplanned readmissions within 30 days [7.1-11].

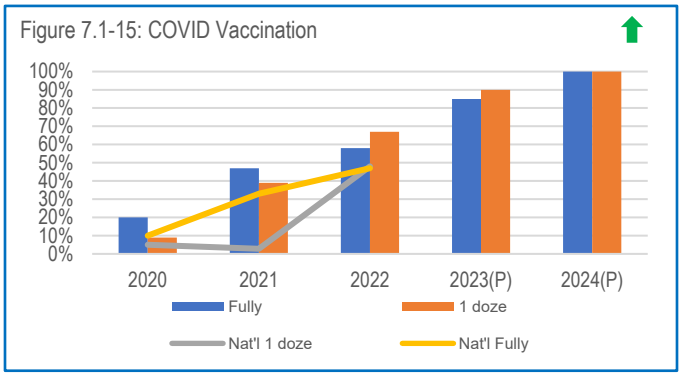


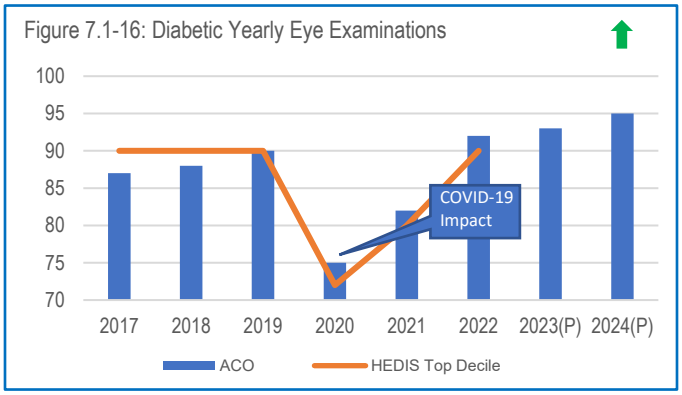
Coordination of care throughout the enterprise [2.1-2], inclusive of the Accountable Care Organization and the Insurance products, also contribute to high **quality** care and best possible **outcomes**. The holistic safety net of in-process measures are leading indicators for outcomes related to patient well-being. All HEDIS measures are monitored and analyzed by each segment (business unit, specialty, patient demographics) and analyzed at SQPIC. Examples of measures are provided [7.1-12 through 16] with a myriad of additional measures and segments AOS. For clarity in the graphs, measures are reported primarily for the larger hospitals. Sharing of processes and practices, particularly since implementing ISO standards for internal audit and corrective action, has resulted in very little variability among the processes or performance of the hospitals.









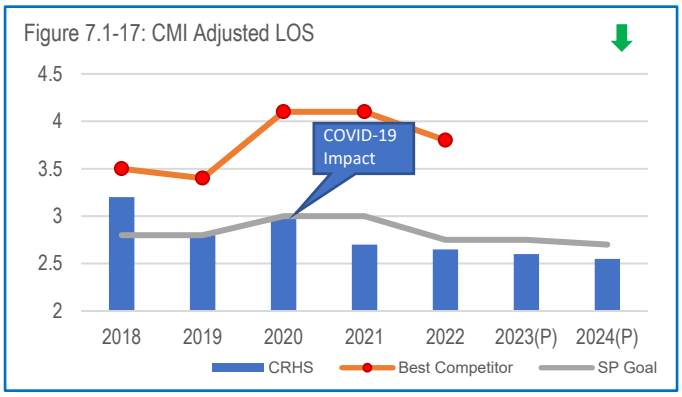


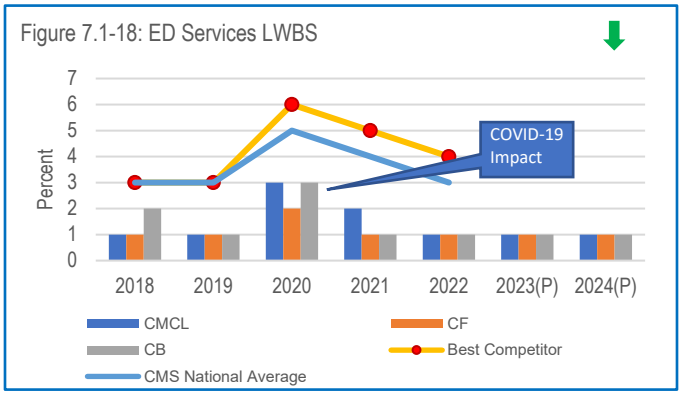
7.1b Work Process Effectiveness Results

7.1b(1) Process Effectiveness and Efficiency

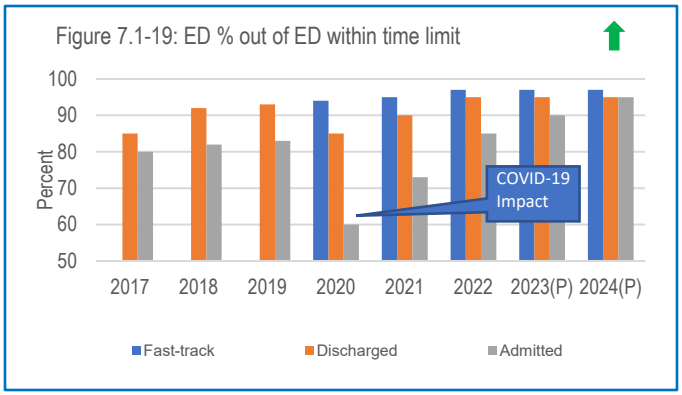
Patients require timely access to get in for health care, and efficient treatment to get back out [P.1-4]. Multidisciplinary approaches to patient-centered care, and holistic collaboration across the continuum of care [2.1-2] create efficiency for inpatients [7.1-17], evidenced by the overall LOS.

Efficiency is also demonstrated in the ED [7.1-18]. Very few patients leave prior to being seen and evaluated by a provider. A "fast track" was implemented during COVID, where patients coming in for minor conditions were assigned to a recliner chair vs. a bed – quickly evaluated and treated, then released.

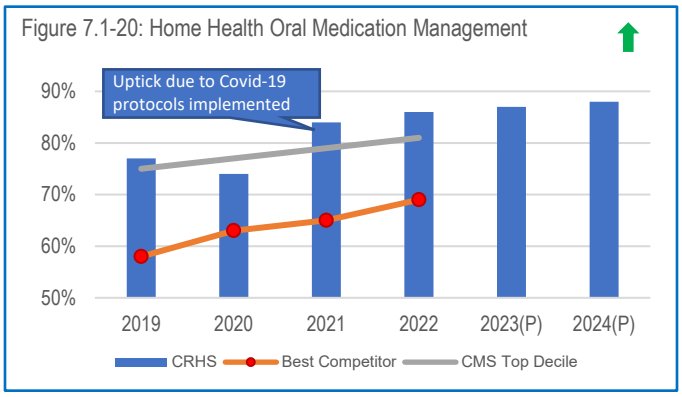


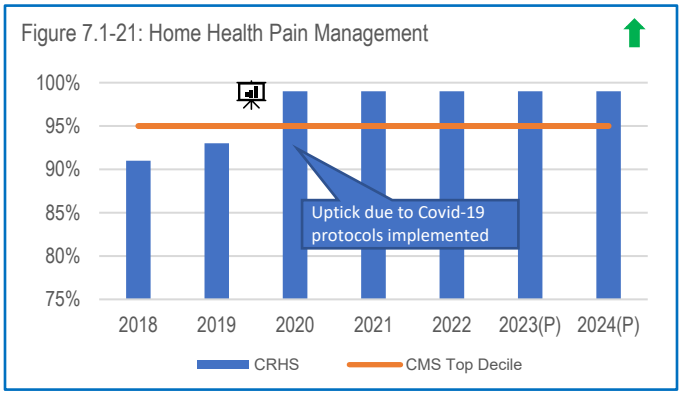


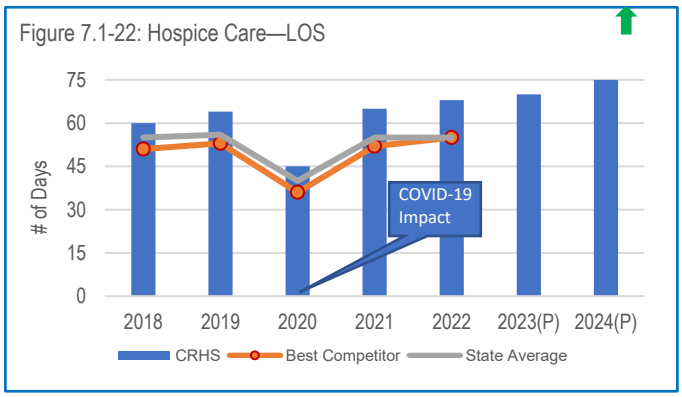
The measure was also changed from the average length of stay to the percent goal achievement [7.1-19] in order to better analyze instances where the goal time is not met. The time limits are that fast track patients are discharged within one hour of arrival, other patients who don't require admission will be discharged within two hours, and those requiring admission will be in an inpatient bed within four hours. Comparison data are not available, as most hospitals report only average times.



Home health and hospice patients have different expectations, primarily management of medications, and particularly for pain medications [7.1-20 and 21].



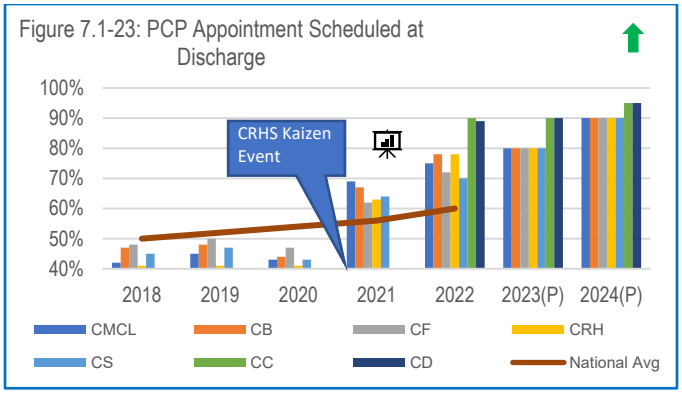


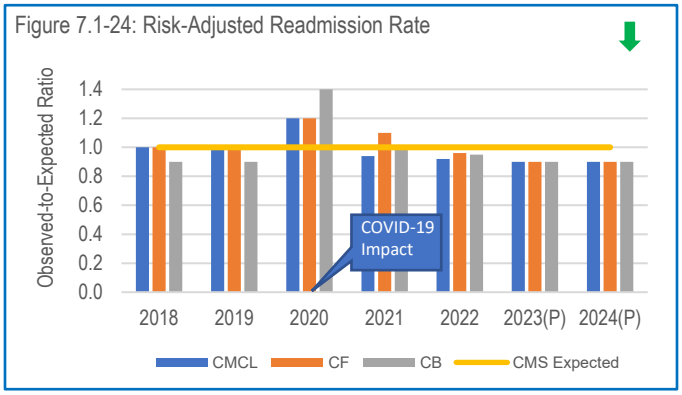


For hospice patients, a longer LOS is desirable in order to provide the maximum benefit of the program to patients and their families [7.1-22].

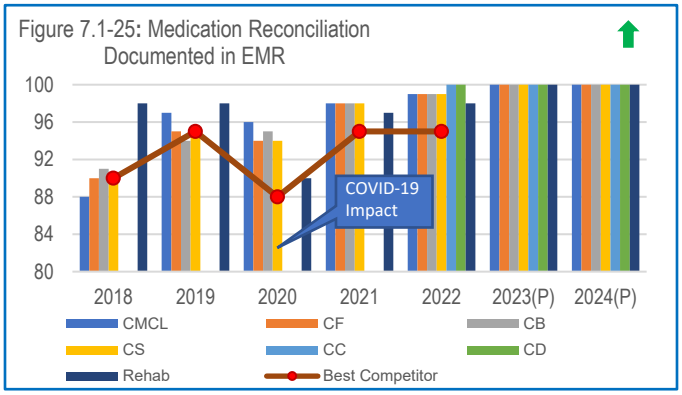
Outcomes improve when patients have timely follow-up after an inpatient stay. CRHS expedites this process by scheduling the follow-up appointment prior to discharge [7.1-23].

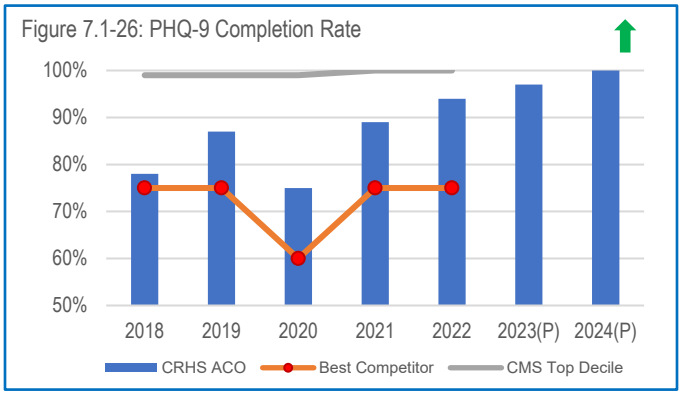
The key risk to shorter LOS is a premature discharge, resulting in a readmission. CRHS has worked to achieve balance and is "better than expected" [7.1-24] and are satisfied with information given to prepare for discharge [7.2-4].



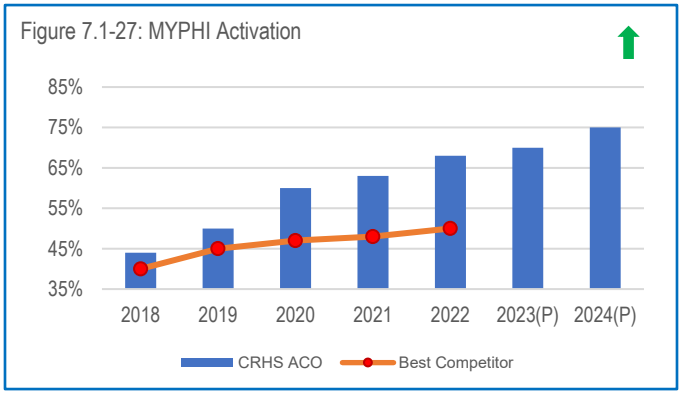


High quality care depends on accurate, reliable information about the patient status. Examples of measures include an accurately documented list of medications the patient was taking prior to coming in for care [7.1-25] and a full assessment of patient status, including screening for mental health issues such as depression [7.1-26].

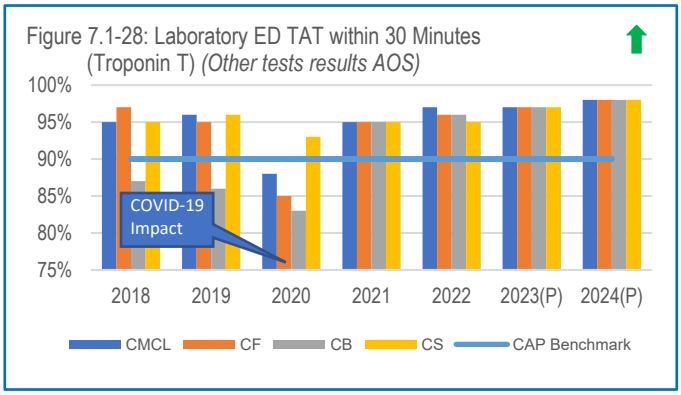


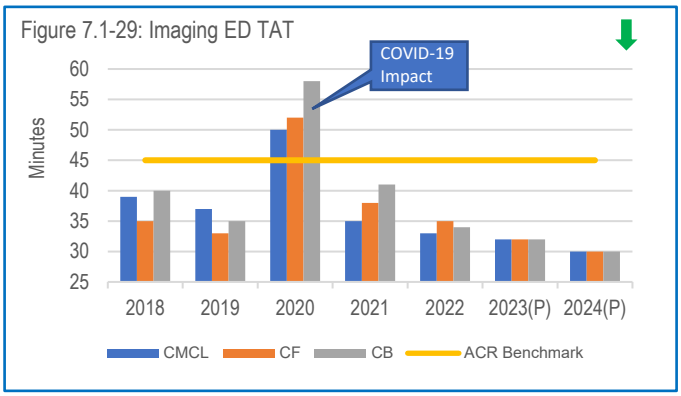


Having patients engaged in their own care also supports effectiveness and well-being. One leading indicator of patient engagement is activation of the MYPHI software [7.1-27], which enables secure communication with providers, viewing test results, after-visit summaries, and prescription refills.

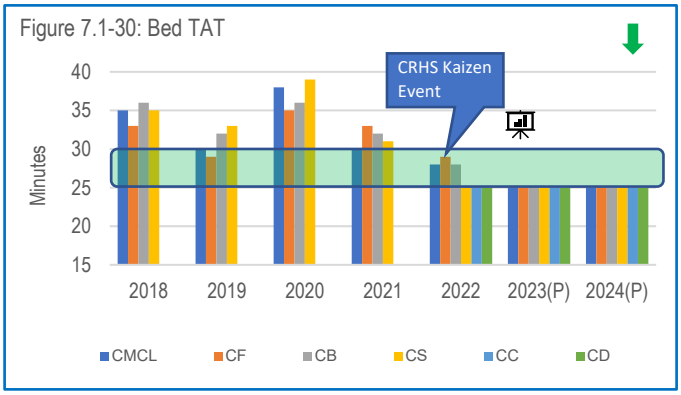


Efficiency in reporting results of various tests helps providers of care make evidence-based care decisions in a timely manner. CRHS tracks turn-around-time (TAT) for all diagnostic tests [examples 7.1-28, 7.1-29] except for cultures that take 3 days to declare "no growth." Additionally, when a result is in a designated "critical" range, lab personnel immediately contact a nurse or provider directly by telephone. If the result was given to a nurse, such as in an ED, inpatient, or home care situation, the nurse contacts the provider to determine whether additional orders are required. Internal audits have demonstrated 100% compliance with this process for 2021 and 2022, and providers were informed of critical test results by either lab or nursing personnel within 30 minutes.

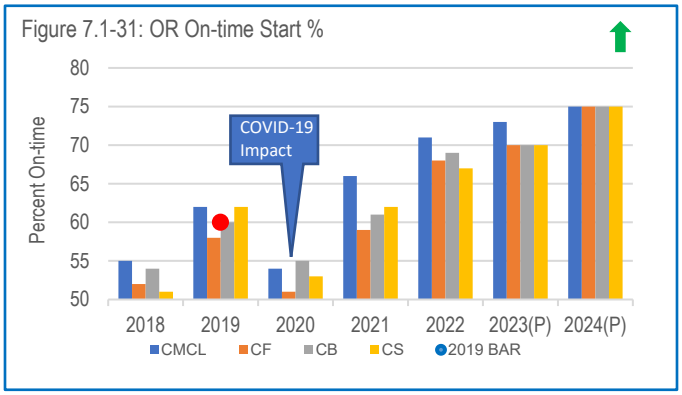




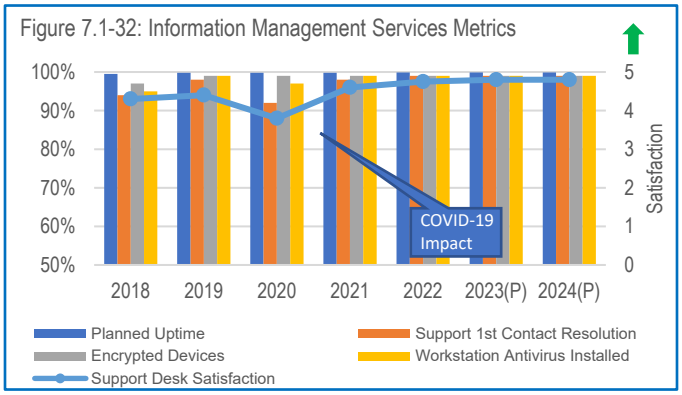
A key element in efficient operations is not having empty beds while patients are waiting to be assigned to a room. CRHS conducted a Kaizen event in 2022 to determine the most efficient process to clean a room, while maintaining effectiveness of the products. The optimum time was found to be 25-30 minutes, which aligns to the APIC guidance that 25 minutes is the minimum time needed for proper cleaning.



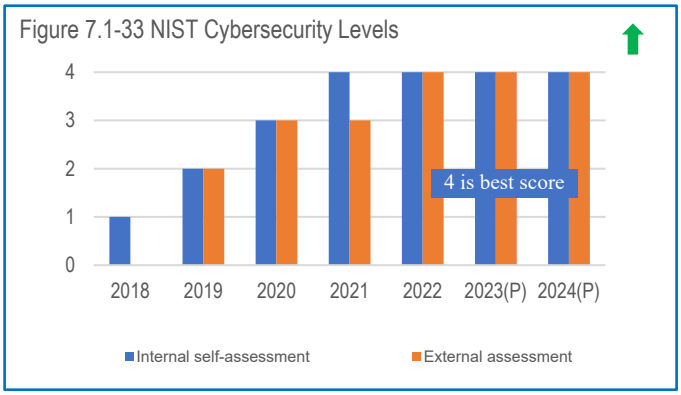
Another key efficiency measure is whether the first case of the day in each operating room begins on time [7.1-31]. CRHS had a Kaizen event to address this topic in 2019 and performance was improving until COVID. The ORs were shut down for most cases in early 2020, and staffing was a major issue, as well as surgeons and anesthesia personnel being overwhelmed in providing care. Performance has continued to improve during 2021 and 2022.



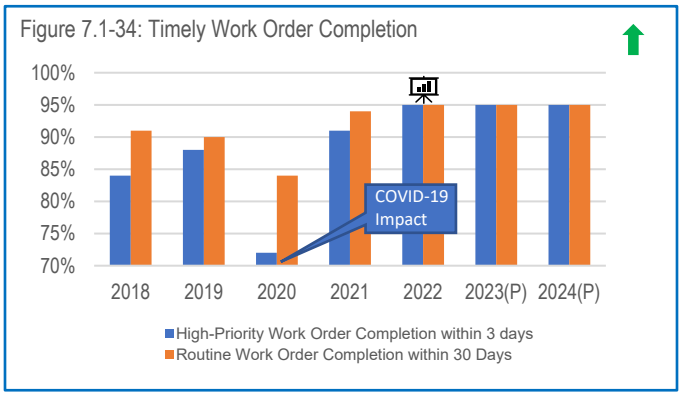
COVID also disrupted efficiency and effectiveness of support services. Support from information management [7.1-32] declined in 2020, primarily due to staffing issues, increased IT demands related to remote work and telehealth, and social distancing.



Performance of systems was maintained throughout the pandemic, and full compliance with the NIST cybersecurity guidelines was achieved in 2022 [7.1-33].



Support from facilities and biomedical engineering suffered similarly during the early phase of the pandemic, partially due to timeliness waivers granted by CMS for many "routine" operations and partially due to staffing shortages. Timeliness of successfully closing work orders is now above the pre-COVID baseline and achieving the established goals [7.1-34]. Data segmented by facility is AOS, as well as the analysis of any outlier delays – typically due to a shortage of repair parts. Additionally, in 2022, 100% of all preventive maintenance, inspections, and testing of infrastructure systems and equipment was completed on schedule.



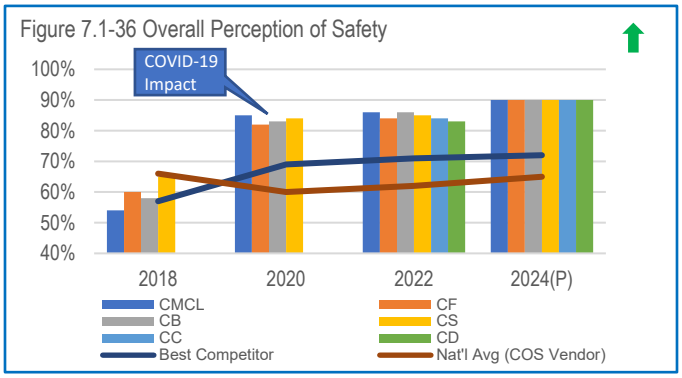
7.1b(2) Safety and Emergency Preparedness

Many processes were disrupted in 2020 due to the pandemic. Given the actual emergency declaration, drills of emergency situations were suspended or scaled back in scope and/or frequency under waivers to alleviate pressures on the staff and keep the focus on the true emergency situation. In 2020, environment of care (EOC) rounds were replaced by frequent leader rounding, monitoring of "space, staff, and stuff" [1.1c(1)] throughout the organization and daily checks of air flow and other environmental safety considerations. Despite the ongoing public health emergency declaration, CRHS returned to normal operations in 2021, with 100% performance of all drills, tests, and inspections [7.1-35].

7.1-35 Emergency and Disaster Preparedness Results

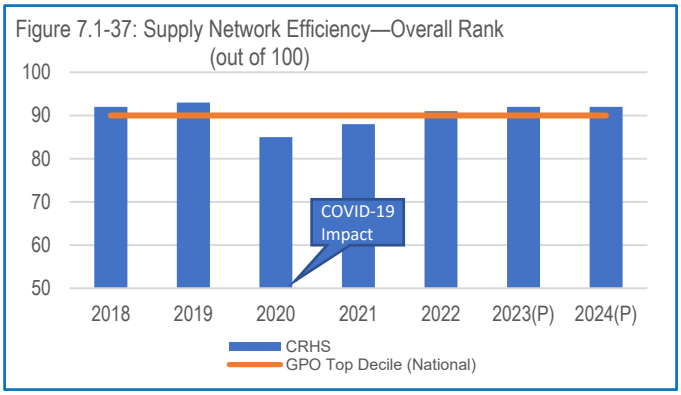
	2018	2019	2020*	2021	2022	2023(P)	2024(P)
Fire Drills	100%	100%	50%	100%	100%	100%	100%
State Disaster Drills	100%	100%	0%	100%	100%	100%	100%
Regional Drills	100%	100%	0%	100%	100%	100%	100%
County Drills	100%	100%	0%	100%	100%	100%	100%
EOC Rounds	100%	100%	50%	100%	100%	100%	100%
Code Pink	100%	100%	100%	100%	100%	100%	100%
Code Black	100%	100%	100%	100%	100%	100%	100%

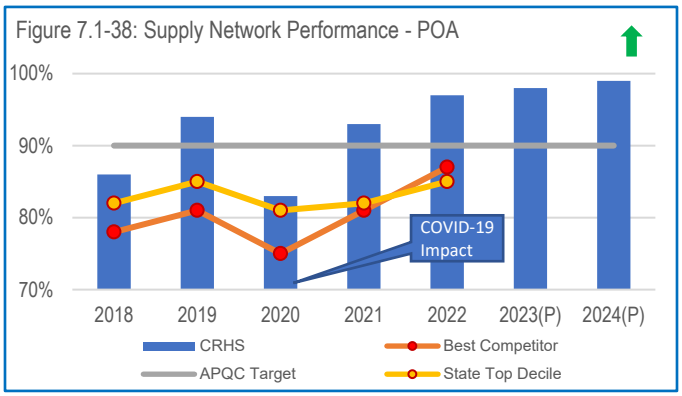
The CRHS Culture of Patient Safety survey is conducted approximately every 18 months, with action plans developed to improve the lowest scoring areas after results are provided by the vendor. Effective communication helped ensure COVID had little impact on the perception that CRHS has a core competency of providing safe, high-quality clinical care. The COS survey for clinics and home health were initiated in 2022, with results AOS.



7.1c Supply-Network Management Results

The pandemic underscored the critical importance of the supplier network and the benefits of good communication and solid relationships with suppliers. Supply networks were stressed by increased consumption and decreased production creating many shortages. ISO has strengthened relationships between CRHS and individual suppliers, in addition to the GPO overall. Clear, frequent feedback about suppliers meeting requirements and expectations and sharing processes has aided recovery of efficiency [7.1-37] and performance [7.1-38]. Performance is defined as the percent of orders that are appropriate (POA), defined as on-time, complete, damage free, and with accurate documentation.





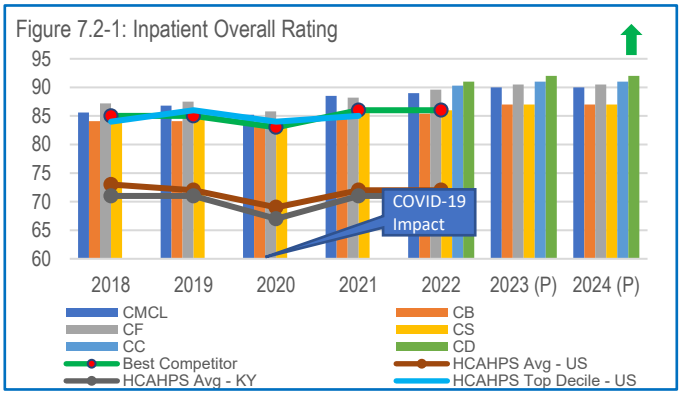
7.2 Customer Results

7.2a Patient- and Other Customer-Focused Results

Patient satisfaction data are obtained primarily through a formal survey process driven by CMS requirements and administered through Kress Daney, known as the Consumer Assessment of Healthcare Providers and Systems (CAHPS). Data are available for Hospitals (HCAHPS), Emergency Department (EDCAHPS), Clinicians and Groups (CGCAHPS), Home Care (HHCAHPS), Hospice, Health Plans, Mental Health, and Ambulatory surgery. CRHS participates in all surveys for the services offered, and full data sets, segmented to the individual nursing unit or provider group are available on site, in addition to segmentation by various patient demographics. Results are analyzed monthly at the unit / provider level and discussed at SQPIC [4.1b(1)]. Because results impact reimbursement rates from CMS ideas to raise scores are encouraged for shark tank consideration. Frequently, ideas are implemented on a pilot basis at one unit or facility, then deployed to other areas after evidence of beneficial impact is available.

7.2a(1) Patient and Other Customer Satisfaction

A sampling of **satisfaction** results for key business units and survey questions are provided, with full details and additional segmentation AOS. The pandemic decreased scores significantly, primarily due to mandated restrictions on visitation and incredibly high patient volumes. Innovative ideas helped CRHS demonstrate agility and "bounce forward" – scores are now higher than pre-pandemic.



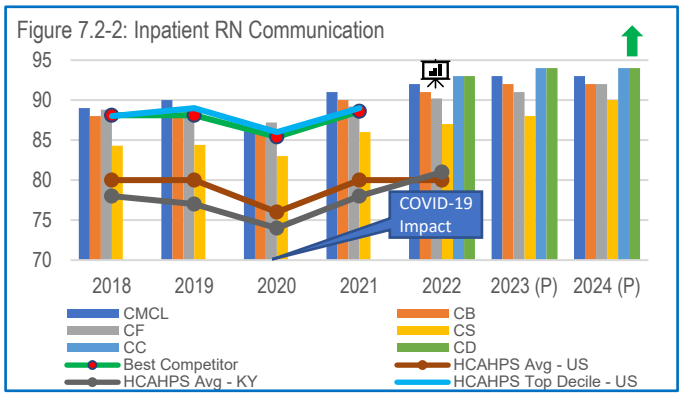


Figure 7.2-2: Inpatient RN Communication
95
90
85
80
75
70
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
CMCL
CF
CC
Best Competitor
HCAHPS Avg - KY
CB
CS
CD
HCAHPS Avg - US
HCAHPS Top Decile - US

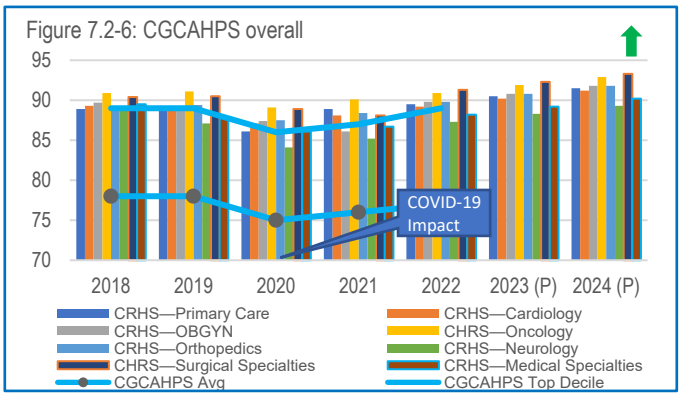


Figure 7.2-6: CGCAHPS overall
95
90
85
80
75
70
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
CRHS—Primary Care
CRHS—OBGYN
CRHS—Orthopedics
CRHS—Surgical Specialties
CGCAHPS Avg
CRHS—Cardiology
CRHS—Oncology
CRHS—Neurology
CRHS—Medical Specialties
CGCAHPS Top Decile

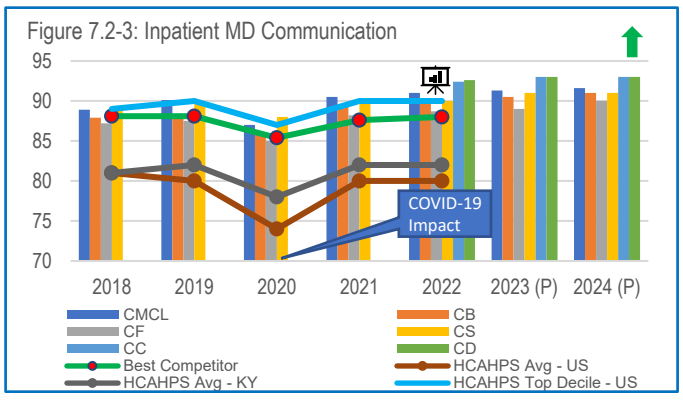


Figure 7.2-3: Inpatient MD Communication
95
90
85
80
75
70
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
CMCL
CF
CC
Best Competitor
HCAHPS Avg - KY
CB
CS
CD
HCAHPS Avg - US
HCAHPS Top Decile - US

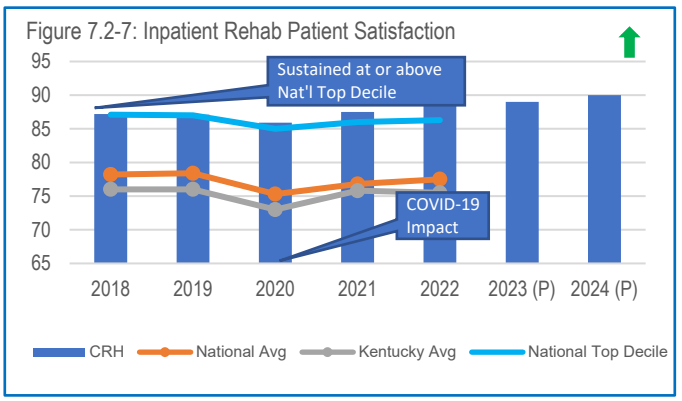


Figure 7.2-7: Inpatient Rehab Patient Satisfaction
95
90
85
80
75
70
65
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
Sustained at or above Nat'l Top Decile
COVID-19 Impact
CRH
National Avg
Kentucky Avg
National Top Decile

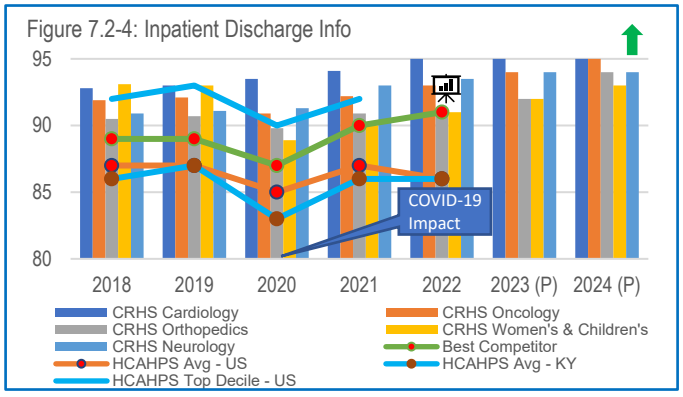


Figure 7.2-4: Inpatient Discharge Info
95
90
85
80
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
CRHS Cardiology
CRHS Orthopedics
CRHS Neurology
HCAHPS Avg - US
HCAHPS Top Decile - US
CRHS Oncology
CRHS Women's & Children's
Best Competitor
HCAHPS Avg - KY

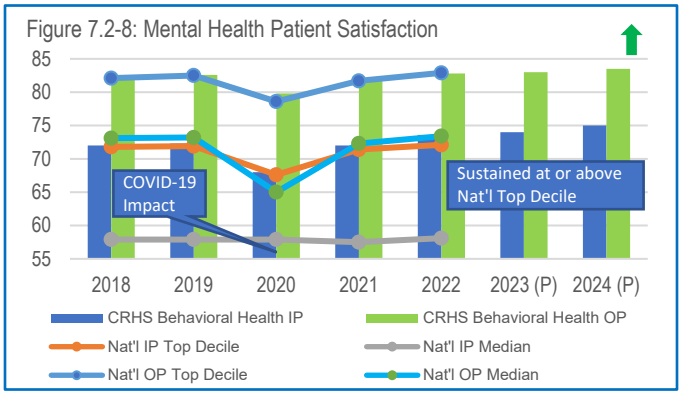


Figure 7.2-8: Mental Health Patient Satisfaction
85
80
75
70
65
60
55
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
Sustained at or above Nat'l Top Decile
CRHS Behavioral Health IP
Nat'l IP Top Decile
Nat'l OP Top Decile
CRHS Behavioral Health OP
Nat'l IP Median
Nat'l OP Median

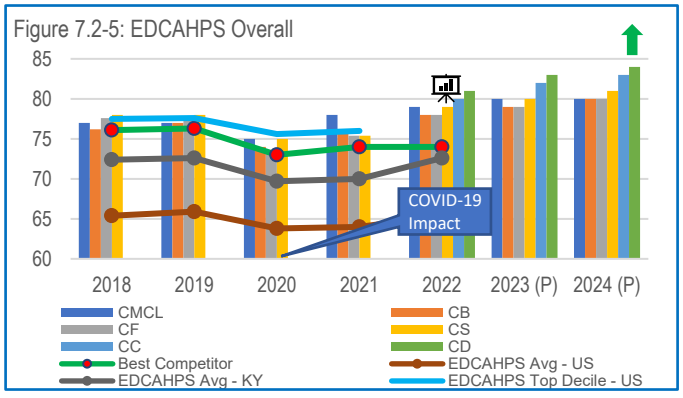


Figure 7.2-5: EDCAHPS Overall
85
80
75
70
65
60
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
COVID-19 Impact
CMCL
CF
CC
Best Competitor
EDCAHPS Avg - KY
CB
CS
CD
EDCAHPS Avg - US
EDCAHPS Top Decile - US

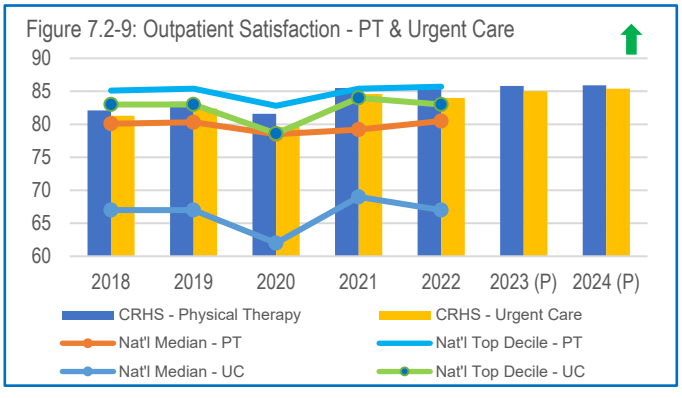
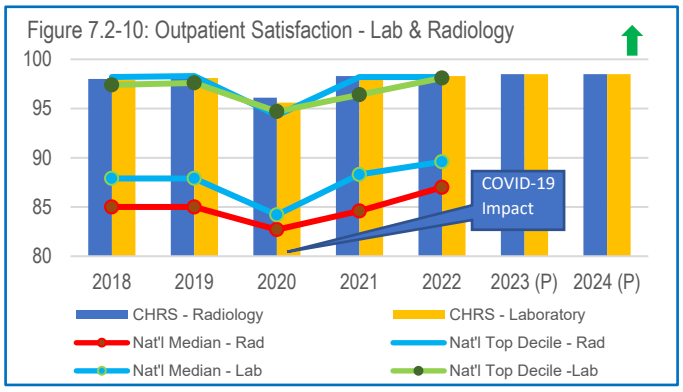
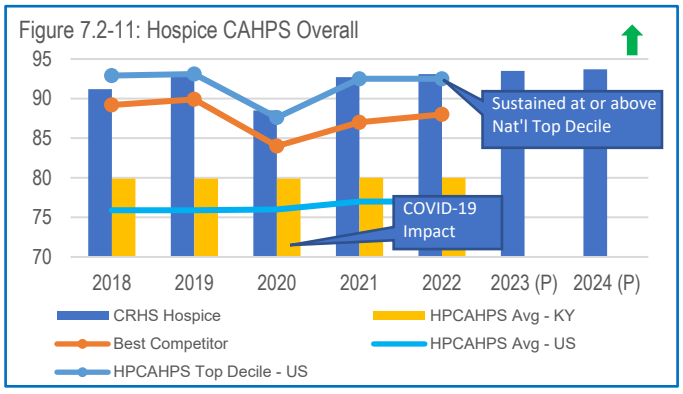
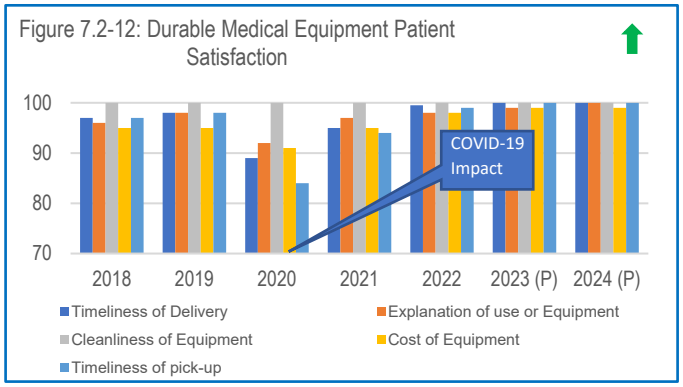
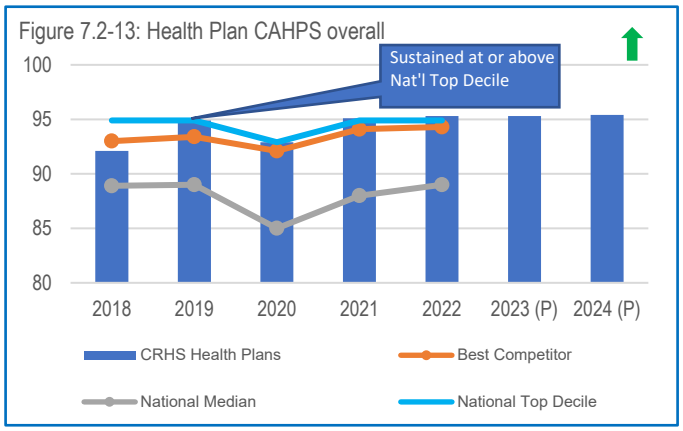


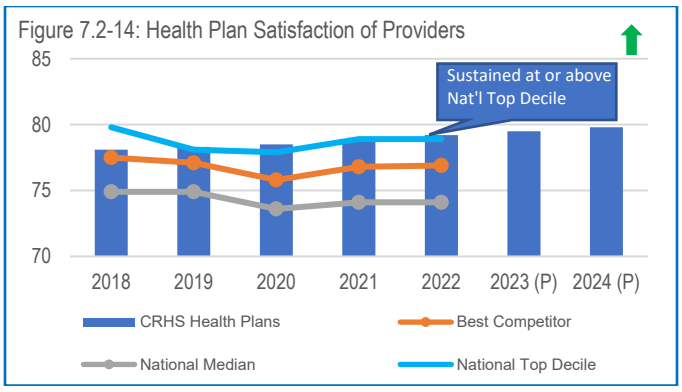
Figure 7.2-9: Outpatient Satisfaction - PT & Urgent Care
90
85
80
75
70
65
60
2018
2019
2020
2021
2022
2023 (P)
2024 (P)
CRHS - Physical Therapy
Nat'l Median - PT
Nat'l Median - UC
CRHS - Urgent Care
Nat'l Top Decile - PT
Nat'l Top Decile - UC





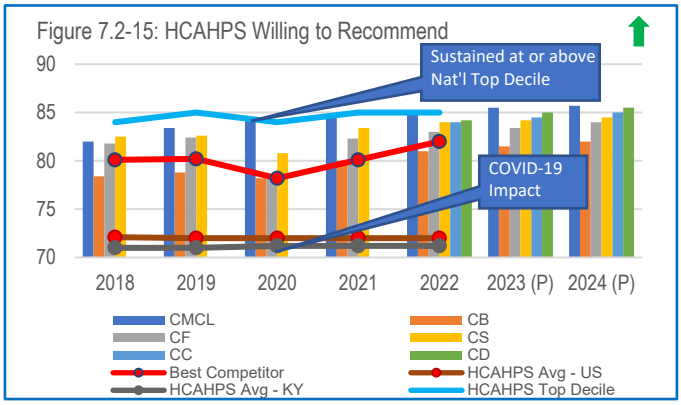


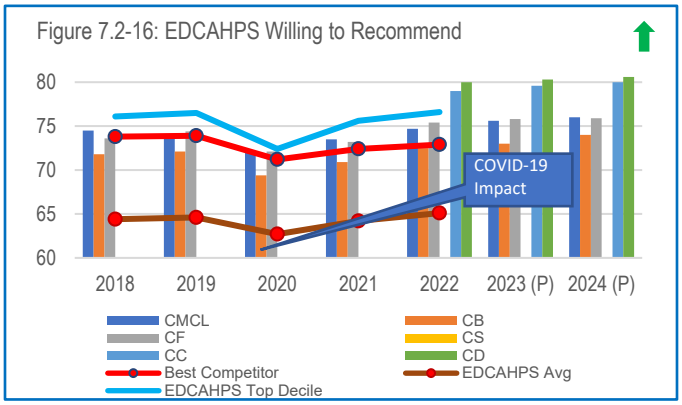


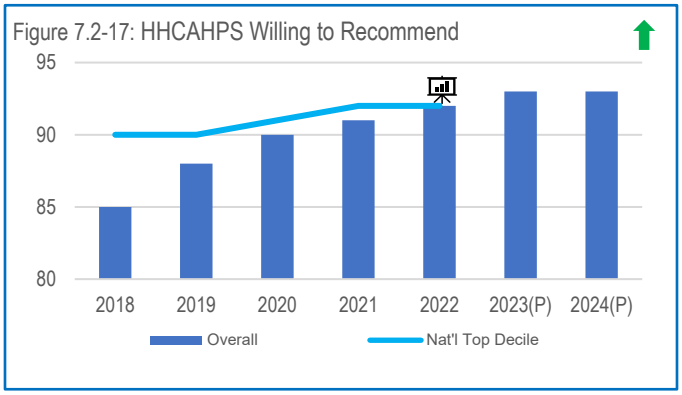


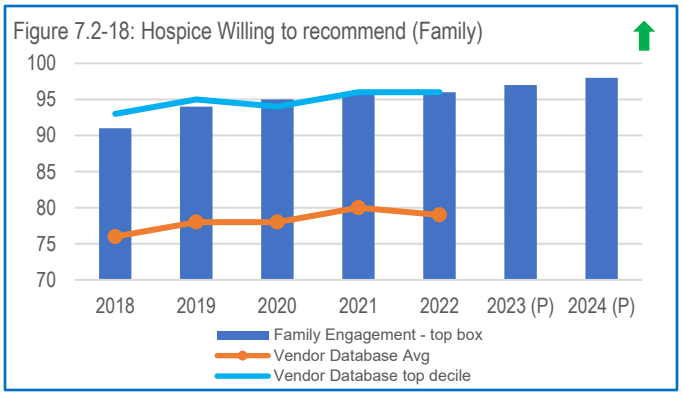
7.2a(2) Patient and Other Customer Engagement

A key element in CRHS growth is patients and families, and the community to actively **advocating and recommending** service offerings. The Hospital, ED, Home Health, and Hospice surveys include a specific "willing to recommend" question [7.2-15 – 7.2-18].

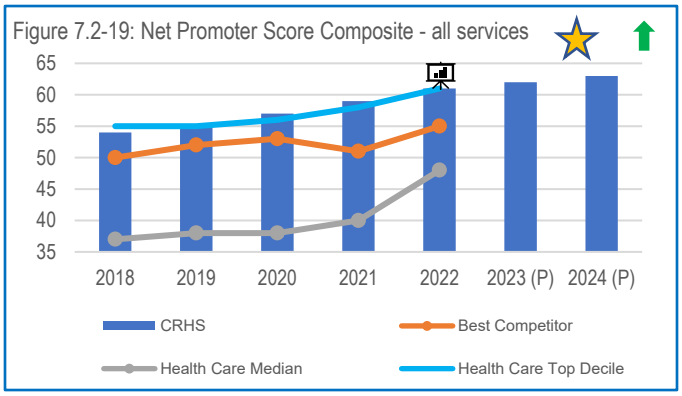


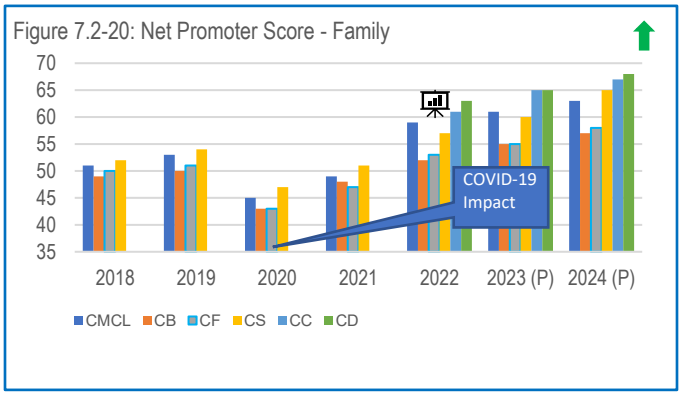




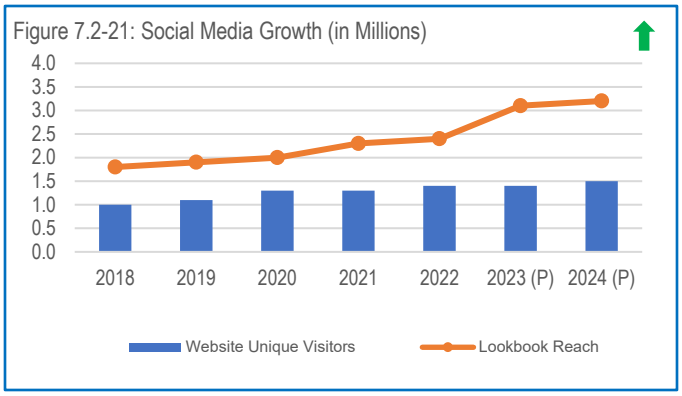


A Net Promoter Score (NPS) is calculated to evaluate engagement when a direct measure of engagement is not available. The composite and family composite are provided [7.2-19 and -20]. Full segmentation by service line, business unit, specific area where care was provided, customer type (patient / family / community), and other customer demographics results are AOS.

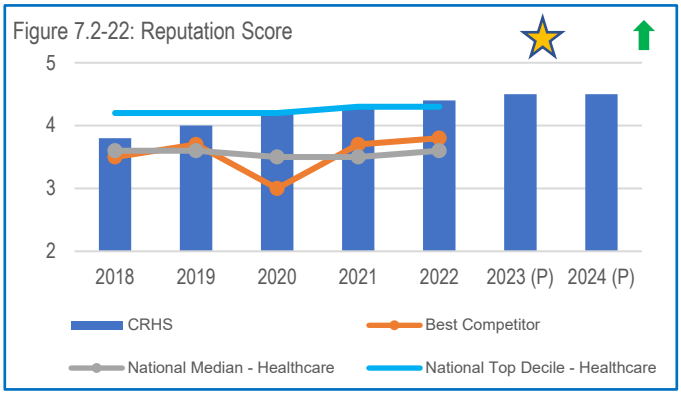




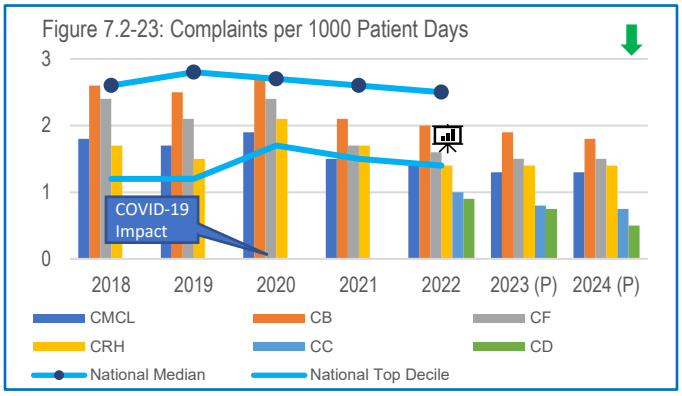
Much insight can also be gained from the growing presence of CRHS in social media [7.2-21]. Additional information is captured from other social media, such as Chatgram, Vidtube, and Short-time. Full metrics are AOS. Data captured are also segmented by "incoming" (defined as someone posting about CRHS) or "outgoing" (defined as a CRHS outreach posting). Outreach posting has attracted an increasingly significant number of patients coming to CRHS from outside the typical service area. No comparison data are available.



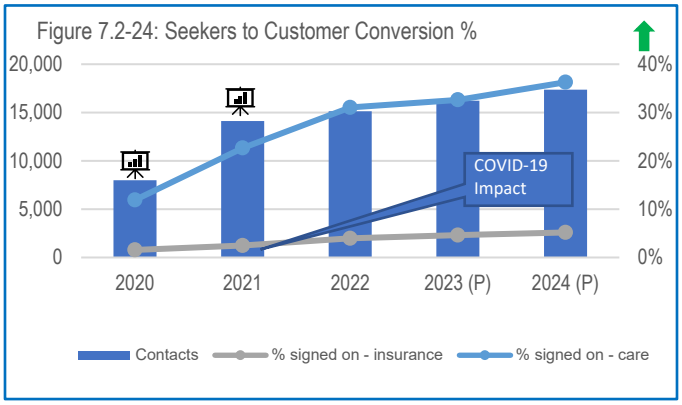
CRHS also tracks the reputation score [7.2-22] as an engagement proxy for willingness to recommend of the system overall. The measure includes how easily customers can find CRHS online, online reviews, social media presence and activity levels and overall sentiment, particularly from the surveys and focus groups used to gather information for the community health needs assessment.



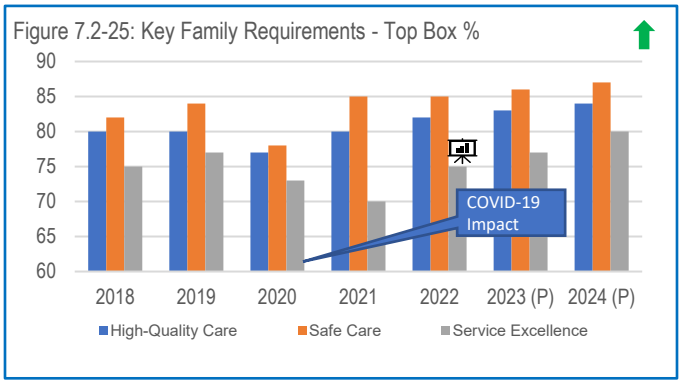
Complaints [7.2-23] are addressed individually and also aggregated for analysis and discussion at SQPIC regarding any discernable patterns and trends to prevent future occurrences. The improvement in 2022 was related to the discipline of using ISO principles to create a corrective action plan and evaluate similar circumstances where the event may recur. Fully segmented data are AOS.



The innovative *Seekers* program [3.1b(2)] provides outreach to convert potential customers into actual customers. The program was instrumental in outreach in the Carlisle and Danville areas when the micro-hospitals were opened in existing (closed hospital) facilities with different services than had been offered previously [7.1-24].



The surveys and focus groups used to gather information for the community health needs assessment also capture data from people who had a family member receive care at CRHS. Coupled with other listening methods [3.1-2], data are compiled and analyzed into information about how well key family requirements are met [7.2-25]. No comparison information is available, as this is an internal CRHS metric. Results are included in the family NPS [7.2-20] for analysis.



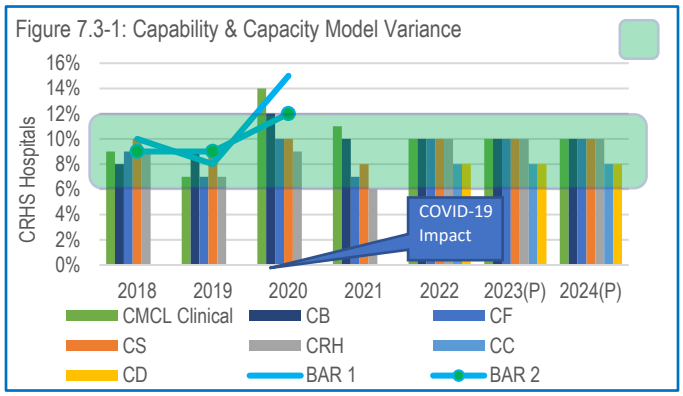
7.3 Workforce Results

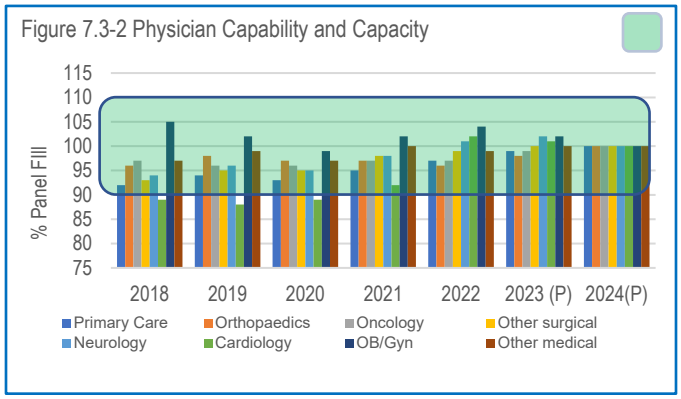
7.3a Workforce-Focused Results

Aligned with the Leadership system [1.1-1] and MVV [P.1-1] CRHS supports customers by supporting the workforce. The pandemic created a unique set of challenges – staff and supply shortages and increased staff stressors and illness during a time of patient surge. In order to understand and address workforce (WF) issues, CRHS segments by workforce classification and/or location, as appropriate. Many other segment results are AOS, down to the work unit level in most cases.

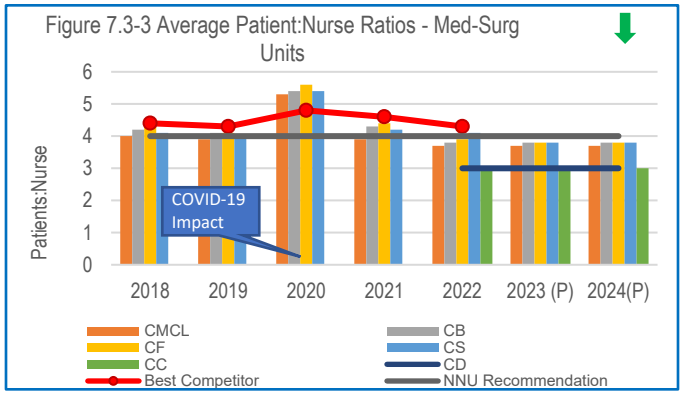
7.3a(1) Workforce Capability and Capacity

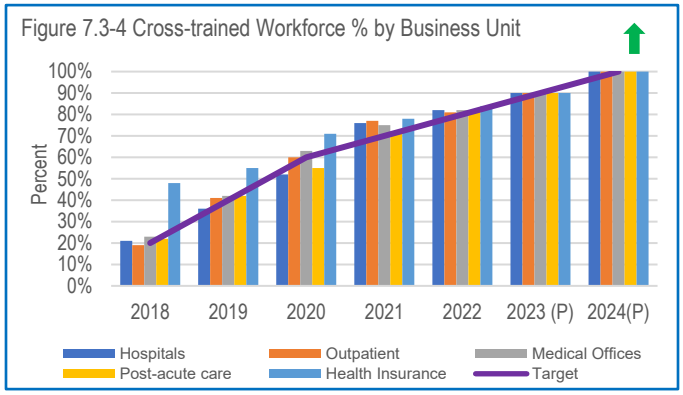
The Capability and Capacity Model (CCM) [5.1a(1)] is used to ensure appropriate staffing levels. Variance is tracked [7.1-1 and 7.1-2] to ensure that sufficient, but not excessive staff are available for each segment.

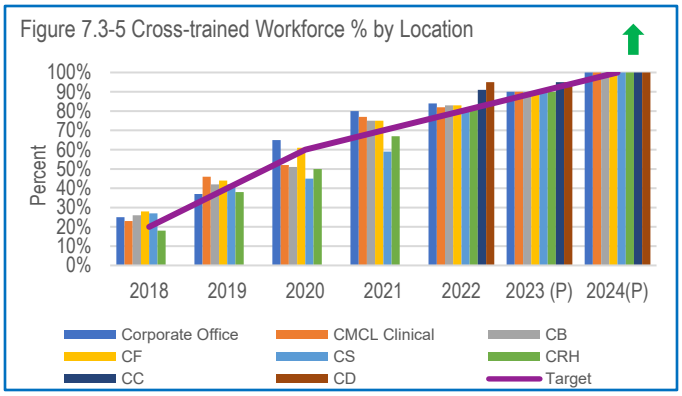




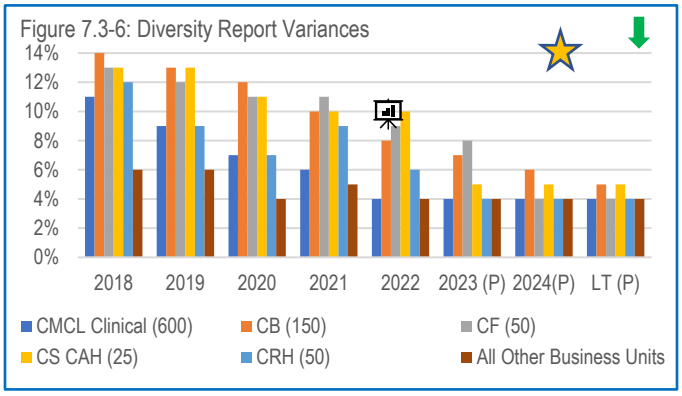
During 2022, CRHS worked diligently to return to appropriate staffing levels [7.3-3] and decrease the utilization of traveling and agency personnel, including locum tenens and temporary physician staffing coverage. Staffing agility has been enhanced by willingness of staff to be cross-trained, both to different business units [7.3-4] and locations [7.3-5]. Additional data are AOS.



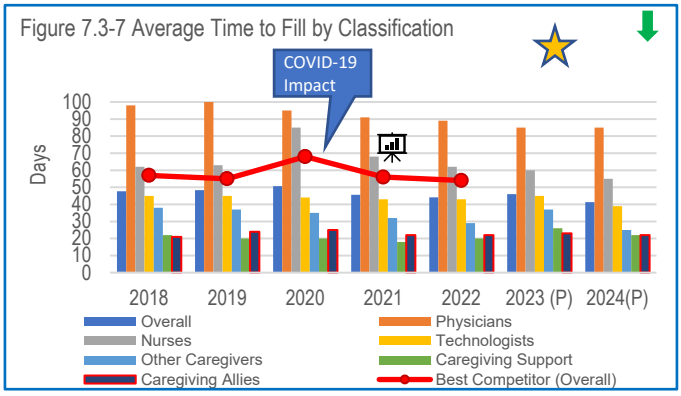




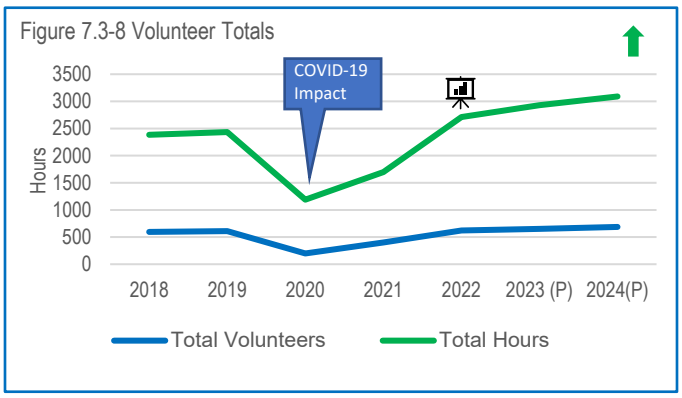
The CRHS HR department tracks variance of workforce diversity [7.3-6] from community diversity. As hiring increased post-COVID, training was provided about best hiring practices to enhance the diversity of the workforce and promote equity and inclusion in the workplace – with consideration for learning styles, personality types, experience, etc. – well beyond the typical DEI segments.

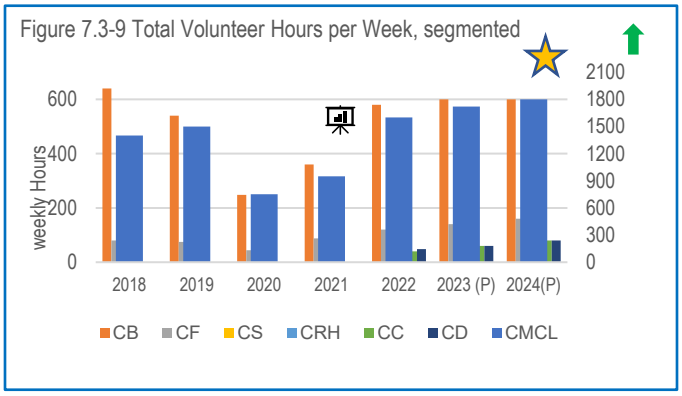


Desire to hire the "right" person is balanced with the need to fill positions quickly, a significant challenge during COVID.

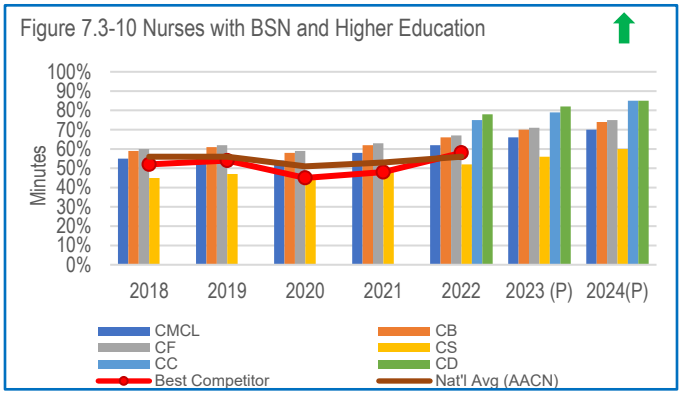


Volunteers were not working during most of 2020 and part of 2021. Some choose not to return, but recruitment efforts have returned the number of volunteers and the hours [7.3-8] to near or above pre-pandemic levels for all facilities [7.3-9]. Note to [7.3-9], CMCL is shown on the secondary axis because volunteer hours at the largest hospital in a metropolitan area are far greater than at the other facilities.



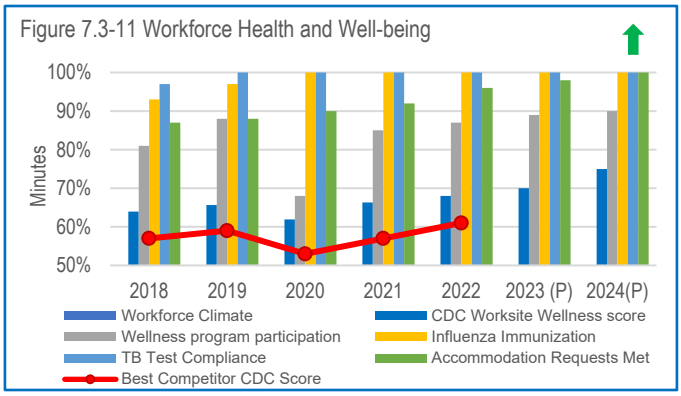


Capability is demonstrated by 100% compliance for many years with job position requirements, licensure verification, physician credentialing process, and completion of mandatory training as a condition of ongoing employment. CRHS exceeds capability requirements in many areas, such as RNs who have a college degree [7.3-10].



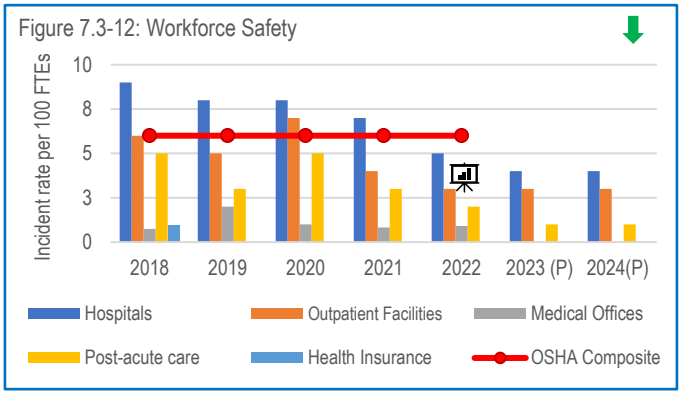
7.3a(2) Workforce Climate

Workforce **health** is evaluated by workforce engagement in their own well-being as defined by the CDC [7.3-11], partially as a role-model for patients. COVID vaccination, as mandated by CMS, is 100%, including those with accepted exemptions. Workforce **accessibility** is evidenced by the percentage of accommodation requests that are determined to be reasonable and are met. Detailed scores in each of the 18 measurement areas are AOS.

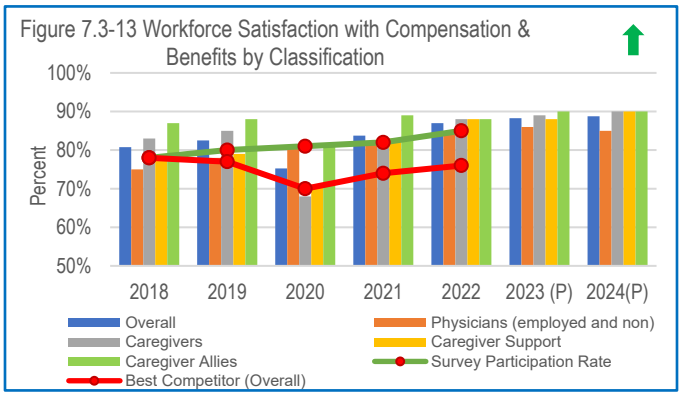


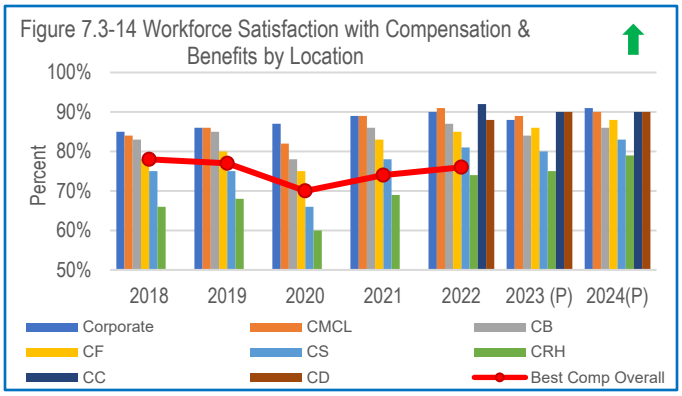
A **security** question was added to the 2022 workforce survey regarding incivility in the workplace, based on a 2021 report from OSHA. OSHA defined Incivility as intimidation, harassment, victimization, aggression, emotional abuse, and psychological harassment or mistreatment at workplace, and reported as 21% of nurses reporting being physically assaulted by others on the workforce or patients, and over 50% reporting verbal abuse. As a new measure, only a single data point is available, with CRHS nurses reporting 14% experiencing physical assault and 32% reporting verbal abuse, primarily by patients. While better than the OSHA average, CRHS has taken action to create a safe and secure workplace for all.

Perception of safety is measured on the employee survey [7.3-12], and CRHS was highly successful at avoiding workplace transmission of COVID. OHSA VPP star status was achieved in 2020 and anticipated to be renewed in 2023.



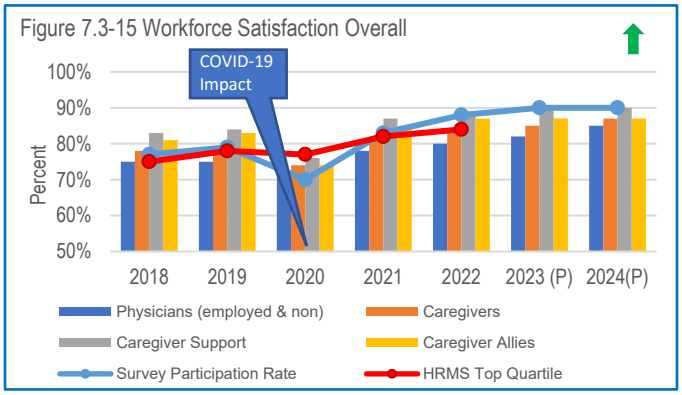
Satisfaction with compensation and benefits is primarily assessed through formal surveys [5.2a and 5.2b]. Segmented analysis is done by job classification [7.3-13], location [7.3-14], and a variety of employee demographics [AOS].

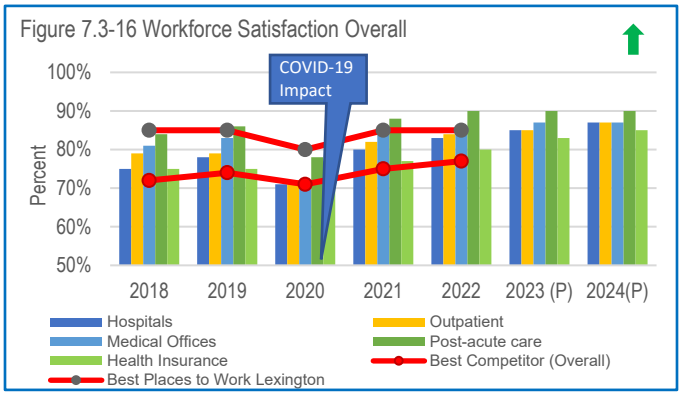




7.3a(3) Workforce Engagement and Retention

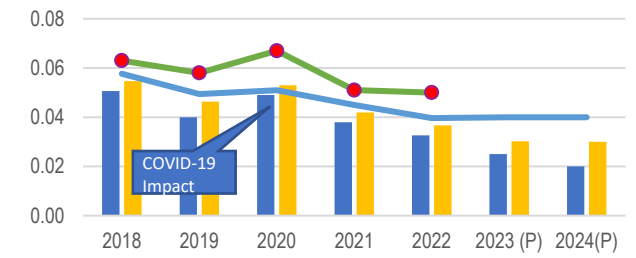
Workforce **satisfaction** is primarily measured through survey results [7.3-15 and 7.3-16]. Satisfaction declined during the pandemic, with high levels of burnout across all workforce types and locations. Staff support mechanisms [1.1c(1), 4.2b(1) and 5.1b] have aided in the recovery. Segmentation to the work unit level is AOS.





Dissatisfaction is measured through lower scores on the satisfaction/engagement survey, as well as valid grievances (violations of the bargaining agreements) and Unfair Labor Practices (ULP) (violations of Federal Law) [7.3-17] for the members of the two unions.

Figure 7.3-17: NLRB Valid Complaints/100 Workers



Workforce **retention** is segmented by classification [7.3-18], location [7.3-19], during first year [7.3-20], and specific manager [AOS].

Figure 7.3-18 Workforce Retention by Classification

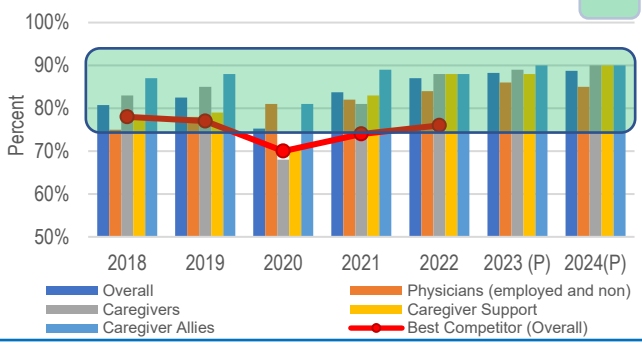


Figure 7.3-19 Workforce Retention by Location

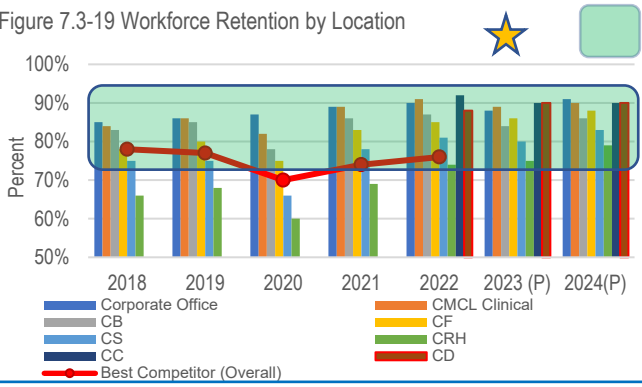
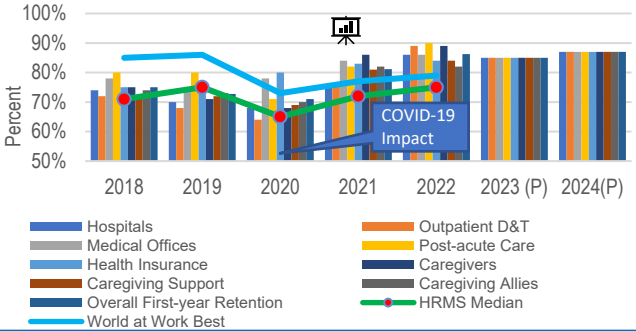


Figure 7.3-20 1st Year Retention



Results are segmented by workforce role [7.3-21] and physician types [7.3-22 & 23] –-additional segmentation AOS.

Figure 7.3-21 Workforce Engagement Overall

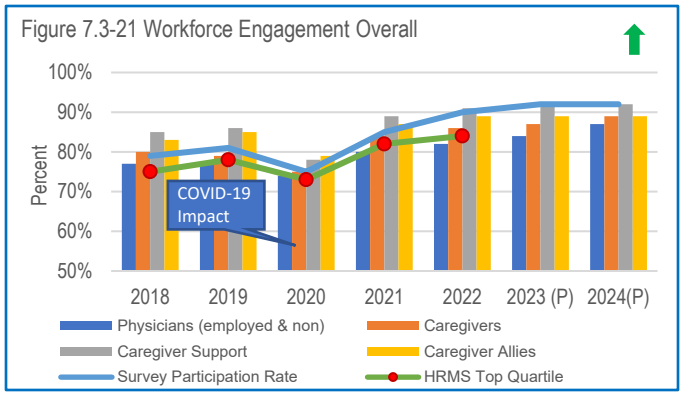


Figure 7.3-22 Employed Physician & Resident Engagement

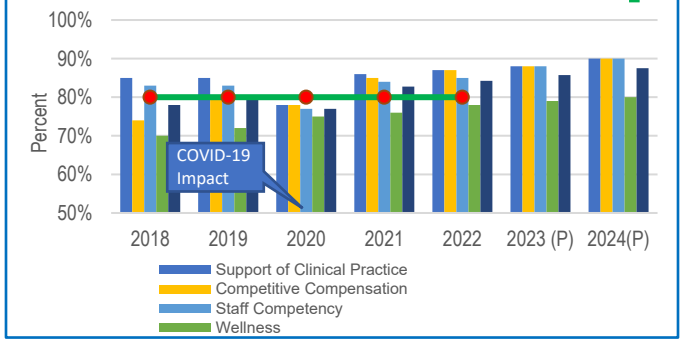
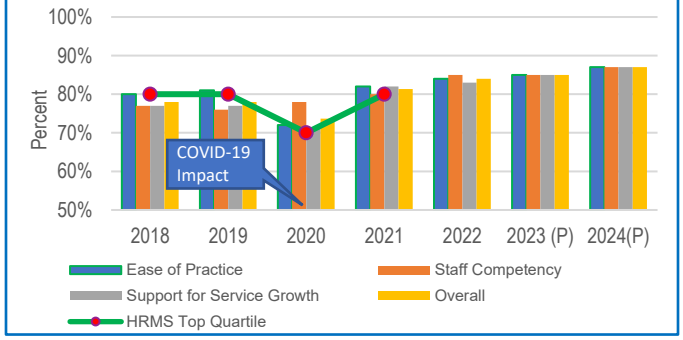
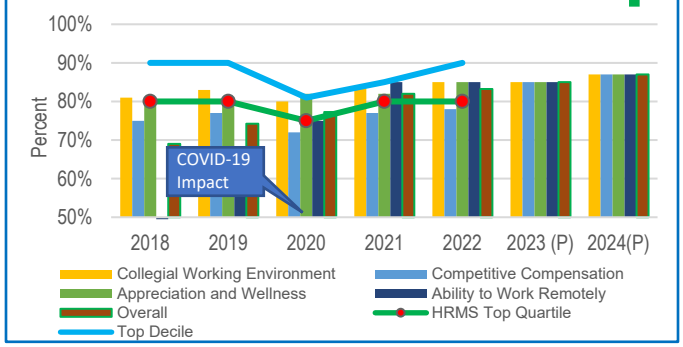


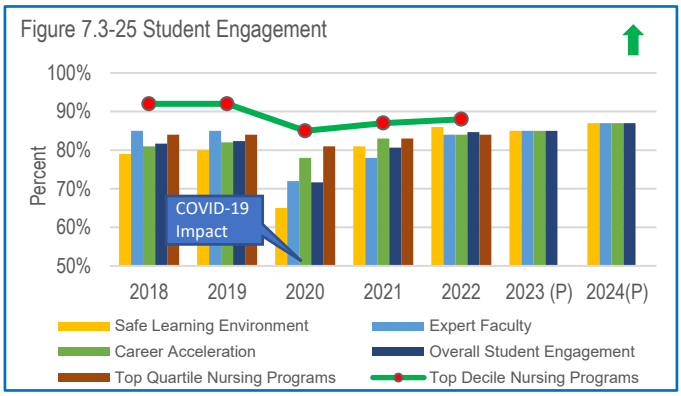
Figure 7.3-23 Nonemployed Physician Engagement

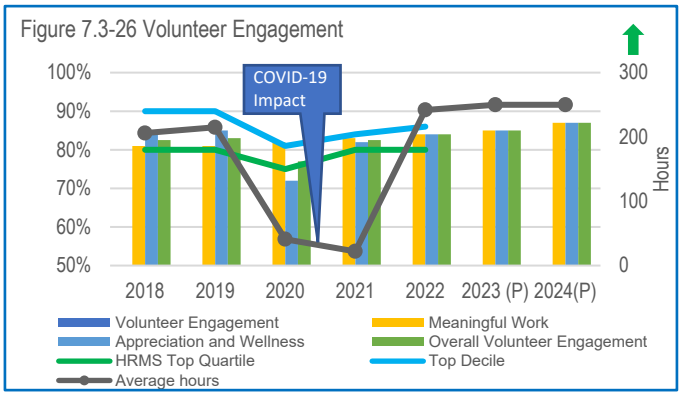


Engagement is measured by survey including analysis of the participation rates. As with satisfaction, burnout influenced engagement results during COVID, but resilience has "bounced forward" and results are now higher than previous. Numerous specific questions on the survey address specific drivers of engagement for segments of the workforce [7.3-24] and physicians, as well as students [7.3-25] and volunteers [7.3-26].

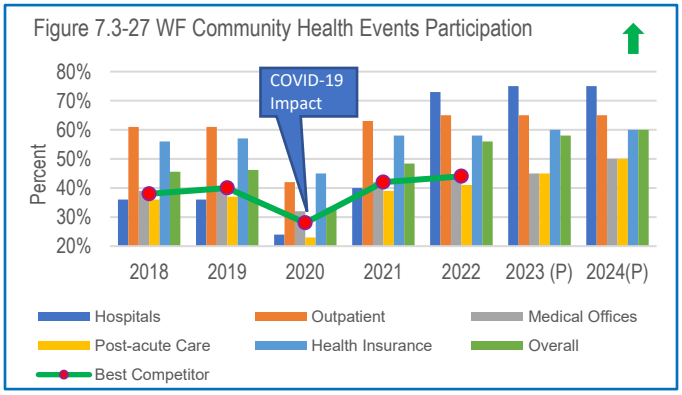
Figure 7.3-24 Caregiver Support & Allies Engagement





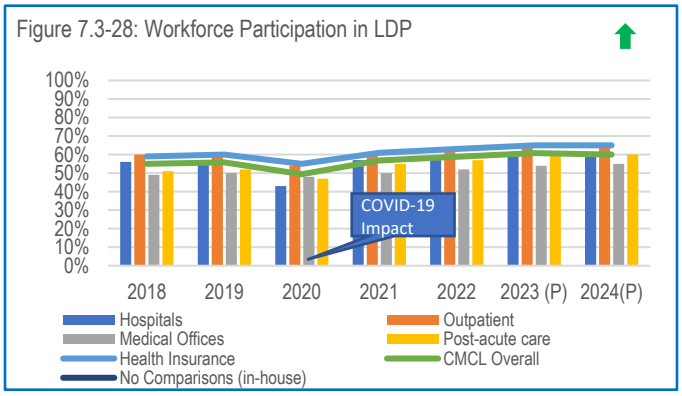


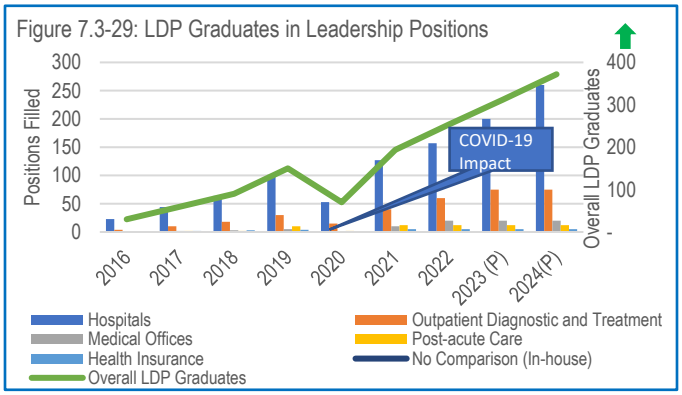
Engagement is also evaluated based on employee participation rates in various community events [7.1-27], particularly those focused on promoting health and wellness. Opportunities for participation are specifically presented to non-clinical members of the workforce to demonstrate linkage of all job types with the Mission of CRHS. COVID disrupted the ability to host many types of events, but current participation rates exceed the pre-pandemic levels.



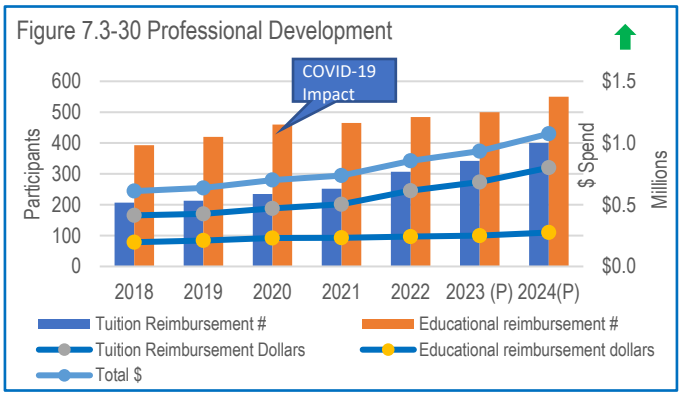
7.3a(4) Workforce Development

The LDP [5.2c(3)] was started in 2016 with the first class of 30, expanded to 60 in 2017, 90 in 2018, 150 in 2019, reduced to 70 in 2020 due to COVID; and then was ramped up in 2022 and 2023 to date [7.3-28]. Graduates are highly eligible for internal promotions [7.3-29]. Medical offices, Post-acute care, and Insurance are at maximum fill for LDP graduates in leadership positions, therefore their trends are flat.





Participation and monies spent on tuition and education [7.3-30] went up during the 2020 COVID impact due to more people enrolling and completing online courses. Increases in the nurses with bachelor's or higher degrees [7.3-10] is also an indicator of leadership development success.



7.4 Leadership and Governance Results

7.4a Leadership, Governance, Legal, Ethics, and Societal Contribution Results

7.4a(1) Leadership

Results for **communications** [7.4-1a] and valuing opinions [7.4-1d] are shown as indices of surveys conducted for the **workforce, partners, patients, and other customers** – segmented results for all workforce survey questions are AOS.

7.4-1a Communications index							
	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
CMCL	4.4	4.4	4.3	4.4	4.5	4.5	4.5
CB	4.3	4.3	4.3	4.4	4.5	4.5	4.6
CF	4.3	4.3	4.3	4.2	4.4	4.4	4.5
CS	4.5	4.5	4.6	4.5	4.6	4.5	4.5
Rehab Hosp	4.3	4.4	4.4	4.3	4.5	4.4	4.5
Medical Offices	4.3	4.2	4.3	4.3	4.4	4.4	4.4
Outpatient	4.2	4.2	4.2	4.2	4.3	4.4	4.4
Post-Acute	4.2	4.2	4.1	4.3	4.4	4.4	4.4
Health Insurance	4.4	4.4	4.5	4.4	4.5	4.5	4.5
Corporate Service Center	4.3	4.3	4.6	4.3	4.4	4.4	4.4
Upwood Top Decile	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Upwood Top Quartile	4.4	4.4	4.4	4.4	4.4	4.4	4.4

7.4-1d Opinions count index							
	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
CMCL	4.3	4.3	4.5	4.5	4.6	4.6	4.6
CB	4.4	4.4	4.4	4.5	4.5	4.5	4.5
CF	4.3	4.3	4.2	4.2	4.5	4.5	4.5
CS	4.2	4.2	4.4	4.3	4.3	4.4	4.4
Rehab Hosp	4.2	4.1	4.2	4.2	4.3	4.4	4.4
Medical Offices	4.3	4.3	4.2	4.3	4.3	4.3	4.3
Outpatient	4.2	4.2	4.3	4.3	4.4	4.4	4.4
Post-Acute	4.2	4.2	4.2	4.1	4.3	4.4	4.4
Health Insurance	4.3	4.3	4.3	4.4	4.4	4.4	4.5
Corporate Service Center	4.3	4.3	4.6	4.5	4.4	4.4	4.4
Upwood Top Decile	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Evidence of effective 2-way communication							

Figure 7.4-2: **SL Communication and Engagement with Patients, Families, the Community, and Partners**

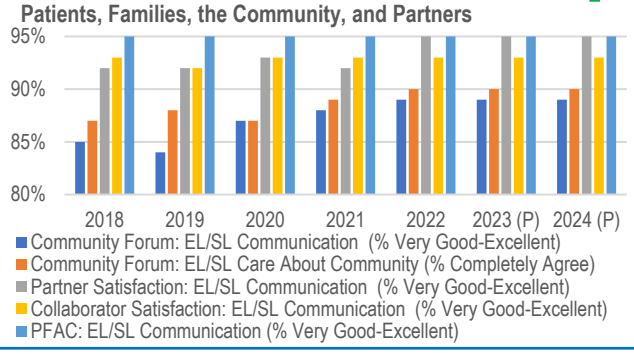


Fig. 7.4-3 Senior Leaders actions support MVV, percentile rank							
CMCL	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
Employees	90	91	89	92	92	92	92
Volunteers	89	88			90	90	90
Medical Staff	88	87	88	89	90	90	90
Students	89	89	90	90	90	88	89
Best Competitor (academic medical center)							
Employees	86	85	86	87	88	88	88
Volunteers	87	87			87	86	87
Medical Staff	86	86	86	87	87	87	87
Students	87	87	85	85	86	86	86
Upwood Top Decile - Emp	91	91	91	91	91	91	91
Upwood Top Decile - Vol	90	90	90	90	90	90	90
Upwood Top Decile - Med Staff	90	90	90	90	90	90	90
Upwood Top Decile - Students	91	91	91	91	91	91	91

7.4a(2) Governance

Results for both external fiscal audits have been "unqualified" (best possible performance) since 2019. Results for internal **fiscal** audits [7.4-4] and other key measures of **governance effectiveness** [7.4-5] underscore the organizational values of Efficiency, Accountability, and Excellence. Transition to ISO has increased the meaning of internal process audits in **non-fiscal** areas, with an emphasis on infection prevention and control. These results and the associated IDEALS improvement activities with impact are AOS in SQPIC minutes and various scorecards and dashboards.

7.4-4a Coding Audit Compliance							
Hospitals	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
CMCL	93%	95%	95%	96%	96%	96%	96%
CB	94%	94%	94%	95%	95%	95%	95%
CF	95%	96%	96%	95%	96%	96%	96%
CS	96%	95%	96%	96%	96%	95%	95%
Medical Offices*	94%	95%	96%	95%	95%	95%	95%
Urgent Care*	97%	97%	97%	96%	97%	97%	97%
PT-Rehab*	97%	97%	97%	97%	97%	97%	97%
Surgery Center*	95%	96%	96%	96%	96%	96%	95%
Imaging*	98%	97%	98%	97%	97%	97%	98%
Home Health Hospice	93%	94%	95%	95%	95%	95%	95%
Industry Goal	**>95%**	**> 95%**	**> 95%**	**>95%**	**> 95%**	**> 95%**	**>95%**

7.4-4b Clinical Documentation Improvement (CDI)							
Industry Goal	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
Review Rate >80%	77%	79%	85%	84%	84%	84%	84%
Query Rate >40%	37%	38%	40%	39%	40%	40%	43%
Response Rate >90%	85%	88%	89%	93%	93%	90%	92%
Agreement Rate >75%	67%	68%	68%	70%	72%	72%	75%
CDI/Coder Mismatch Rate <10%	10%	9%	6%	6%	7%	7%	6%

7.4-4c Billing Audit Compliance							
Hospitals	'18	'19	'20	'21	'22	'23 (P)	'24 (P)
CMCL	97%	97%	98%	98%	98%	97%	97%
CB	97%	98%	98%	98%	98%	98%	98%
CF	98%	98%	99%	98%	98%	98%	98%
CS	97%	97%	97%	98%	98%	98%	98%
Medical Offices*	98%	98%	98%	98%	98%	98%	98%
Urgent Care*	98%	98%	97%	98%	98%	98%	98%
PT-Rehab*	99%	99%	99%	99%	99%	99%	99%
Imaging*	99%	99%	99%	100%	99%	100%	100%
Home Health / Hospice	97	97%	98%	98%	98%	98%	98%
Industry Goal	**98%**	**98%**	**98%**	**98%**	**98%**	**98%**	**98%**

7.4-5 Governance Effectiveness, Self Evaluation	'18	'19	'20	'21	'22	'23 (P)	'24 (P)	KY Best
Board's Fiduciary Role	92%	93%	95%	97%	98%	99%	99%	98%
Mission, Strategy & Stakeholders	100%	100%	100%	100%	100%	99%	99%	100%
Governance & Leadership Effectiveness	99%	99%	99%	99%	99%	99%	99%	99%
Finance	95%	97%	99%	99%	99%	99%	99%	99%
Quality and Patient Safety	89%	93%	95%	95%	96%	99%	99%	95%
Board-CEO Relationship	95%	95%	97%	98%	98%	99%	99%	98%
CEO Evalulation Effectiveness	92%	94%	95%	98%	99%	99%	99%	99%
Board Member Satisfaction	98%	98%	98%	98%	100%	100%	100%	98%

7.4a(3) Law, Regulation, and Accreditation

CRHS publicly reported standing for meeting or exceeding regulatory, legal, and accreditation requirements greatly surpass any of the local competitors [7.4-6]. Designation as Center of Excellence for 16 service lines [AOS] has been achieved in order to demonstrate to the community that exceptional care is available close to home. In addition to stroke and orthopedic certifications, accreditations for the Blood Bank, Clinical Lab, all Hospitals, Trauma, and Imaging

Services have been maintained without exception for at least five years.

7.4-6 Meeting and surpassing regulatory, legal, and accreditation requirements	CRHS	Churchill Downs	Rivertown University
CMS Star rating	5 Since '18	4 Since '19	3 Since '15
Current LeapCore Hospital Safety Grade	A	B	B
Magnet Status (2x)	CMCL, CB	X	
CHDMG Most Wired Hospital	Since '20	X	
Wooland Health Top 100	Since '20		X
KY Best place to work designation	Since '19	X	
LEED/Practice Environment Excellence Award	Since '19		
VPP star status	Since '20		
ISO 9001:2015 Certified	2024 (P)		

7.4a(4) Ethics

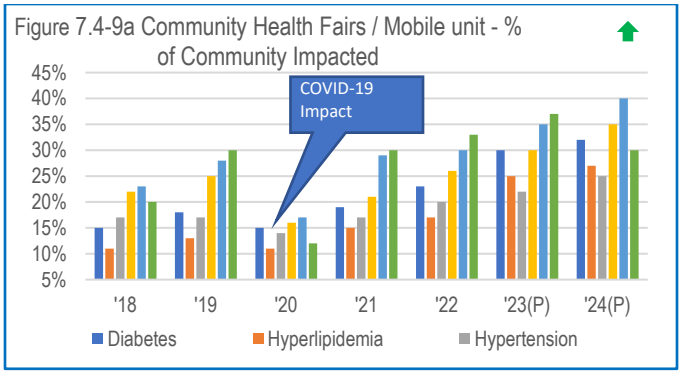
Ethics is evaluated by assessing the number of complaints or violations that are substantiated [7.4-7]. 100% of substantiated issues have been addressed through the ISO corrective action process, and opportunities for improvement have been identified and corrected on many unsubstantiated issues. Staff are educated annually to understand that expressing a concern is a desirable behavior in order to potentially address "a polyp before it becomes a tumor."

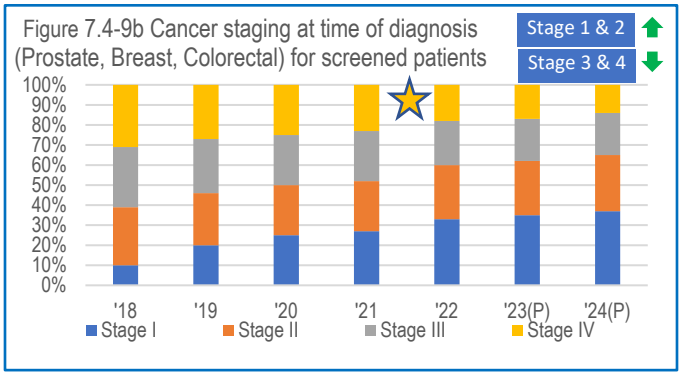
7.4-7 Results for Ethical Behavior (segmentation by business unit AOS)						
Ethics: Breaches & Complaints	*'18*	*'19*	*'20*	*'21*	*'22*	Goal
Compliance Hotline Complaints	1/5	1/10	0/13	0/11	0/8	0
Behavioral Standards (WF)	0/8	1/7	0/5	0/2	0/2	0
Behavioral Standards (MS)	1/6	2/9	0/4	0/3	0/3	0
HIPAA Privacy Compliants	0/4	0/5	0/3	0/3	0/5	0
Patient Rights Complaints	0/2	0/1	0	0/2	0/1	0
Conflict of Interest Violation	0	0	0	0	0	0
Ethics Compliance Training						
Code of Ethical Standards of Behavior Training (all)	100%	100%	100%	100%	100%	100%
Code of Ethical Standards of Behavior - signed (all)	100%	100%	100%	100%	100%	100%
Stakeholder trust in SL and governance	3.7	3.6	3.9	4.1	4.3	4.5

7.4a(5) Society

As part of its efforts in support of the local environment, in 2021, CRHS purchased and installed an innovative technology called an Ozonator which shreds, compacts, and disinfects bio-waste materials, greatly reducing the waste stream [7.4-8] while reducing costs. Feeding the Ozonator was offered to the **community**, with a specific focus on local nursing homes as a community benefit beginning in 2022.

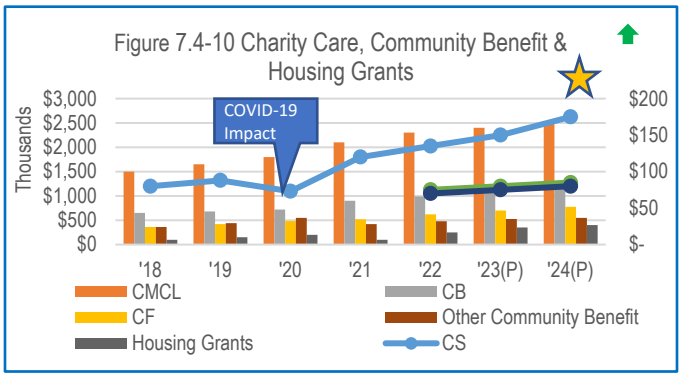
CRHS has continuously increased outreach efforts [7.4-9a] and the effectiveness of its approach. In 2018, less than 40% of cancer detections were reported at Stage 1 or 2, when the disease is much easier to treat. By 2022, these earlier detections accounted for 60% of the total [7.4-9b], thereby greatly increasing the likelihood of better outcomes and survival rates.





Additional **societal contributions** and **support of key communities** [7.4-10] include uncompensated/charity care at each facility, the housing grants provided to the workforce [5.1b(2)], and other financial and in-kind support.

As a recent innovation, CRHS has partnered with local Community Action Organizations (CAO), which aid



communities in job placements, early childhood education (Head Start), and wellness activities. The partnership includes mutually beneficial job training, with likely placement at a CRHS facility, and subsidized childcare for WF members. Initiated in the spring of 2022, in its first year, over 100 new employees have joined CRHS through the CAO which now provides childcare for over 300 children of WF members.

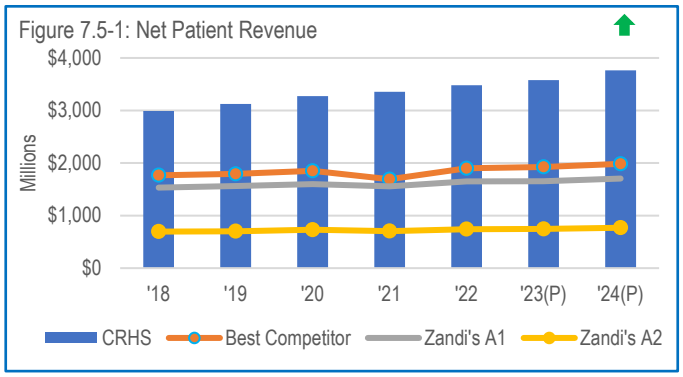
7.5 Financial, Marketplace, and Strategy Results

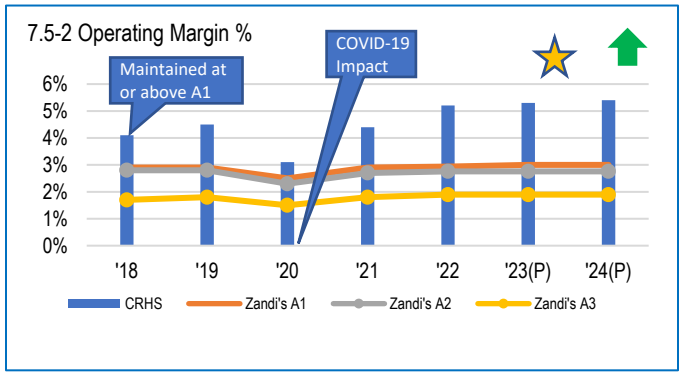
7.5a Financial and Marketplace Results

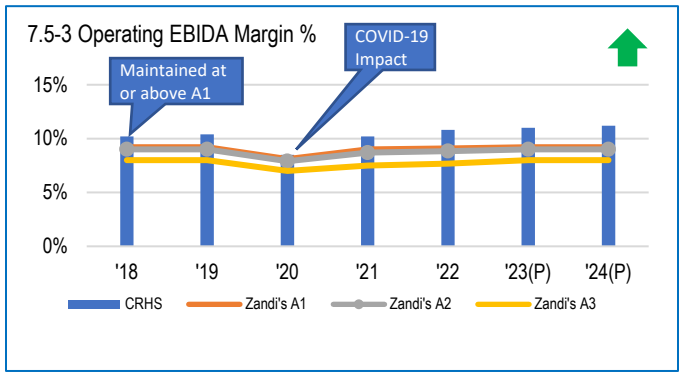
Financial and market results are segmented by service line, business unit, and hospital, as appropriate.

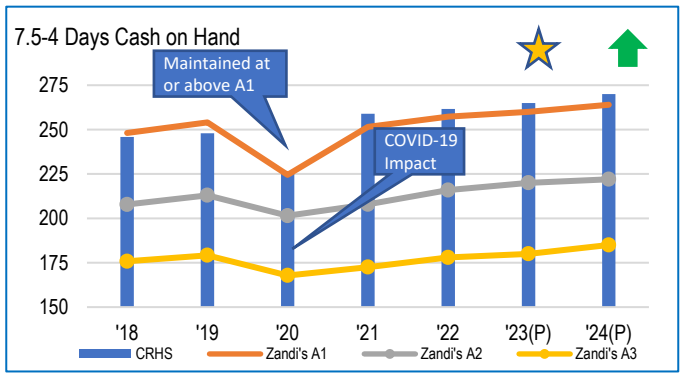
7.5a(1) Financial Performance

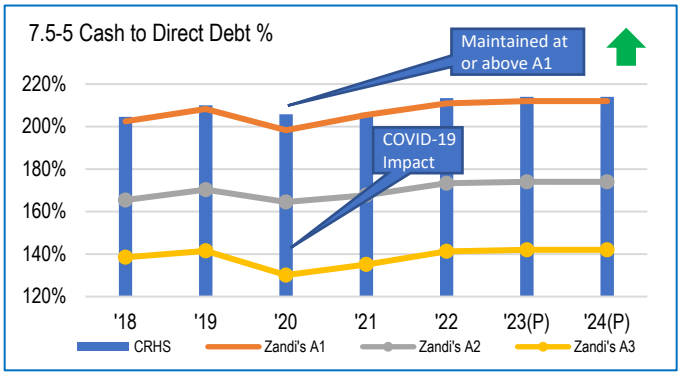
CRHS financial performance has remained strong despite the challenges of the pandemic. As with most health care organizations, performance in key financial indicators [7.5-1 through 7.5-10] did not meet expectations at the height of COVID, primarily due to the months-long moratorium on elective surgeries for, expenses to manage patients who needed negative-pressure rooms with high-level filtration, and increased use of personal protective equipment. Beneficial trends resumed for all indicators in 2021.

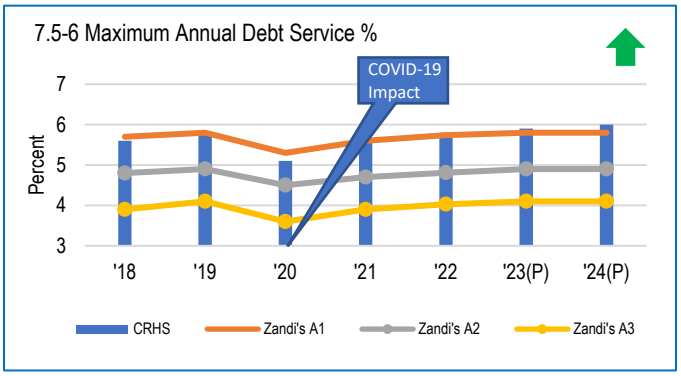


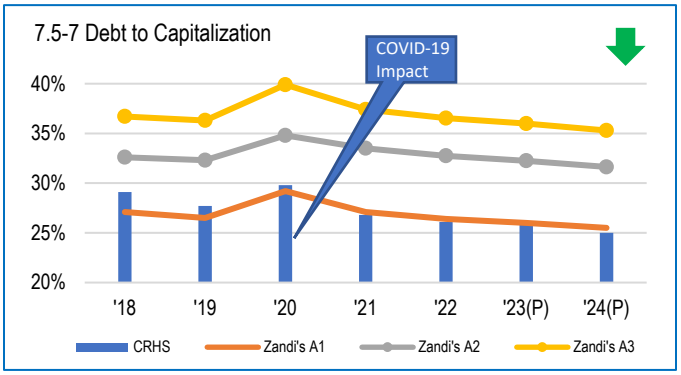


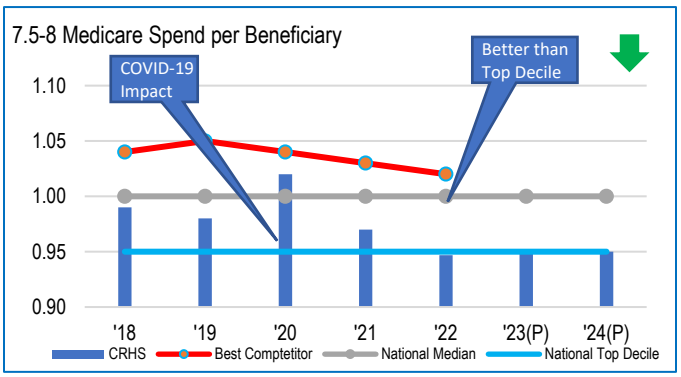






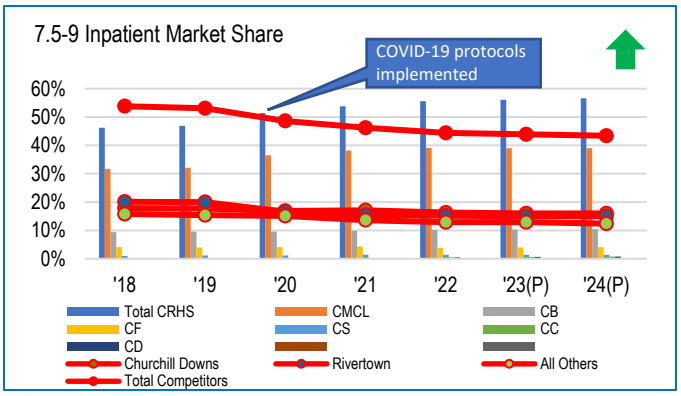


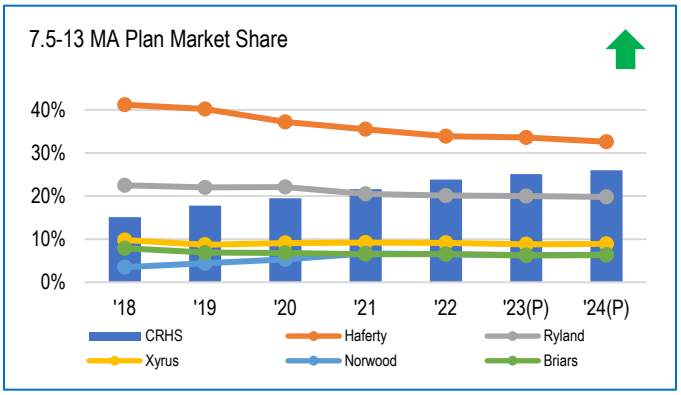


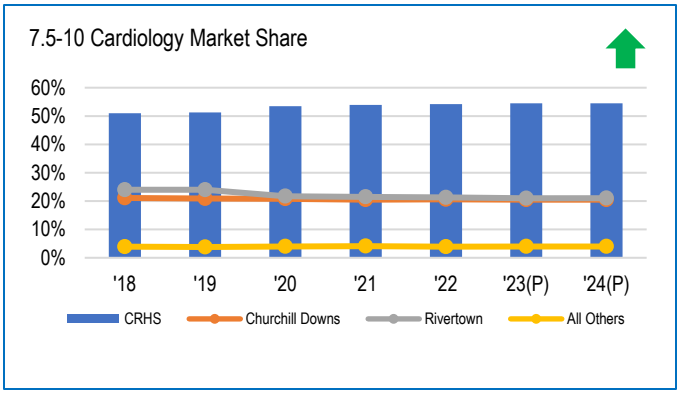


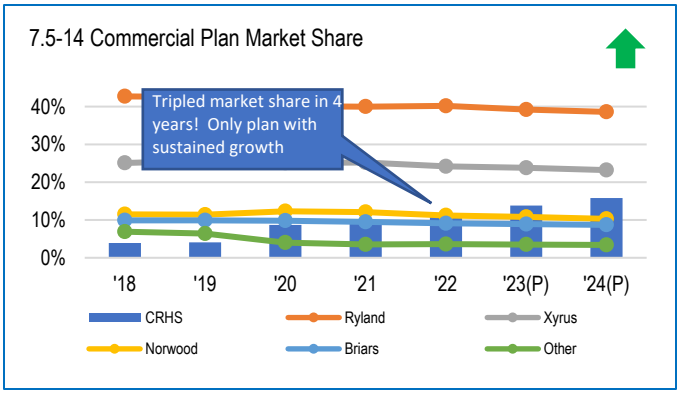
7.5a(2) Marketplace Performance

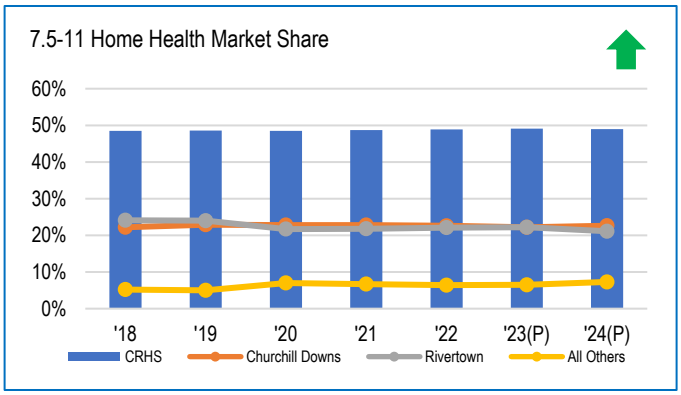
As CRHS reputation and outreach expand, so has the market share in all business units and service lines [7.5-9 – 7.5-15]. This is validated by consumer preference data [7.5-16].

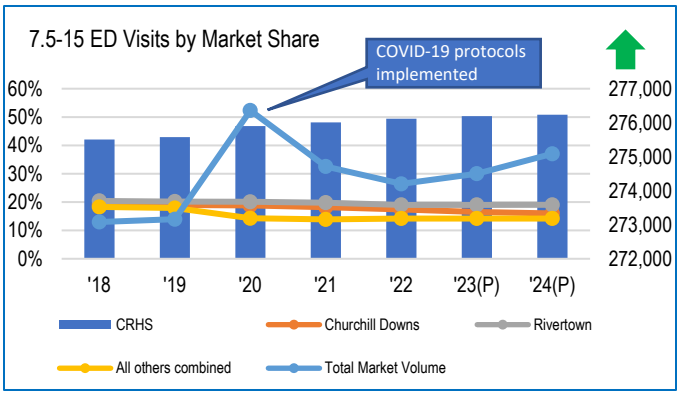

7.5-9 Inpatient Market Share
COVID-19 protocols implemented
60%
50%
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
Total CRHS
CMCL
CB
CF
CS
CC
CD
Churchill Downs
Rivertown
All Others
Total Competitors

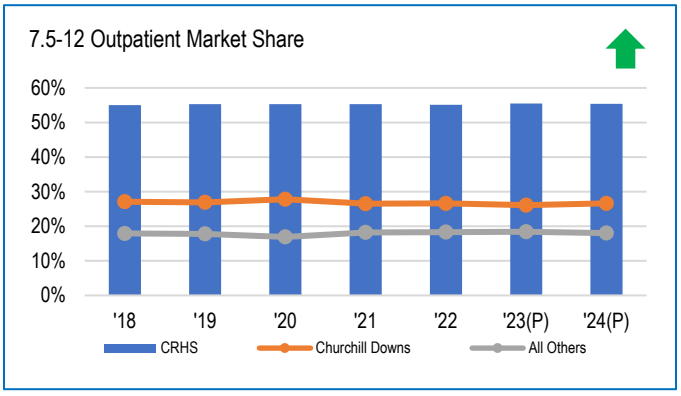

7.5-13 MA Plan Market Share
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Haferty
Ryland
Xyrus
Norwood
Briars


7.5-10 Cardiology Market Share
60%
50%
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Churchill Downs
Rivertown
All Others


7.5-14 Commercial Plan Market Share
Tripled market share in 4 years! Only plan with sustained growth
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Ryland
Xyrus
Norwood
Briars
Other


7.5-11 Home Health Market Share
60%
50%
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Churchill Downs
Rivertown
All Others


7.5-15 ED Visits by Market Share
COVID-19 protocols implemented
60%
50%
40%
30%
20%
10%
0%
277,000
276,000
275,000
274,000
273,000
272,000
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Churchill Downs
Rivertown
All others combined
Total Market Volume


7.5-12 Outpatient Market Share
60%
50%
40%
30%
20%
10%
0%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Churchill Downs
All Others

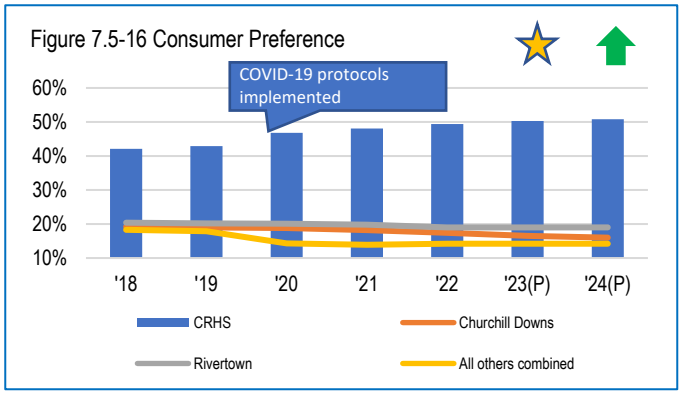


Figure 7.5-16 Consumer Preference
COVID-19 protocols implemented
60%
50%
40%
30%
20%
10%
'18
'19
'20
'21
'22
'23(P)
'24(P)
CRHS
Churchill Downs
Rivertown
All others combined

7.5b Strategy Implementation and Innovation Results

Figure 7.5-17 Strategy Achievement Results

Objective	Goals/Action Plans	KPM	Figure
Achieve top decile in Customer-focused excellence	Increase outreach to disadvantaged communities	Multiple Measures	7.1
	Enhance culturally competent care – Diversity/Equity/Inclusion	Reputation score	7.2-22
		Consumer Preference	7.5-16
	Improve community health	% follow-up after screening	AOS
		Cancer Stage 1 at diagnosis	7.4-9b
	Top decile satisfaction	Willingness to Recommend	7.2a(2)
		Net Promoter Score	7.2-19 & 20
	Top decile healthcare outcomes	CMS Core Measures	7.1
		HEDIS measures	AOS
Achieve top decile in Workforce-focused excellence	Achieve top decile workforce engagement	Multiple Measures	7.3-15 to 23
	Re-establish/grow volunteer presence	Hours per volunteer (weekly avg)	7.3-9
	Recruit physicians	Primary care panel size	AOS
		Patients per Hospitalist	AOS
	Build workforce resilience	Workforce wellness score	AOS
		Physician burnout	AOS
	Decrease workforce vacancies	Workforce Retention	7.3-19 & 20
		Regrettable losses	AOS
		Time to fill vacancies	7.3-7
	Balance workforce profile with community (DEI)	Diversity variance	7.3-6
Achieve top decile in Financial excellence	Achieve operating margin of 5%	Operating Margin	7.5-2
	Increase community support	Total Community Benefit	7.4-10
	Improve cash position	Days Cash on Hand	7.5-4
Achieve top decile in Process excellence	Enhance access (telehealth and appointments)	Primary % within 15 days	AOS
		Specialist % within 30 days	AOS
	Implement cybersecurity framework	External score	7.1-33
	Enhance communication	% Very satisfied (Workforce and Patients)	7.4-1a

Figure 7.5-19 CRHS "Shark Tank" Innovations

Space was reconfigured to enable pick-up of ready-to-go meals prepared by food service for the WF and their families to enjoy at home.
Carts used for treatment of malignant hyperthermia, a time-critical life-threatening condition, were reconfigured into "go-bags," for faster transport to the area needed, particularly on a different level.
Rain ponchos and disposable sleeves were substituted when isolation gowns became in short supply. Both patients and staff preferred them, they were less expensive, and accomplished the required barrier for infection prevention, so they became permanent.
"Call, don't fall" signs were placed on the ceiling above patient beds as a more prominent visual reminder to request assistance.
Numerous suggestions were implemented to re-assign tasks that do not require licensure to perform from nursing and other workforce shortage segments to other team members.
Multi-disciplinary rounds were changed to twice daily in critical care units to enhance communication and continuity with the night shift.
Research was conducted to determine how many pills patients actually took post-discharge after surgical procedures and prescribing patterns were changed accordingly in order to decrease "leftover" narcotics being available to the public.
Patient information on the *Be-well system [3.1a(1)]* was made available in the top five non-English languages in the region.
Consent forms, HIPAA information, Patient Rights information, and home-going instructions were set up to automatically be translated by the Electronic Health Record system for the top five non-English languages in the region.
An annual "vendor information fair" was implemented for equipment suppliers to set up information stations to answer questions and provide education and tips to more effectively and efficiently use their products.
Restraints were placed in medication cabinets to be "dispensed," enabling reports to capture all instances of use to analyze for patterns and trends.
Telehealth capabilities were activated when behavioral health patients had extended stays in the ED to enable therapy to be started while waiting for bed placement.

Figure 7.5-18 Baldrige Journey

2012	2014	2016	2017	2018	2019	2020	2021	2022
Adopted Baldrige Framework	Review all previous award recipient HC applications, find improvements to implement	Continue learning (Quest, Regional, sharing days). evaluate processes & results against new recipients	Commit to annual applications, added non-HC to "best practice" search	Shift focus to community health – aligned better with mission	Increase transparency - public posting of scorecard, aligned with value of accountability	COVID (implications for innovation, workforce support, telehealth)	Begin to broaden scope - joining COE's 2021 cohort in October	Increase focus on COE, sharing best processes with other participants
				Increased focus on Culturally Competent Care	Purchased Mobile Medical Clinic	Expanded telehealth	KY Broadband initiative	Focus on resilience/COVID emergence
Training on PDCA	Adopt shared governance model	Improvement philosophy "what was wrong," not "who was wrong"	Add formal RCA and Appreciative Inquiry principles to PDCA	Add Lean principles to PDCA	Convert graphs and tables to SPC as appropriate	Focus on converting innovative ideas into practice	Adopt Scorecard / Dashboard model	Convert to IDEALS framework
Formalize Strategy & Performance Measurement Systems	Align planning and budgeting cycles	Strategic planning cycle every 3 years; formalize comparative analysis	Strategic planning cycle annually, deep dive every 3 years	Fully deploy action planning template "contracts"	Add "longer-range" 5-year planning horizon for facilities and IT	Focus on "how well" vs. "how many" (use ratios / rankings / rates, as appropriate)	Cascade measures and objectives down to individual commitment	Further align individual performance evaluations with strategic plan
Self-assessment (Are we making progress); cycles of improvement based on analysis	Level 1 KyCPE application; cycles of improvement based on feedback	Level 2 KyCPE application; cycles of improvement based on feedback	Level 3 KyCPE application; cycles of improvement based on feedback	Level 4 KyCPE application, Level 3 award; cycles of improvement based on feedback	KyCPE top tier award; cycles of improvement based on feedback	Baldrige application, no site visit; cycles of improvement based on feedback	Baldrige site visit; cycles of improvement based on feedback	Second Baldrige site visit; cycles of improvement based on feedback