2017 MALCOLM BALDRIGE NATIONAL QUALITY AWARD APPLICATION

Adventist Health Castle

Together inspired™

Table of Contents

Glossary

0-9

4Ps Pain, Position, Potty and Plan

A

AAR After Action Review

Abx Antibiotic

ACT Apologize, Correct and Thank

ADT Admission, Discharge, Transfer

AH Adventist Health

AHA American Heart Association

AH BCC Adventist Health Board of Compliance Committee

AHC Adventist Health Castle

AH GB Adventist Health Governing Board

AHRQ Agency for Heathcare Research and Quality

AIDET Acknowledge, Introduce, Duration, Explanation and Thank

AMI Acute Myocardial Infarction

AONE American Organization of Nurse Executives

AOS Available On Site

AR Accounts Receivable

ASF Ambulatory Surgery Facility

ASQ American Society for Quality

B

BCMA Barcode Medication Administration

BD Business Development

BEAM (Software for sharing radiology images)

BHS Behavioral Health Services

BSN Bachelor of Science in Nursing

C

CAP Change Acceleration Process

CABG Coronary Artery Bypass Grafting

CAUTI Catheter-Associated Urinary Tract Infection

CC1 Core Competency One

CC2 Core Competency Two

CCL Cardiac Cath Lab

CCU Critical Care Unit

CDC Centers for Disease Control

CDI Clostridium Difficile Infection

Cdiff Clostridium difficile

CE Continuing Education

CEO Chief Executive Officer

CEU Continuing Education Units

CFO Chief Financial Officer

CGCAHPS Clinician & Group Consumer Assessment of Healthcare Providers and Systems

CHG Chlorhexidine Gluconate

CHG Castle Health Group

CHNA Community Health Needs Assessment

COPD Chronic Obstructive Pulmonary Disease

CLABSI Central Line Associated Bloodstream Infection

CLI Castle Leadership Institute

CME Continuing Medical Education

CMS Centers for Medicare and Medicaid Services

CNA Certified Nursing Assistant

CNO Chief Nursing Officer

COE Computer Order Entry

CPOE Computerized Physician Order Entry.

CPR Cardiopulmonary Resuscitation

CSL Cardiac Service Line

CV Cardiovascular

CVOR Cardiovascular Operating Room

CVSL Cardiovascular Service Line

D

DC Discharge

DOH Department of Health

DNFB Discharged, Not Final Billed

E

EBIDA Earnings Before Interest, Depreciation and Amortization

EBP Evidence-Based Practice

ECRI ECRI Institute (formerly “Emergency Care Research Institute”)

ED Emergency Department

EMR Electronic Medical Record

EMTALA Emergency Medical Treatment and Labor Act

EOC Environment of Care

EOP Emergency Operations Plan

EP Emergency Preparedness

EVS Environmental Services

F

FD Fire Drill
FDA Food and Drug Administration
FEMA Federal Emergency Management Agency
FMEA Failure Modes and Effects Analysis
FT Full Time
FTE Full-Time Equivalents

G

GB Governing Board
GE CAP General Electric Change Acceleration Process
GWTG Get With The Guidelines

H

HbA1c Glycated Hemoglobin
H & K Hip & Knee
H & P History and Physical
HAC Hospital Acquired Condition
HAH Healthcare Association of Hawai'i
HAI Healthcare Associated Infection
HCAHPS Hospital Consumer Assessment of Healthcare Providers and Systems
HCC Hospital Command Center
HEN Hospital Engagement Network
HF Heart Failure
HFMA Healthcare Financial Management Association
HHIC Hawai'i Health Information Corporation
HI Hawai'i
HICS Hospital Incident Command System
HIPAA Health Insurance Portability and Accountability Act
HMO Health Maintenance Organization
HMSA Hawaii Medical Services Association
HR Human Resources

I

ICU Intensive Care Unit
ID Identification
IMM-2 Influenza Immunization
InfoSec Information Security Department
IOM Institute of Medicine
IP Inpatient
IRS Internal Revenue Service
IS Information Systems
IT Information Technology
IUSS Immediate Use Steam Sterilization

J

JCC Joint Care Center
JLL Jones Lang LaSalle

L

LDRP Labor, Delivery, Recovery and Postpartum
LEM Leadership Evaluation Manager
LOS Length of Stay

M

MBA Master's in Business Administration
MD Medical Doctor
MEC Medical Execute Committee
MI Myocardial infarction
MOU Memorandum of Understanding
MQSA Mammography Quality Standards Act
MRI Magnetic Resonance Imaging
MRSA Methicillin-Resistant Staphylococcus aureus
MSSA Methicillin-Susceptible Staphylococcus aureus
MVV Mission, Vision, and Values

N

NEC Nurse Executive Council
NHSN National Healthcare Safety Network
NIMS National Incident Management System
NMC Nurse Manager Council
NPSG National Patient Safety Goals
NRC National Research Corporation

O

OASCAHPS Outpatient Ambulatory Surgery Consumer Assessment of Heathcare Providers and Systems
OB Obstetrics specialty
OFI Opportunity For Improvement
OIG Office of the Inspector General
OP Operations
OP Outpatient
OPI Optimal Phone Interpreters

OPPE	Ongoing Professional Practice Evaluation
OR	Operating Room
OSHA	Occupational Safety and Health Administration

P

PA	Physician Assistant
PACS	Picture Archiving and Communication System
PC	President's Council
PC-03	Elective Delivery
PC-01	Elective Delivery Compliance
PCM	Patient Call Manager
PCP	Primary Care Physician
PDCA	Plan, Do, Check, Act
PDP	Patient Data Profile
PFS	Provider Feedback System
PHI	Protected Health Information
PI	Performance Improvement
PMPM	Per Member Per Month
PN	Pneumonia
PNR	Pacific Northwest Region
PPE	Personal Protective Equipment
PPO	Preferred Provider Organization
PR	Percentile Ranking
PRC	Professional Research Corporation
Pt	Patient
PT	Part Time

Q

Q12	Gallup's 12 question survey
QUEST	Quality, Efficiency, Safety and Transparency
QIC	Quality Improvement Council
QIT	Quality Improvement Team

R

RADAR	Electronic incident reporting software
RCA	Root Cause Analysis
RCI	Revenue Cycle Improvement
RFI	Requirement for Improvement
RIMPAC	Rim of the Pacific (international maritime warfare exercise)
RN-BS	Registered Nurse-Bachelor of Science
ROI	Return on Investment
RRD	Remote Report Distribution
RRT	Rapid Response Team

S

S & P	Standard & Poor's
SAF	Strategic Area of Focus
SA	Strategic Opportunity
SBAR	Situation, Background , Assessment , Recommendation
SC	Strategic Challenge
SHPDA	State Health Planning Department Agency
SIR	Standardized Infection Ratio
SL	Senior Leadership
SMS	"SMS Research"
SP	Strategic Plan
SPP	Strategic Planning Process
SSI	Surgical Site Infection
STEMI	ST Elevation Myocardial Infarction
STK-4	Thrombolytic Therapy
SUSP	Surgical Unit Safety Program
SWOT	Strengths, Weaknesses, Opportunities, and Threats

T

TCOC	Total Cost Of Care
TJC	The Joint Commission

V

VBP	Value Based Purchasing
VP	Vice President
VPMA	Vice President of Medical Affairs
VPO	Vice President of Operations
VTE	Venous Thromboembolism

W

WPD	Weighted Patient Day

Y

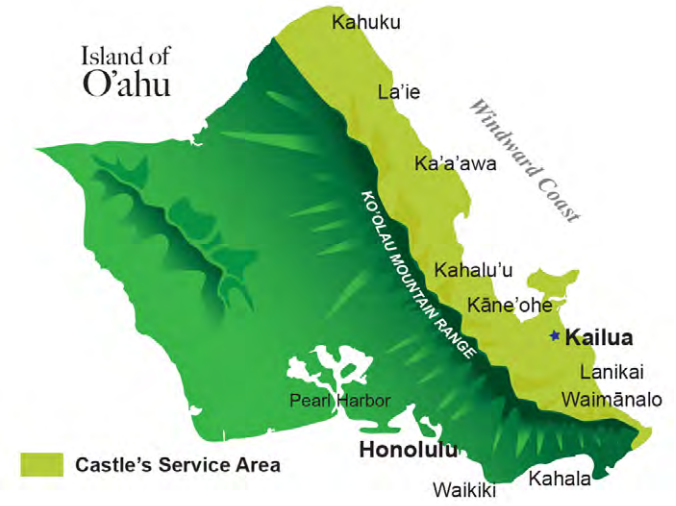
YTD	Year to Date

Organizational Profile

P.1 Organizational Description

Adventist Health Castle (AHC), formerly known as Castle Medical Center, was founded in 1963 through community activism by local Windward O'ahu residents, concerned physicians, benefactors, and the Seventh-day Adventist Church. AHC is located on the Windward side of O'ahu, and is separated from Honolulu hospitals by the Koolau Mountain Range. Prior to opening, the route to the hospital was via a winding mountain road and took anywhere from 45 minutes to several hours to complete. Ambulance service was limited and often Windward physicians took patients to Honolulu hospitals in their own cars during emergencies. It was from these humble beginnings that Castle was born to care for its community. Today, Castle is known for its profound commitment to the community, compassionate patient care, a deeply rooted spiritual heritage, and a constant quest for clinical quality and performance excellence.

Fig. P.1-1 Map of Castle's Service Area



Castle is part of Adventist Health (AH), a not-for-profit faith- based health system in Roseville, California, operated by the Seventh-day Adventist Church. AH is a regional delivery network operating in four western states - California, Hawai'i, Oregon, and Washington that includes over 80 distinct business units including 21 hospitals, 220 rural health clinics and outpatient centers, 14 home care agencies, 7 hospice agencies and 4 joint-venture retirement agencies. Castle is a top performer in the AH system, often providing role model practices for other AH agencies.

Castle demonstrates several distinguishing characteristics that facilitate the achievement of our core competencies:

- Tenacity/commitment to quality outcomes are integral to Castle's success. Our quality journey began in the early 1980s and has truly been a continuous process. Committed to "chasing zero", we believe we can avoid patient harm, such as hospital-acquired infections and patient falls, by establishing rigorous processes that standardize excellent care (7.1 Results).
- *Aloha* (love) matters. Our deep commitment to the communities we serve allows us to see each individual as a meaningful member of our *Ohana* (family). Deeply rooted in our culture of *Aloha*, compassion, kindness and respect is shown to all. Every individual matters and our culture is focused on creating a warm, welcoming environment as evidenced by our high patient satisfaction (7.2 Results). Compassion, kindness, and respect is also seen and felt in relationships between associates, physicians, and volunteers (7.3 Results).

P.1a(1) Healthcare Service Offerings – Castle is recognized as the primary provider of healthcare services [3.2a(1)] for the diverse communities of Windward O'ahu, and is the only faith-based, acute-care hospital in Hawai'i. Our community-based not-for-profit hospital has 160 licensed beds and offers a full range of acute care inpatient services, outpatient services, and community health education and wellness programs. The following areas are in relative importance to our success:

- Medical/Surgical/Telemetry Units—111
- Intensive Care Unit—8
- Birthing Center (including 9 LDRP)—12
- Adult Behavioral Health Unit—29

Castle's on-campus outpatient services include outpatient surgery, oncology, emergency services, diagnostic and interventional cardiac catheterization, cardiopulmonary diagnostics, imaging, neurophysiology, rehabilitation services, and laboratory diagnostic testing. Facilities and programs located off-campus include, radiology, laboratory, rehabilitation services, AH Home Care, and community based primary care clinics including one rural health clinic located in an under-served area of the North Shore. In keeping with our mission, we provide a wide range of community-based outreach services, including community health education, and wellness classes offered in concert with local agencies such as the Boys

Fig. P.1-2 Castle's Mission, Vision and Values (MVV)

MISSION:	*Living God's love by inspiring health, wholeness and hope.*
VISION:	Compelled by our mission we will transform the health experience by: • Improving the physical, mental and spiritual health of our community • Enhancing interactions with our patients, providers and associates • Managing people's health to help make care more affordable
VALUES:	• Integrity • Respect • Compassion • Excellence
CORE COMPETENCY (CC1)	**Tenacity / We Chase Zero** – We are tenacious about quality improvement, especially in regard to chasing zero harm to our patients. We have honed our approach to performance improvement over decades into a rigorous, transparent, and well deployed approach. However, the strength of this capacity is in our tenacity to never accept anything less than excellence.
CORE COMPETENCY (CC2)	**Love Matters:** We bring our compassionate, healing ministry to the forefront with one another, our patients, our community, and in all that we do. We provide care with the same *Aloha* spirit that makes our island home so unique. This isn't just talk, it's a palpable environment that is frequently articulated by our patients, associates, and community partners.

and Girls Club and the Weinberg Village. Several clinical services, including ED physician, radiology, pathology, hospitalist, intensivist, anesthesia and acute hemodialysis services are offered by contractual arrangement.

P.1a(2) Vision and Mission − Our culture is inspired by our religious heritage and our dedication to wellness. Deeply committed to our community and to treating the whole person - body, mind, and spirit; our Core Competencies help us fulfill our mission, vision, and values (Fig P.1-2) by creating an energized, passionate, healing environment that produces exceptional results, but never rests on its laurels.

Our MVV form the foundation for 5 Pillars that represent our strategic categories for performance excellence (Fig. P.1-3). The Pillars provide a balanced framework to strategic planning [2.1a(1)], performance improvement, communication [1.1b(1)] and the delivery of care across the continuum[6.1b(1)].

Since our inception, we have committed staff and resources to the development and implementation of wellness and lifestyle programs designed to meet the needs of our local community. An expanded Wellness and Lifestyle Medicine Center established in 2002 attests to Castle's long-standing commitment to health promotion and disease prevention. Each year, more than 4,000 community members participate in classes and services provided by the Center.

Castle continues to develop services to meet the needs of our community while achieving fiscally responsible growth. As a not-for-profit organization, we focus on optimizing financial results while caring for our community members regardless of their ability to pay.

P.1a(3) Workforce Profile − Castle is the largest civilian employer on the Windward side of O'ahu with over 1,000 employees (associates), 146 volunteers, and 300 physician and allied health partners. Our associates include:

- Nurses—RN and CNA (408)
- Professional clinical/non-clinical associates (156)
- Patient care associates (127)
- Support services associates (106)
- Administrative assistants/office clerical associates (167)
- Executives, management, and supervisory associates (42).

Castle has no labor union contracts, 77% of associates are female, and associates represent the diverse population we serve in our local community: 21% Caucasian, 12% Japanese, 9% Hawai'ian, 4% Filipino and 54% of multiple ethnic backgrounds.

Workforce education levels range from high school to doctoral level, with years of advanced training for clinicians and administrative associates consistent with their job functions and professional interests. More than 70% of Castle's associates hold degrees licensure, or certification related to their professional roles. A key driver for our associates is alignment and engagement with our mission, vision, and values (see Fig. 5.2-1 for full list of drivers of engagement). All members of our workforce require a safe, healthy, and secure environment [5.1b(1)] which are addressed through hospital-wide programs and activities targeting risks and particular settings, such as exposure to communicable diseases, blood and body fluids, hazardous materials, crisis management, and other workplace safety and security concerns.

Our associates enjoy an excellent benefit package [5.1b(2)] and are a consistently more engaged workforce when compared to national averages [7.3a(3)]. Contract associates such as traveling nurses and local agency staff is used infrequently to meet peak volume demands.

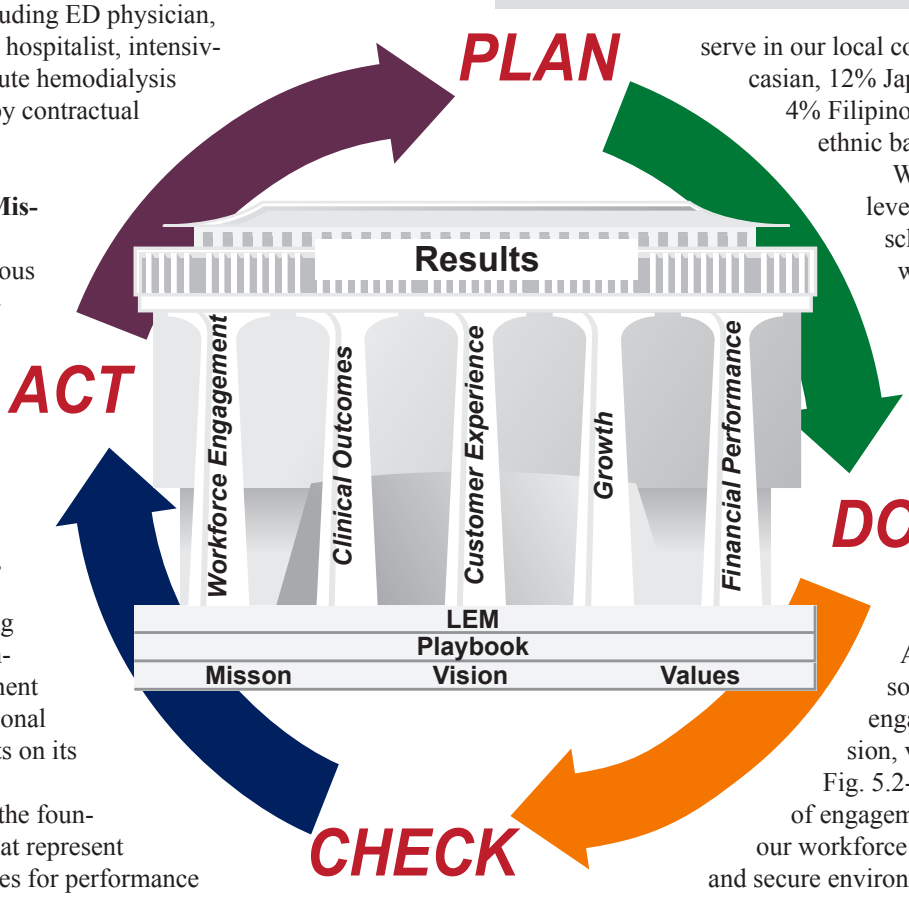
The medical staff members include approximately 350 providers and is organized in a traditional manner with bylaws, and rules and regulations that govern membership, provide a framework to define medical staff responsibilities define the scope of services, and provide mechanisms to ensure the delivery of quality patient care.

Medical staff members serve on Castle's Governing Board (GB) [P.1b(1)], Strategic Planning Committee [2.1a(1)], Quality Improvement Council (QIC), Patient Safety Committee, and other clinical and operational quality improvement teams in addition to the various medical staff committees. The Medical Executive Committee (MEC) oversees all activities of the medical staff and reports directly to the Governing Board.

Castle's more than 140 highly valued and dedicated volunteers provide support services throughout the organization. In 2016, our volunteers provided 17,114 hours of service.

P.1a(4) Assets − Castle is located in Kailua, O'ahu, Hawai'i. Facilities at this location include the medical center, a medical professional office building and support buildings with over 208,000 square feet of space. We also own additional

Fig. P.1-3 5 Pillars



professional office buildings. Castle Professional Center in Kāne'ohe, Hawai'i that is home to outpatient Rehabilitation, Radiology, Laboratory, Pharmacy services, and medical office suites. In 2013, Castle purchased Kailua Professional Centers I and II to expand our outpatient presence and facilitate our physician alignment strategies. Our latest addition is the La`ie Clinic located 27 miles north of the hospital.

In 2016, Castle invested in the purchase of 132 acres of land located one mile away from the existing campus. Our long range vision is the ultimate relocation of our hospital and associated services to a setting that is better able to accommodate our future needs.

Castle's technological capabilities support the provision of diagnostic and treatment services within the community hospital setting and includes state of the art technology of a fixed 1.5 Tesla MRI, 64-slice CT, digital radiography, computer-aided detection for 3-D mammography, ultrasound, diagnostic imaging, angiography, surgical lasers, Dexa Scan, and nuclear medicine capabilities. Castle's cardiac catheterization laboratory performed 5,342 interventional procedures during its first full year of service in 2009, and continues to provide vital services to our community.

A standardized corporate-wide information system infrastructure and a Cerner clinical electronic health record (EHR) provides an infrastructure for wide-area networks, local-area networks, intranet and internet access, and a regional data center. The Siemens MedSeries 4 HIS System is utilized for all financial information. Departmental clinical systems include OR Scheduling, Nurse Scheduling, Clairvia, and Patient Education.

P.1a(5) Regulatory Requirements − Castle operates in a highly complex and regulated environment and seeks to comply with and exceed both state and federal requirements related to patient care, employment practices, patient safety, financial practices, and environmental regulations. We are subject to oversight by Centers for Medicare and Medicaid Services (CMS), Occupational Safety and Health Administration (OSHA), Americans with Disabilities Act (ADA), Centers for Disease Control (CDC), Office of the Inspector General (OIG), and many other state and federal agencies (Fig. P.1-4). Committed to maintaining high standards of practice across all business and service entities, we participate in numerous voluntary accreditation and reporting processes including participation in the triennial survey by The Joint Commission (TJC), which provides a comprehensive, systematic evaluation of all hospital processes and services. During the most recent TJC survey in August of 2016 we were once again fully accredited and were recognized as the top performer in AH [7.4a(3)] with only two indirect findings.

Fig. P.1-4 Regulatory Oversight

LEVEL OF OVERSIGHT	AGENCY RESPONSIBLE	STANDARDS
Federal	TJC	Accreditation
	CMS	Hospital Operations
	OSHA	Workplace Safety
	IRS	Non-Profit Status
State	DOH	Licensure
County	SHPDA	Certificate of Need

To maintain Castle's tax-exempt, not-for-profit status and in support of our mission, we actively track charity care and community benefits [1.2c(2) and 7.4a5]. Our corporate compliance structure ensures that we comply with Medicare and Medicaid fraud and abuse regulations enforced by the Office of the Inspector General (OIG).

P.1b(1) Organizational Structure − The Board of Directors for AH is the legal board for our hospital. This Board has delegated certain authority to the GB of Castle, including strategic planning, quality oversight, physician relations, and physician credentialing. Castle's diverse GB of 15 voting members represent our community, including medical staff, local business, and church leaders.

The President and CEO of Castle reports to the chair of the GB, who is also the president and CEO of AH's Pacific Northwest region. Each of Castle's executive team members reports to the president/CEO of Castle. Castle's GB is pivotal in guiding the strategic planning process [2.1a(1)], and providing oversight for the clinical and operational activities of the organization. The quarterly GB agenda focuses on these three critical areas.

P.1b(2) Patients, Other Customers and Stakeholders − Patients are segmented into three key service groups and work systems: Inpatient, Outpatient, and Emergency Services. Fig. P.1-5 displays customer and stakeholder key requirements.

Fig. P.1-5 Key Patient, Other Customers, and Stakeholder Requirements

CUSTOMERS	Patients (IP, OP, ED)	Safe, Effective, Timely, Caring, and Efficient
	Patients' Families	
	Community (Windward O'ahu)	Care for chronic diseases/conditions, Emergency care, Health and wellness information, Access and equitable care for both insured and uninsured, Service to the community
STAKEHOLDERS	Adventist Health	Mission focus, Quality Care, Fiscal Strength, Leadership, Access to care
	Workforce (Nursing, Ancillary, Support)	Mission focus, Quality Care, Fiscal Strength, Leadership, Excellent Facilities, Job safety/security
	Physicians (Community, Contracted)	Mission focus, Quality Care, Fiscal Strength, Leadership, Technology, Excellent Facilities
	Suppliers	Fiscal strength

P.1b(3) Suppliers and Partners − Castle is mindful that the services we provide are largely contingent upon our relationships with external suppliers and partners (6.1c). Without these key relationships, we would be unable to provide the high quality, cost effective services needed in our community. Castle was instrumental in establishing the Windward Coalition, a collaborative group of community partners, such as long term care, home care, and hospice care agencies, to ensure seamless continuity of care.

AH was one of the founders of Premier Inc., one of the largest group purchasing organizations in the United States with approximately 3,750 hospitals and more than 13,000 other provider organizations nationwide. The supply chain department has developed an extensive affiliate program which offers providers of any size the opportunity to aggregate

their volume with other organizations in order to achieve best pricing. AH is now a stockholder of Premier and ranks in the top 10 in volume purchases. As an owner/partner, Premier provides AH with access to its cost savings analysis tools that assist in benchmarking and identifying even greater savings opportunities. Through our relationship with Premier, Castle established vendor relationships for efficiently obtaining medical and surgical supplies, pharmaceuticals, nutritional supplies, and other supplies and services.

In addition to group contracting for hospital products and services, Premier is also a healthcare improvement organization. Premier collects data from participating hospitals for inclusion in the Premier Perspective data warehouse. This is the largest clinical and financial database of its kind and it enables us to compare performance in specific areas to peers and best performers, find opportunities for improvement, and track results. Castle was the first Hawai'i hospital and first AH hospital to become a member of Premier Quest, a group of over 300 top-performing hospitals within the Premier hospital engagement network. Quest members benchmark with each other and share best practices. Since that time, Castle has been instrumental in convincing other AH and Hawai'i hospitals to join Premier Quest for benchmarking purposes. Premier has also been contracted for data submission services and disseminates our clinical performance data to CMS, TJC, and various healthcare improvement initiatives.

Other key contractual relationships include:

- Physician groups who provide clinical professional services to patients in the fields of hospital medicine, intensivist services, emergency medicine, radiology services, anesthesia, and pathology services.
- Clinical relationships with universities and colleges to support the education of health professionals in our community. Programs supported by Castle include Medicine, Nursing, Surgical Technician, Medical Technician and Phlebotomy, Rehabilitation, Pharmacy, Respiratory Therapy, Radiological Technology, and Wellness and Lifestyle Medicine.
- Relationship and transfer agreements with other acute care facilities as well as with long-term care facilities and hospice providers to ensure that patients can be transferred to the appropriate level of care when necessary.
- Cardinal Health is AHC's primary medical surgical supply distributor. This contractual agreement is leveraged through the AH corporate supply chain branch and managed at the facility level by the Materials Management Department. High volume commodity supplies are stocked at Cardinal Health's on-island warehouse to meet AHC's supply needs in a timely manner and during times of emergency.

Supplier and partner communication mechanisms include in-person meetings, email, and contracts. Suppliers contribute to the innovation process by providing consultation on supply-chain efficiency and cutting-edge technology, as well as remapping processes – especially in the case of information technology (IT) vendors. Supply-chain requirements include efficiency, cost, quality, and adherence to Castle's Code of Conduct. Providing innovation, efficiency and process improvement elements all contribute to enhanced competitiveness.

P.2 Organizational Situation

P.2a(1) Competitive Position – Castle enjoys a very strong share of [redacted]% of the primary market on the Windward side of O'ahu with a steady and consistent growth in overall market share over the past 10 years (7.5b). Our primary service area extends from Waimānalo to Lā'ie and serves a population of almost 150,000 residents (Fig. P.1-1). The large military population that resides on the Windward side of O'ahu receives its hospital services primarily from Tripler Army Medical Center. However, Castle provides emergency and birthing services to this population. There are a total of seven other hospitals on O'ahu. The primary competition for inpatient services is from the major hospitals based in Honolulu, including The Queen's Medical Center, Kapi'olani Medical Center for Women and Children, Kapi'olani Medical Center at Pali Momi, Kuakini Medical Center, and Straub Clinic and Hospital.

We collaborate with other leading healthcare organizations in Hawai'i through various agencies and committees to improve our expertise and services and to improve the health of our Windward community [1.2c]. Examples of these agencies include the Healthcare Association of Hawai'i (HAH), American Organization of Nurse Executives (AONE), CFO Roundtable, and ASQ Hawai'i.

P.2a(2) Competitive Changes – Castle, like so many hospitals across the country, has seen reimbursement cuts and changes in the competitive market that escalate financial challenges. While Castle ranks in the top 2.5% for CMS pay for performance (Fig. 7.1-20), we have experienced decreased reimbursement from government and private payors. The healthcare market in Hawai'i has been difficult in recent years with the closure of two other faith-based facilities due to financial issues. Castle is one of two healthcare organizations on O'ahu experiencing positive operating margins.

While healthcare reform has been challenging, the State of Hawai'i is in the enviable position of having the prepaid healthcare act established in 1974. This law dictates employer's responsibilities for providing health insurance for employees based on working more than 20 hours per week. Fortunately, this means even before the Affordable Care Act, Hawai'i had less than 10% uninsured.

Hawai'i Medical Services Association (HMSA) is the major insurance provider in Hawai'i, and covers approximately 50% of the population statewide. HMSA has consistently moved towards a Pay for Quality model for both inpatient and outpatient care. In 2016, the 32 PCP's of Castle Health Group (CHG) volunteered to be in HMSA's pilot for Physician Payment Transformation changing from fee-for-service payment to a per member per month (PMPM) amount as a base, a PMPM based on quality outcomes, and share in any Total Cost of Care (TCOC) savings. CHG has become a top decile performer of physician organizations, and is currently number one in the State.

Competitive changes have also presented us with opportunities for innovation. When a Honolulu hospital that offered open heart surgery closed, Castle's senior leadership identified this service line as a critical community need and a strategic opportunity. We quickly partnered with the cardiac surgeon from the Leeward hospital and developed our own state-of-

the-art open heart surgical program [6.1a(3)]. We continue to explore and implement strategies to enhance our competitiveness by including adding neurosurgery/spine services and expanding GI and ENT services in 2017.

P.2a(3) Comparative Data – Comparative and competitive data from within the healthcare industry include utilization data from Hawai'i Health Information Corporation (HHIC), State Health Planning and Development Agency (SHPDA), and Centers for Medicare and Medicaid Services (CMS), Professional Research Center (PRC), Gallup; clinical and financial performance data from Premier Perspective, Premier Quest and TJC Core Measures; customer satisfaction data from National Research Corporation (NRC); community perception from SMS Research, and financial data from AH, Standard & Poors, and Premier Perspective. Coveza and the Advanced Hospital Care Program of Hawai'i Medical Services Association (HMSA) provide numerous types of data comparisons, as does AH. Our corporate relationship with AH provides a wealth of comparative data across the many facets of healthcare services provided throughout the AH system, as well as national benchmarks.

Comparisons from outside the healthcare industry include salary comparisons for non-caregivers, safety and emergency preparedness data from the state of Hawai'i, and best practice approaches and results from the hospitality industry. In 2014, Castle made the strategic decision to change the associate satisfaction survey vendor from PRC to Gallup as part of a system-wide change to align with national best practices. We have now completed three cycles with Gallup, each time emerging as best in AH overall as a place to work, and having the highest composite score across all AH.

P.2b Strategic Context – During this period of healthcare reform Castle has experienced both strategic challenges and advantages (Fig. P.2-1). We have become more nimble in our decision-making and our strategic planning processes have become aligned with our budgetary cycle and allocation of capital resources.

P.2c Performance Improvement System – Castle was an early adopter of quality improvement principles such as customer-driven quality, management by fact, Total Quality Management, and benchmarking, with an emphasis on results since the early 1980s. We maintain our strong unwavering focus on organization-wide quality improvement demonstrated by three state level Baldrige applications and now our second national level Baldrige application.

Castle uses the scientific method of ***Plan*** (the change), ***Do*** (test the change), ***Check*** (results of the change), and ***Act*** (adopt, adapt, or abandon the change) to improve our processes (Figure P.1-3). In 2014, we introduced General Electric's Change Acceleration Process (CAP) to enhance stakeholder acceptance, alignment, and accountability. These elements are differentiating factors between successful implementation of good technical solutions and unsuccessful implementation of good technical solutions. Examples of CAP tools include: Threat/Opportunity Matrix, Stakeholder Analysis, Attitude/Influence Matrix, Write-it Say-it Slap-it, Storyboarding, and Who-What-When to engage stakeholders in the change process. CAP tools are used to enhance the effectiveness of PDCA, not to replace it. Throughout this application cycles of improvement are reflected with the symbol . Our Chain of Innovation process (Figure 6.1-4) helps to identify, support, and sustain improvements. Successful changes are incorporated into standard procedures and shared with affected departments and associates through in-service education, departmental meetings, storyboards, and celebration events. Improvements are also celebrated hospital-wide with newsletters, trophies, and banners.

Fig. P.2-1 Strategic Context

STRATEGIC CHALLENGES	STRATEGIC ADVANTAGES
SC 1: Physician alignment. Creating a clinically integrated physician network that meets the needs of the community throughout the continuum of care. (**H**, **O**, **S**, **W**)	SA 1: Geographic position in primary service area (**H**)
	SA 2: Strong history of community engagement (**S**)
SC 2: Population Health Management. Become recognized as a Center of Excellence for wellness and population health management. (**H**, **O**, **S**, **W**)	SA 3: Access to capital through AH (**H**, **O**, **S**)
	SA 4: Faith-based organization enhances sense of purpose (**W**)
SC 3: Strategic Growth. Increase primary care base of aligned physicians; expand medical specialties to address underserved needs; expand service offerings to meet community need. (**H**, **O**, **S**, **W**)	SA 5: Engaged associates, physicians and volunteers (**W**)
	SA 6: Stellar quality results (**H**)
SC 4: Enhance cash flow through increased revenue cycle efficiencies. (**H**, **O**)	SA 7: Advanced IT systems and support (**H**, **O**)
	SA 8: Leadership strength and engagement (**W**)

Key: **H** = Healthcare; **O** = Operational; **S** = Societal; **W** = Workforce

Annually, quality improvement goals are reviewed, updated, and aligned with strategic planning Playbook objectives and performance measures assigned to strategic planning objectives are deployed through the Leadership Evaluation Manager (LEM). The LEM is an Internet software tool developed by the Studer Group that is fully deployed to all leaders, including physician leaders. The LEM provides structure by sorting performance measures into the 5 Pillars, developing 90-day action plans, and producing monthly report cards. This process is described in the annual quality improvement plan that is developed by the QIC and presented each year to the GB for approval.

Castle has published an annual Quality Report with national and local benchmarks for over ten years. This comprehensive report posted on our website provides a clear picture of our performance to community members, stakeholders, partners, legislators, and competitors. Our results are a testament to our tenacious commitment to quality and ***chasing zero harm***. Year-over-year improvements continue to inspire our journey and our current results have taken us to levels of excellence that have made us role models in AH, the state, and the nation.

Category 1

1.1 Senior Leadership

1.1a(1) Vision and Values – Commitment to Castle's MVV is inherent in all forms of senior leader's communication and behavior. The senior leadership team, called the President's Council (PC)—which includes the President/CEO, Chief Nursing Officer (CNO), Chief Financial Officer (CFO), Vice President of Operations (VPO), and Vice President of Medical Affairs (VPMA)—has never lost sight of the fact that our hospital's very existence came out of a grassroots effort to build a hospital on the Windward side of O'ahu. From this beginning, Castle's mission has always been community focused, with a deep respect and appreciation for the *Aloha Spirit* that makes our island home unique and special.

In 2016 Adventist Health focused heavily on mission, vision and values (MVV). The outcome was a transition from 21 hospitals each with aligned, but separate MVVs to a true system with one MVV that encompasses the entire system and its participant agencies. Castle leadership participated in the development of the new statements to ensure they represent our culture and commitment to the community. The new MVVs were being rolled out throughout AH during the spring of 2017. These new MVV statements are listed in the Organizational Profile.

All new applicants are introduced to Castle's history and MVV during the application and interview processes. The MVV are presented in more detail to all new associates during General Orientation by the CEO, and are reinforced by all senior leaders, who also attend the opening session of General Orientation. In 2011, senior leaders chartered and empowered an interdepartmental task force to develop behavior standards that would align closely with our MVV, and also provide clearer expectations for associate behavior. This resulted in our Always Behaviors, which are reinforced personally by all senior leaders during bi-monthly *Hoku* Award ceremonies [5.2a(4)]. These awards recognize associates' demonstration of Always Behaviors in their daily work. Recently, the Always Behaviors were reaffirmed in concert with the new MVVs. Examples of senior leaders' personal actions and commitment to Castle's MVV include:

- **CEO** – Championed the Share *Aloha* customer service program, and enhanced use of the Hawai'ian language for various patient care units, publications, and programs (i.e. *Pulama* Unit, *Laulima* Unit, *Hookipa* Unit, *Ulupono* newsletter, and *Hoku* Award program). Introduced the weekly *Aloha* Friday Report that is delivered to all associates. Promotes and supports Girls and Boys Club of Kailua, and holiday outreach to the Institute for Human Services, a homeless shelter serving O'ahu residents.
- **CNO** – Passionate advocate for the pursuit of ***zero harm*** in all clinical areas of the organization. Established and leads each daily safety huddle to ensure clear organization-wide communication to identify and prevent harm. Personally championed innovative efforts to eliminate patient falls. Personally championed efforts to elevate nursing education and the quest to have 80% BSN by 2020 (Fig. 7.3-14). As Employer Chair for the Academic Progression in Nursing, and the past president for the AONE, our CNO provides vision and resources to Castle's nursing workforce.
- **CFO** – Plays a pivotal role in working with the HAH in representing the local community on legislative bills relating to Windward O'ahu. Oversees the tracking and reporting of Castle's many and diverse mechanisms to meet community health needs including community outreach efforts, tobacco cessation, chronic disease outreach, and uncompensated care.
- **VPO** – Established Castle's first Rural Health Clinic designed to specifically meet the unique health needs of one of the most under-served native Hawai'ian populations on O'ahu. Champions the LivingWell associate wellness program that emphasizes disease-prevention, self-care and personal commitment to well-being. Personally demonstrates commitment to running at least 500 miles annually. Chairs the Castle Leadership Institute (CLI) planning group that promotes continuous leadership training and development. Volunteer judge at Windward schools annual science fair.
- **VPMA** – University of Hawai'i School of Medicine, Professor of Surgery, providing support to medical students. Board of Directors of Legacy of Life Hawai'i, to promote and encourage organ donation in the community. Personally championed the development of the AHC Physician Compact. Holiday outreach to the Institute for Human Services, a homeless shelter serving our community. Takes calls in the Emergency Room caring for surgical emergencies in the community.

Additional mechanisms senior leaders use to communicate and reinforce Castle's mission, vision and values to all stakeholders are listed in Figure 1.1-1.

1.1a(2) Promoting Legal and Ethical Behavior – Recognizing that culture fosters ethical and legal behavior, and that leadership sets the example, senior leaders personally promote legal and ethical behavior by all associates, volunteers, physicians, partners, and suppliers. Our corporate compliance program includes training related to legal and ethical behavior for all associates, including senior leaders. They also actively participate in processes that ensure adherence to compliance training for direct reports. At general orientation the CEO reinforces and discusses the importance of legal and ethical behavior. Members of the senior leadership team participate on the hospital Ethics Committee and annually sign conflict-of-interest disclosure statements, as do department directors and physician leaders. In addition, all members of the Castle GB are required to complete conflict of interest statements annually. All of these approaches are formally assessed through an annual compliance audit conducted by the AH Corporate compliance team. An annual financial audit reviews financial transactions to assure compliance with all applicable laws and regulations. Our compliance management system aggregates information derived from various feedback systems such as rounding, hotline calls, audits, letters, and service recovery gift certificates.

1.1b(1) Communication – Fig. 1.1-1 summarizes the key communication methods used by senior leaders to engage associates, patients, supplier partners, and our community. Frank two-way communication occurs in eleven out of the eighteen methods. Leadership rounding is one of the best examples of frank two-way communication. Senior leaders round on their directors, and directors round on their associates. These rounds use the following scripted questions:

- What is working well or what are you most proud of?
- Are there any individuals I should be recognizing?
- Are there any physicians I should be recognizing?
- Is there anything we can do better?
- Do you have the tools and equipment to do your job?
- Do you have any tough questions for me (unfairness, hypocrisy, rumors, etc.)?

Castle's listening and learning approaches (Fig. 3.1-1) also provide opportunities to engage patients, other customers and associates. Social media experts in the Marketing department monitor social media responses to our services and community events, and HR utilizes linkedin.com and glassdoor.com for advertising and recruitment. Senior leaders motivate the workforce by connecting to our purpose through our mission and by personally recognizing high performance [5.2a(3)] through the following methods:

- CLI Pillar awards
- Bi-monthly *Hoku* Awards
- Handwritten thank yous
- Share *Aloha* Cookie Cards
- Free meal tickets at The Bistro
- Department rounding
- Publications including: *Aloha Friday Report, Weekly Huddle, and Ulupono*

In addition, all associates are taught to "manage up" other associates, physicians, and other departments as part of their AIDET training. Managing up not only reassures patients that they are in competent hands by putting others in a positive light, but also creates a very positive work atmosphere where associates want to exceed patient and other customer expectations. These strategies are a direct result of our Studer Group partnership.

1.1c(1) Creating an Environment for Success – Senior leaders have created a sustainable organization through:

- ***Mission achievement and organizational agility*** – Our two Core Competencies have created an excellent environment for "Living God's love by inspiring health, wholeness, and hope." Using our mission as the foundation, senior leaders align all of our systems and processes with the 5 Pillars. This begins with strategic planning [2.1a(1)], and progresses into the development of annual LEM quality improvement goals for leadership. Weekly Huddles, *Aloha* Friday Report, Top 5 Dashboards, and quarterly *Hui* (to gather together) Sessions conducted by the senior leadership team, keep associates informed about our progress in each of the 5 Pillars. Organizational agility is possible through corporate policies that allow access to strategic capital for addressing changing business needs.
- ***Learning, Innovation and intelligent risk taking*** – Senior leaders cultivate organizational learning by evaluating and improving key approaches and sharing insights with others in the organization. A prime example is the annual evaluation of our LEM goals which has led to the creation of template goals that are shared by numerous leaders. LEM goals and 90-day action plans are transparent, which allows leaders to learn from each other. The success of our LEM process in reaching key organizational goals has led to organizational learning corporate-wide. As of 2017, the LEM tool has now been adopted by AH, and implemented in all 21 hospitals. Learning also takes place at each Castle Leadership Institute (CLI), where we have developed a process to "showcase" leadership best practices [4.2b(2)]. Innovation and intelligent risk taking is encouraged through our Chain of Innovation process [Fig. 6.1-4], and through a deliberate push throughout the organization during the first quarter of each year to glean creative solutions for key strategic goals that are likely to be achieved only through innovation. All of these approaches have greatly enhanced our Core Competency of tenacious performance improvement.
- ***Patient and other Customer Engagement*** – The Share *Aloha* customer service program was inspired by the warmth and charm of Hawai'i's people and perpetuates that *Spirit of Aloha* in our hospital through dedicated resources for customer service training, service recovery gift certificates, and data-driven performance feedback. Since 2010, our CEO and Vice Presidents have partnered with the Studer Group to provide Castle with evidence-based leadership models and tools such as the LEM, PCM, AIDET, key words at key times, nurse and leadership purposeful rounding, and bedside shift reports. These initiatives have greatly enhanced our core competency of "***love matters***" and facilitated significant improvement in our customer service and engagement results.
- ***Succession planning and leadership development*** – Senior leadership has invested heavily in leadership development since 2010 through the Castle Leadership Institute (CLI) program, which consists of 1-2 days of off-site training at least three times per year. Upon seeing the benefits of this training for directors, senior leaders decided to include supervisors, managers, and charge nurses, totaling over 120 individuals, at each CLI. To grow leadership talent we have sponsored two on-site MBA cohorts for leadership and physicians, hosted an on-site RN to BSN program and have instituted a nurse residency program. In addition, a hospital-wide tuition reimbursement program supports any associate seeking growth opportunities. In 2016, an emerging leadership program was created to develop and grow talent within our organization to enhance the capability and capacity for succession planning. A new leader boot camp was also created to train and orient new leaders into their new roles.
- ***Culture of patient safety*** – Our Core Competency for ***tenaciously chasing zero harm*** is all about patient safety. Senior leaders have actively promoted a culture of patient safety for many years, beginning with participation in the Leapfrog Group's National Quality Forum-Endorsed Set of Safe Practices in 2004, and the Institute for Healthcare Improvement's "Save 100,000 Lives" campaign in 2005. Today, the CNO is a member of the Patient Safety Council, which is respon-

Fig. 1.1-1 Senior Leaders' Communication Methods with All Stakeholders

COMMUNICATION METHOD	APPROACH			AUDIENCE					FREQUENCY	PURPOSE
	In-person, two-way	Electronic	Print	Leadership	Associates	Patients	Community	Suppliers / partners		
MVV at general orientation (CEO)	✓				✓				Every 2 Weeks	**MVV**
Introductions at general orientation (All SL)	✓				✓				Every 2 Weeks	**MVV**
Annual strategic planning process (All SL)	✓		✓	✓	✓	✓		✓	Yearly	**MVV, D**
Purposeful department rounds by all (All SL)	✓				✓	✓		✓	Weekly	**MVV, D, R**
Leadership rounds (All SL)	✓			✓	✓				Monthly	**MVV, D, R**
Leadership meetings (All SL)	✓			✓					Monthly	**MVV, D, R**
Hui sessions (All SL)	✓				✓				Quarterly	**MVV, D, R**
Hoku/solid/low coaching (All SL)	✓		✓	✓	✓				Yearly	**D, R**
Top 5 Goals			✓	✓	✓				Monthly	**V, D, R**
Web site (CEO)		✓		✓	✓	✓	✓	✓	Daily	**MVV**
AHC Facebook and Twitter		✓		✓	✓	✓	✓	✓	Periodically	**MVV, D, R**
Annual Quality Report (CEO)		✓	✓	✓	✓	✓	✓	✓	Yearly	**MVV, D, R**
Weekly Huddle (CEO)		✓	✓	✓	✓				Weekly	**D, R**
Aloha Friday Report (CEO)		✓		✓	✓				Weekly	**MVV, D, R**
Patient Information Handbook (CEO)			✓			✓			Daily	**MVV**
Birthday luncheons (All SL)	✓			✓	✓				Monthly	**MVV**
Patient rounds (CNO)	✓					✓			Weekly	**MVV, R**
Hoku Awards (All SL)	✓			✓	✓				Bi-Monthly	**MVV, R**

Key: **MVV** = Mission, Vision & Values, **D** = Key Decisions, **R** = Recognition

sible for identifying high-risk processes, implementing best practices, identifying solutions for problematic processes, and conducting at least one proactive Failure Mode and Effects Analysis (FMEA) on a high-risk process annually. In addition, the CNO initiated and personally conducts a daily Patient Safety Huddle each morning. All ancillary and patient care areas send a representative to this huddle to report any patient safety concerns for the day so a corrective action plan can be developed immediately. If needed, key individuals stay after the huddle to work out the details of the plan.

1.1c(2) Creating a Focus on Action – Our Core Competency for ***tenacious quality improvement and chasing zero harm*** is driven by senior leadership. Senior leaders use the 5 Pillars to align our systems such as strategic planning and leadership LEM measures to create a focus on organizational goals and needed actions. The 5 Pillars create a balanced approach to performance improvement that includes goals for patients, associates, and other stakeholders. Weekly Huddles, Top 5 Dashboards [1.2a(1)], and quarterly *Hui* Sessions keep everyone focused on our performance improvement and needed actions. Senior leaders role model personal accountability through their own LEMs and by asking "What tough questions do you have for me?" during senior leadership rounds. Senior leaders also demonstrate personal accountability for Castle's performance at each Governing Board meeting when performance data is presented and discussed.

1.2 Governance and Societal Responsibilities

1.2a(1) Governance System – Castle's senior leaders have established systematic processes to achieve the following key aspects of the governance system:

- ***Accountability for senior leaders' actions*** – The CEO receives an annual evaluation by the GB. Each Board member is provided the opportunity to evaluate performance and provide constructive feedback, which is aggregated and shared with the CEO.
- ***Accountability for strategic plans*** – The Strategic Planning (SP) process functions around a five-year rolling cycle. The CEO reviews the status of current SP initiatives with the GB at least annually and many elements of the plan are incorporated into the regular CEO report to the GB at their quarterly meetings. A comprehensive dashboard of strategic goals is shared with the Board to report progress to goals. Key elements of the SP are incorporated into the LEMs of all senior leaders and are cascaded to directors and managers based on sphere of authority and influence. LEMs are reviewed monthly with all leaders and 90-day action plans are developed for each quarter of the year. Leaders' incentive compensation is tied to LEM goal achievement. Top 5 Dashboards list five SP goals that are relevant to each department, along with five department goals (usually a LEM goal) that are aligned to support each SP goal. Top 5 Dashboards also list specific actions that associates can take to contribute to each department goal. This creates a direct line of sight between associate actions and the attainment of our SP. Top 5 Dashboards are located on large bulletin boards in each unit/department.
- ***Fiscal accountability*** – Fiscal accountability is achieved through establishment and maintenance of processes that are in adherence with generally accepted accounting principles, routine and systematic reporting mechanisms, and established processes for variance analysis and reporting. Internal and external Medicare and Medicaid auditors conduct annual reviews. In addition, our Finance Committee

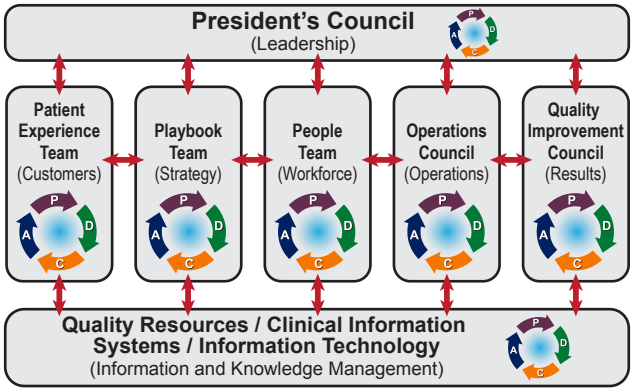
meets monthly to evaluate and improve performance.

- ***Transparency in operations*** – Castle's culture of transparency begins with disclosing unanticipated outcomes to our patients and continues with disclosing organizational performance data in our public Annual Quality Report. This report contains information regarding patient volumes, staffing, emergency care, inpatient care, patient satisfaction, physician satisfaction, innovations, awards, and goals for the following year.
- ***Governing Board member selection and disclosure policies*** – The GB, which is comprised of a cross-section of the community, seeks to ensure transparency in all of our operations. GB members are selected based on a competency needs grid. Each year GB members, senior leaders, and directors are required to sign conflict of interest statements disclosing any potential sources of conflict of interest.
- ***Independent and effective audits*** – All contracts are reviewed annually during internal and external audits for compliance and appropriate documentation. All physician contracts are reviewed by outside legal counsel and by a committee of the AH corporate legal board prior to execution.
- ***Protection of stakeholder interests*** – Our not-for-profit status defines our stakeholders as the community we serve. The GB, which is made up of members from the community, has the oversight to ensure the protection of community interests and hospital resources.
- ***Succession planning for senior leaders*** – Senior leader succession planning seeks to promote from within whenever possible. This applies to within Castle and AH. Of the four most recent senior leader positions that have been filled, two have been promoted from within Castle, and two have been promoted from within AH.

1.2a(2) Performance Evaluation – The senior leadership team engages in goal setting activities annually. Measurable LEM goals are developed in concert with the strategic plan and budget. Annual performance review is based on overall job performance and achievement of these goals. Achievement of these goals is tied to annual executive incentive compensation. Base compensation is based on market analysis.

Our Governing Board engages in annual self-assessments to review its performance and to make improvement suggestions. Results of the self-assessment are shared with the Board in aggregate form. Changes that have resulted from these self-assessments include:

Fig. 1.2-1 Leadership System



- Realignment of board meetings with more time and focus on quality
- Enhanced board education on local healthcare issues
- Annual Board retreat participation and content

The Associate Engagement Survey provides feedback to senior leadership as well as department-specific feedback to each director. Based on these results, the senior leadership team and department directors develop action plans designed to improve their leadership effectiveness.

Senior leaders have also used the Baldrige Excellence Framework and feedback reports to improve the leadership system as a whole. Fig. 1.2-1 illustrates how senior leaders have aligned existing teams/committees to Baldrige categories and given them oversight responsibilities for using the Baldrige criteria to refine their processes. Senior leaders from PC also participate in each of these teams/committees to facilitate coordination and communication between functions. Each of these teams/committees is responsible for reporting measurable performance results at least annually to the QIC.

1.2b(1) Legal, Regulatory, and Accreditation Compliance – Castle takes seriously its responsibility to the community. The MVVs drive organization-wide policies and processes to ensure they meet or exceed regulatory, legal, and ethical requirements. The analysis of the future impact of existing and proposed changes in programs and operations is addressed by senior leadership. We anticipate public concerns by using formal and informal listening approaches and developing proactive responses appropriate to the particular concern. Listening methods include neighborhood board meetings, our complaint management system [3.2b(2)], SMS, and the Quality Resources Department. Leadership uses a full disclosure

Fig. 1.2-2 Regulatory, Legal, Accreditation and Risk Management

REQUIREMENTS	KEY PROCESSES	INDICATORS	GOALS	RESULTS
Regulatory	Licensure—State	Licensure	Full Licensure (Now obtained through TJC deemed status surveys.)	7.4-5
Legal	Contracts	Contract review	100% Review	100%
Accreditation	The Joint Commission	Accreditation	Full Accreditation	7.4-5
RISKS				
• Patient Safety	NPSG, FMEA, RCA	Infection Prevention Fall Prevention Mortality	Reduce/Prevent Reduce/Prevent Reduce/Prevent	7.1-2 to -7 7.1-8 7.1-17 & -18
• Disaster Preparedness	NIMS Compliance / Drills	Compliance training	100%	7.1-34
• Environmental Safety	Education and Training	OSHA Reportables	<34 (2009-2013 Mean)	7.3-5

policy in which errors are disclosed and remedied whether or not the patient was initially aware of the occurrence.

We are committed to the provision of quality healthcare in a highly complex and high-risk environment. Fig. 1.2-2 describes our key compliance processes, measures, and goals for meeting legal, regulatory, and accreditation requirements. In all cases, Castle's targets are the same as, or higher than, the corresponding requirement.

We reinforce our environmental stewardship by ensuring our supply chain and equipment purchase decisions include evaluating reduction of our carbon footprint. We actively recycle all green waste, food waste, corrugated cardboard, and electronic waste. We have nearly completed our goal of converting all of our lighting systems to LEDs. Most of our cleaning products used in our facilities are green certified and we continuously evaluate products that are friendlier to our environment. As good stewards of our environment, we also recycle our batteries, electronics, and computer equipment with certified and "regulatory approved" business partners.

1.2b(2) Ethical Behavior – As a faith-based organization, we are committed to ensuring the highest standards of ethical behavior in all business interactions and are dedicated to serving our patients, our communities, and one another in a transparent, open, honest, and fair manner. We believe in obeying the spirit and letter of the law, and in conducting all business based on what is correct and just. The Castle Code of Conduct outlines how we do business and conduct ourselves professionally with regard to confidentiality, quality of patient care/patient rights, billing practices, health education, marketing and advertising, vendor relationships, human resources, medical education, and conflicts of interest. In addition, our Director of Risk and Compliance is designated as the hospital's Compliance Officer and is responsible for overall organizational compliance. The compliance officer provides education and monitors the hotline, which is available to all associates, physicians and stakeholders. All contracts are reviewed by internal legal counsel and the AH BCC before execution to ensure all legal and ethical standards are met. Key ethical practices include:

- Criminal background checks on all new hires
- Communication of ethical practices to all new associates during general orientation
- Requiring all new employees to complete the AH Code of Conduct training, and all associates are required to complete an annual education update course
- Requiring all appropriate new associates to attend training on Medicare's compliance requirements
- Required participation in the Corporate Compliance Program by all associates, volunteers, and physicians (Fig. 7.4-8)
- Availability of a special toll-free telephone hotline for anonymous reporting of legal and ethical issues
- Annual completion of a signed conflict of interest statement by senior management, GB, department directors and physician leaders (Fig. 7.4-4).
- A Bioethics Committee that deals with patient care-related ethical issues, chaired by a physician with a membership that includes representative physicians, nurses, managers, executives, and community members
- Grievance policy that allows associates to file a formal grievance at any time.
- Physician compact signed by all physicians regarding their relationship with administration.

1.2c(1) Societal Well Being – We believe that our Mission Statement of "Living God's love by inspiring health, wholeness and hope" extends beyond our hospital walls and commits us to a greater responsibility to the overall society that we live and work in. That is manifested throughout our organization in small ways such as partnering with local pig farmers to recycle food waste to larger ways such our engagement with the military and healthcare association in island-wide disaster preparedness activities such as RIMPAC. We are committed to furthering education and providing employment opportunities through our partnerships and support of local ancillary and nursing programs. These partnerships have resulted in many success stories where associates working in environmental services or as nurse assistants received financial support to further their education and then were then able to advance into new opportunities. In addition, we are proud to have been recognized by the Governor and Hawai'i Energy – the energy efficiency and conservation program for Hawai'i – for implementing extensive energy efficiency measures in 2012, and reducing our carbon footprint by saving 1,200,000 kilowatt hours of electricity per year. In 2016 we started a large project to re-lamp the entire hospital with LED lighting. This project earned a substantial rebate from Hawai'i Energy and will allow payback to occur in just a few months. Also in 2016, we began to operate the main water chiller plants in such a way that maximizes their efficiency. In the three months following implementation we realized savings of approximately 5% per month over the previous year.

1.2c(2) Community Support – Improving the health of the Windward O'ahu community has been a primary focus of Castle since we opened our doors in 1963. We assess and prioritize how we address community needs largely by using the results of the most recent community needs assessment. The President's Council allocates resources based on 1) identified community needs, 2) available resources and skills, 3) potential partnerships, and 4) the likelihood of being able to conduct a sustained initiative. The design, piloting, and implementation of community programs uses one or more of the outreach methods:

- Program sponsorship
- Community agency collaboration
- Provide direct financial support to community initiative.

A short summary of key Castle community initiatives is presented here:

- Sponsor and organizer of the "Windward Healthcare Coalition" which brings together elected officials, healthcare leaders and Castle personnel for networking and community needs assessment
- Castle Lifestyle and Wellness Medicine Center, which offers an array of health education and lifestyle-enrichment resources to keep Windward residents healthy.

- Provision of charity care for uninsured and underinsured patients
- Wellness activities and education at the Boys and Girls Club
- Sponsorship of annual Windward half-marathon
- Annual community seasonal kick-off, "Kailua Tree Lighting"
- Participation in community events: "I Love Kailua Town Party", "Cool Kailua Nights", and "Kailua 4th of July parade.
- Attendance at Kailua Neighborhood Board meetings in which healthcare/hospital updates are provided as needed
- Membership and support by leadership of local chapters of Rotary International
- Membership by CEO in the Hawai'i Business Roundtable with; a group of key business leaders in Hawai'i that meets monthly

Category 2

2.1 Strategy Development

2.1a(1) Strategic Planning Process – Castle's strategic planning is firmly integrated with the AH strategic planning process (SPP). Our long-term, five-year strategic planning cycle (Figure 2.1-1) uses a playbook format both to organize and prioritize strategic initiatives and to align our goals with the AH corporate goals. The Castle MVVs serve as the foundation for the planning process and our core competencies provide leverage for success. The strategic planning cycle is continuous with the Playbook Team meeting monthly throughout the year. Key stakeholders in the SPP include GB members, community representatives, senior leaders, department directors, and physician leaders.

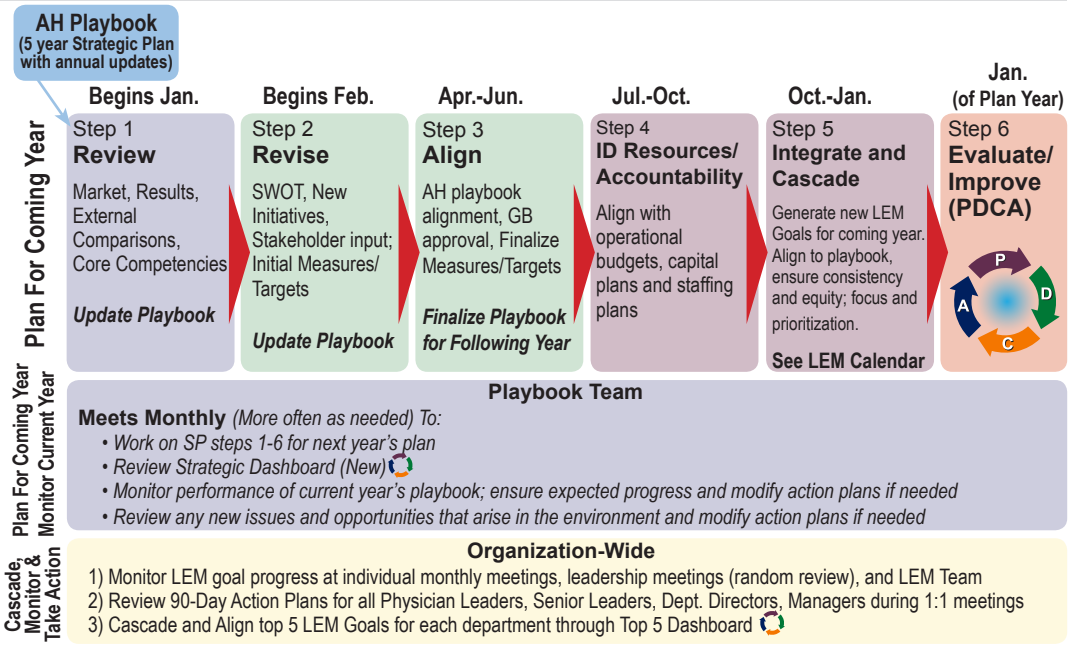
Each year begins with the Playbook Team evaluating our current market position, prior year performance against established comparisons and targets, and analysis of our core competencies. Following the review, the team conducts a SWOT analysis to determine key advantages and challenges (Fig. 2.1-1, Step 2). Strengths and weaknesses are determined through the review of performance data from each of the 5 Pillars. These data are collected from Premier Quest benchmarks, TJC Core Measures, NRC patient satisfaction surveys, HHIC, the annual budget, and internal dashboards. Opportunities and threats are determined by looking outside the organization at emerging technologies, supplier/partner capabilities, new healthcare services being offered by competitors, and changing customer preferences. Following this analysis, input regarding potential opportunities is solicited from the diverse group of stakeholders to ensure that the Playbook includes input from all perspectives. The strategic challenges (Fig. P.2-1) are a result of this process.

Each Playbook cycle addresses a multi-year planning time horizon in with the final document representing a five-year rolling plan. The short-term, annual review and update addresses immediate strategies and progress towards the long-term goals. This is driven in part by AH corporate's planning and budgeting cycle. For some strategies, the planning horizon may be as far off as 10 years or more. Thus, planning activities for more than one year usually occur simultaneously. This approach facilitates the integration of plans across multiple years and supports our long-term organizational success. Castle has demonstrated a strong ability to prioritize strategic initiatives over time. As a small community hospital, resources are limited and all opportunities and capital needs are evaluated and prioritized based on community need and financial capability. Our organizational ***agility*** has been addressed and sustained through the development of corporate policies that allow access to strategic capital for worthy projects. Our organizational structure provides us with the ability to be flexible. As needs are identified we are able to respond with appropriate changes in responsibility for key leaders in the allocation of resources with budgeted funds. The cardiovascular service line is a good example of ***transformational change and operational flexibility*** [6.1a(3)].

Castle benefits from AH's corporate structure and support as it relates to the strategic planning process and our ability to execute the strategic plan. The overall structure and direction assures that key factors are addressed during the process in Step 3. A result of this process is that Castle has a defined set of goals, objectives, strategies, and action plans with assigned accountabilities that are aligned with the AH corporate strategy.

2.1a(2) Innovation – The needs of our community, our customers, and stakeholders are incorporated into the SP and drive

Fig. 2.1-1 AHC Strategic Planning Process (Updated since submission)



opportunities for innovation Large gaps between current performance and SP performance forecasts may require intelligent risk-taking and innovative solutions (6.1d).

Innovation at Castle is actively encouraged at all levels. Every year, our parent organization makes available a total $250,000 of innovation "seed money" and awards up to $50,000 per innovation. In SPP Step 6, we ask our associates and leaders to submit ideas that support our strategic goals, and screen them for financial viability and fit. Over the last several years we have received awards totaling almost $100,000. One recent example is a $48,000 award to create a training module on increasing staff empathy, to be used at our organization and shared with other hospitals within AH . Not every application is successfully funded with this seed money, however in many cases we have decided to internally fund particularly innovative ideas from our own operational capital. One example is our very popular Bistro Cart that delivers food to associates who may be too busy to go to the Bistro for meals. All innovations requiring financial or other resources are approved by senior leaders following the Work and Service Design Process (Fig. 6.1-1). Successful innovations are celebrated through public recognition at staff meetings as well as external publications.

2.1a(3) Strategy Considerations − Our SPP is highly dependent upon the thorough assessment of data related to strategic areas of focus. These data, external and internal, are both intermittent and ongoing. During the strategic planning cycle, data related to utilization, outcomes, operations, and engagement are reviewed and considered in the development and refinement of strategies. The data drives:

- ***Strategic challenges and strategic advantages*** identified and incorporated into the SP during Step 2. Data from each of our 5 Pillars are identified and analyzed to identify key strategic challenges and advantages (Fig. P.2-1).
- ***Risks*** related to the success of programs and services are assessed in relation to community and market dynamics during Step 1. We follow local, state, and national trends to understand how to best meet the needs of our community. Castle participates with HAH in compiling a comprehensive Community Health Needs Assessment (CHNA) annually, and conduct a Community Health Plan every three years. These assessments provide data related to the specific health needs of our community and creates a baseline for strategy and program development. Senior leaders actively participate in local networks such as HHIC, HAH, HFMA, AONE, the Neighborhood Board, Chamber of Commerce, and Civilian-Military Committee to remain connected and have active listening posts to aid in risk assessment.
- ***Changes in the regulatory environment*** are monitored through email subscription alerts, The Joint Commission's "Perspectives" newsletter, mock surveys, AH Quality & Accreditation Director conference calls, and external workshops. Major changes such as Core Measure requirements are communicated to senior leadership and incorporated into Step 1 of the SPP.
- We identify potential ***blind spots*** in several ways. These include seeking diverse input into the SPP, collection and review of data from multiple diverse sources, inclusion of multiple levels of review by physician leaders, department directors, and GB members. All data and findings are aligned with our MVV and our core competencies to prioritize and rank strategic efforts. During Step 6 in the most recent SP process, we identified the need for a more diverse and comprehensive involvement by our key physician leaders. The most recent cycle included this enhanced participation .
- Our ***ability to effectively execute*** our SP is strengthened by our thoughtful process design aligned with our annual budget cycle in Step 4. We only develop and deploy strategies that are aligned to MVV and community need that can be fully supported by allocation of financial and other organizational resources. We are also purposeful in how goals and objectives are delineated and leader responsibilities are assigned. All elements of the plan are measurable and leaders are assigned responsibility for all goals (Fig. 4.1-1). The LEM structure is tied directly to the SPP and leadership accountability is reviewed monthly to assure we are progressing towards goal achievement (Fig. 2.1-1 Step 5).

2.1a(4) Work Systems and Core Competencies − Our key work systems [6.1a(2)] of Emergency Care, Inpatient Care, and Outpatient Care are linked to the strategic planning process through the evaluation and prioritization steps of our healthcare Service and Work Design Process (Fig. 6.1-1). In steps 1&2 of the SPP, we evaluate the results of current objectives and identify changing strategic advantages and challenges. This may result in changes to existing strategic objectives and the creation of new objectives, either of which results in updates to existing processes and would serve as an input into work process design (Fig. 6.1-1). To ensure the completion of objectives, we leverage our core competencies to develop a detailed action plan for each objective that is then incorporated into the SP. This action plan considers both key work processes, and support processes, including those managed by external suppliers and partners along with the security of intellectual property. Decisions to outsource are based on our core competencies and the core competencies of our suppliers and partners to determine which is best qualified to accomplish each objective.

An example of how we leverage our core competencies in strategic planning is our Care Delivery Initiative "To improve AHC clinical outcomes and care transitions for our community, and maximize financial reimbursement tied to quality processes and outcomes by public and private payers." One of the action items developed to support this initiative was to focus on infection prevention. Our tenacity for chasing zero harm has resulted in over 1,000 days without a CAUTI, and only one CLABSI in the past 2 years (Fig. 7.1-2 & -3) Special emphasis is placed on future core competencies when challenges and opportunities are discussed in steps 1 and 2 of the SP cycle. Decreased reimbursement from both government and private payers has emphasized the need to decrease costs by reducing waste in our processes. As a result we have recognized the need to further develop our competency for utilizing Lean methods to reduce costs and to make healthcare more affordable.

2.1b(1) Key Strategic Objectives − Castle's strategic objectives and goals are based on our mission and the 5 Pillars of success. Eight key Strategic Areas of Focus (SAFs) have been identified. These SAFs provide the framework for the SP. During the most recent SP cycle we incorporated SAFs related to Population Health, and Market Development, in response to the changing healthcare environment and the era of accountable care in which we operate. Fig. 2.1-2 aligns the 5 Pillars and summarizes the SAFs and goals, key short-term and long-term objectives, and measures.

2.1b(2) Strategic Objective Considerations − Strategic objectives are developed as a result of the SWOT analysis, which takes into consideration our core competencies, strategic challenges, strategic advantages, opportunities for innovation, and threats (Fig. P.2-1). The objectives are structured around the 5 Pillars to balance clinical outcomes, financial performance, workforce engagement, customer experience, and growth needs. Satisfaction surveys of key customers and stakeholders including patients, associates, physicians, and community are analyzed and reviewed as part of this process. In addition, stakeholder representatives from each of these areas attend the annual board SP retreat to ensure that each has a voice in the plan.

The long-term planning horizon is addressed in our 5-year rolling SP process. Long-term goals and strategies are developed and enacted. Our annual review process assists us in focusing on the short-term planning horizon and to make course corrections. Monthly Playbook Team meetings and quarterly GB meetings provide an opportunity for more frequent review and direction change when needed.

2.2 Strategy Implementation

2.2a(1) Action Plans − Following the setting of strategic goals and objectives, the final steps in the annual SPP focus on translating the strategic objectives into annual goals and action plans with tasks assigned, key measures identified, and due dates established to report on progress. The action plans are developed and evaluated every 90 days using the LEM. See Fig. 2.1-2 for current key short-term and long-term action plans. Results of a leader's goals and LEM are transparent to other leaders to foster alignment and collaboration. For example, "Stroke Guidelines" is an objective with action plans that cross between ED, Imaging, and the Hospitalists. Results are reviewed monthly during one-on-one meetings and a report on performance is given to the QIC and GB during the course of the SP implementation for continuous monitoring to assure sustained improvement.

2.2a(2) Action Plan Implementation − Action plans are deployed to associates, key suppliers, partners and collaborators through the Senior Leaders' Communication Systems (Fig. 1.1-1), LEM, Provider Feedback System [4.1c(2)], contract negotiations, medical staff meetings, and other methods.

An example of action plan deployment is our relationship with our physicians who are key partners. Action Plans are deployed into the physician leaders' LEM and are reviewed monthly. In addition, the CEO meets twice a year with key physician leaders to review progress and reinforce action plans. Our review mechanisms for all action plans, including LEM, help ensure that outcomes from implemented plans are sustained.

2.2a(3) Resource Allocation − We ensure that appropriate resources are available to support the accomplishment of strategic objectives, including workforce requirements and education/training, necessary technology, and appropriate and human resources. Senior leadership coordinates its detailed action planning to coincide with the annual capital and operating budgeting process. Resources are also evaluated during the Design and Innovation phase of the Healthcare Service and Work Process Design (Fig. 6.1-1). Each director's LEM is aligned with the SP and this enables accountability for resource use and financial performance to be shared.

The annual budgeting cycle follows strategic planning, and includes budgeting for FTEs, annual operating expenses, and capital investments needed to support strategic objectives. Throughout the year, our Operations Committee reviews both capital and FTE requests to determine impact on the organization and ensure all possible costs have been identified and understood prior to implementation. Requests are then prioritized and recommendations made to senior leadership.

Performance is also measured on an ongoing basis. In the event that performance is not meeting targets, the champion develops proposals for either restructuring processes to meet objectives or, where necessary, requests additional resources. Due to the austerity of the Castle financial culture and the preference for process improvement over resource expansion, the strong propensity is to seek solutions within existing resource allocations.

We manage risks associated with the plans based upon the scope and complexity of those plans. Complex plans require full business plans with ROI for analysis and approval (Fig. 6.1-1). Other less complex projects, are processed through the capital acquisition process and review.

2.2a(4) Workforce Plans − We have clearly defined workforce needs in the most recent SP. Fig. 2.1-2 describes our short-term and long-term strategic objectives for the Human Performance Initiative. Increasing associate engagement, decreasing associate turnover, and managing our productivity will enhance our capacity and capability for fulfilling not only our Human Performance Initiative, but other strategic initiatives as well.

Senior leaders evaluate impacts on our workforce annually, during our hardwired budget cycle, and intermittently as new opportunities arise. For example, when we expanded our Cardiovascular Service Line we incorporated recruitment and training needs into that plan. Our efforts to enhance workforce plans in recent years have included new graduate RN programs, RN to BSN program, two cohorts of an on-site MBA program for leaders and physicians, expansion of online education for all associates and regular senior leader rounding on associates and physicians.

Fig. 2.1-2 Playbook: Strategic Objectives, Goals and Key Measures

PILLARS	STRATEGIC LINKAGE	KEY INITIATIVES AND OBJECTIVES	KEY PROJECT ACTION PLANS	KEY PERFORMANCE MEASURES	PROJECTIONS 2017	2018	2019	2020	KEY BENCH-MARK	BENCH-MARK SOURCE
Workforce Engagement	SC 1, 3 SA 4, 5, 8 CC2	**Human Performance Initiative** To create an engaged and efficient workforce that inspires excellence and connects associates with their purpose and our mission. (LT)	• Leadership training and accountability (LT) • Succession planning (LT) • Productivity flex targets (ST)	• Engagement • FT/PT Turnover • Productivity	4.32 13.0% 100.0	REDACTED			4.42 10.7% 100.0	Gallup AB AH
Clinical Outcomes	SC 1, 2, 3 SA 1, 2, 4, 5, 6, 7, 8 CC1	**Care Delivery Initiative** To improve AHC clinical outcomes and care transitions for our community, and maximize financial reimbursement tied to quality processes and outcomes by public and private payers. (ST)	• Focus on infection prevention (ST) • Enhance mortality review process (ST) • Revise discharge process (LT)	• HAI & HAC • Mortality • Readmissions	10 0.75 0.85				0 0.54 TD 0.67 TD	NHSN Premier Premier
	SC 2 SA 1, 2, 4, 5, 6, 8 CC1	**Population Health Initiative** Improve patient compliance with identified high risk screenings and improve outcome measurements. Expand Wellness outreach to align with our Community Health Needs Assessment (CHNA) to attributed lives. (LT)	• Expand coordination to include patient outreach (ST) • WO participation in Health RealAge Test (ST) • Improve participation in associate LivingWell (ST)	• Screening compliance • RealAge Test • LivingWell participation	92PR 10% 80%				90 PR 25% n/a	HEDIS HMSA AH
Customer Experience	SC 1, 2, 3 SA 4, 5, 8 CC2	**Patient Experience Initiative** To engage staff & physicians in improving the patient experience as measured by HCAHPS. To maximize financial reimbursement tied to patient experience by public and private payers. (LT)	• Hardwire Studer strategies and empathy training (ST) • Address patient satisfaction with physicians in physician contracts (ST)	• HCAHPS • HCAHPS communication w/doctors	84 80	REDACTED			90 90	NRC NRC
Growth	SC 1, 2, 3 SA 1-8 CC1 & 2	**Market Development Initiative** Expand reach in Primary Care market while also growing inpatient market share to [redacted]% by 2020 through targeted expansion of services and creation of new partnerships. (LT)	• Expand market share (LT) • Market share of CHG PCPs (LT)	• # of CHG PCPs • CHG PCP Market share	32 43%				n/a n/a	n/a n/a
Finance Performance	SC 4 SA 3, 5, 6, 7	**Revenue Cycle Initiative** To enhance cash flow generated from Accounts Receivable by reducing days in A/R and maximizing yield through increased revenue cycle efficiency. (ST)	• Registration efficiency (ST) • Point of service copays (ST) • Timely documentation and reduction of charge lag (ST)	• A/R Days • A/R >90 Day • Clean claims	49 21% 88%				49.3 21% 85%	S&P AH AH

Key: **SC** – Strategic Challenge; **SA** – Strategic Advantage (see Figure P.2-1); **CC** – Core Competency; **ST** – Short Term; **LT** – Long Term

2.2a(5) Performance Measures − Key performance measures used to track the achievement and effectiveness our action plans are listed in Fig. 2.1-2. These action plan measures cascade down to leaders through the LEM to reinforce organizational alignment and accountability. Progress on LEM performance measures is monitored monthly during meetings with each leader's "one up". Overall performance is tracked by the Playbook Team on a monthly basis and updates are provided to the GB on a quarterly basis.

2.2a(6) Performance Projection – Short-term (2017) and long-term (2020) performance projections are listed in Fig. 2.1-2. These performance projections are based on comparisons with top decile whenever such comparisons are available [4.1a(2)]. When not available, we look for best in class such as Standard and Poor's "A" rating indicators for financial targets. Our goal is always to exceed these targets. We are always looking for national benchmark leaders to learn from the best and implement best practices. We are able to connect with these best practice leaders through our involvement with Premier QUEST. See Item 4.1a(1) for a more detailed description of how key performance measure comparisons and targets are determined. Gaps are identified through measurements of key objectives in our LEM and 90-day actions plans are developed to close the gaps. We also align our AH Corporate goals using the monthly forecast [4.1c(1)] format that we project our objectives out three months based on current and future environment.

2.2b Action Plan Modification − Healthcare is inherently dynamic. Opportunities emerge suddenly and must be acted upon to maintain the overall strategic direction and avoid opportunity loss. Action plans are monitored monthly with leaders and plans for success are part of each discussion. We are able to quickly identify when an action plan is not working based on real time results and through a variety of internal and external listening posts. Changes to the market, such as new employers, businesses closing or downsizing, competitor moves (new facilities, new service offerings), new technology opportunities, or legislative/ regulatory changes are discussed throughout the year by senior management and other leaders. The Playbook Team meets monthly in order to modify action plans and deploy resources for rapid execution when needed.

Some of the most significant organizational opportunities of the past few years have presented themselves "mid-cycle" and were executed nonetheless. These include the hospitalist and intensivist programs, neurosurgery and open heart surgery programs, MAKOplasty for hip and knee and most recently, the purchase of the HPU campus. As part of the process, key stakeholders conduct weekly meetings to review strategic action plans and performance measures to determine if adjustments are required.

Category 3

3.1 Voice of the Customer

3.1a(1) Listening to Current Patients and Other Customers − Listening to our patients and other customers with sincere interest and compassion is a priority of our organization and is an important component of our core competency of ***love matters***. In addition, the Customer Experience Pillar is crucial to fulfilling our vision of enhancing interactions with our patients and achieving our Patient Experience Initiative from our strategic plan. Patient experience scores now account for approximately 30% of our pay for performance from CMS and HMSA.

Listening methods are tailored to the needs and settings of our patients and other customers to determine actionable information as shown in Fig. 3.1-1. Most listening approaches are designed to provide caregivers with immediate feedback so they can work with the patient/customer to plan their care and make adjustments concurrently [6.1b(2)]. Rounding is one of our most powerful methods for obtaining immediate actionable feedback and is deployed to all patient care areas. Nurses proactively conduct hourly patient rounds to assess the patient's 4Ps (Pain, Position, Potty, and Plan). Hourly rounds are recorded on a log in each patient room. Nurse managers and charge nurses conduct daily patient rounds to evaluate the effectiveness of the hourly rounds and to capture recognition opportunities and corrective actionable feedback. The Patient Advocate and Chief Nursing Officer also conduct spot rounds to ensure that patients are receiving safe, efficient, effective, timely and compassionate care. The chair for the Patient Experience Council meets quarterly with our Studer coach and PC to refine these approaches for effectiveness and to assess the need for new approaches .

The Marketing Department uses web user data, information from the call center, and SMS to evaluate and improve patient/stakeholder access mechanisms. Social media experts in the Marketing Department also monitor social media mentions, messages, and reviews, and acknowledge patient and community compliments and complaints [3.2b(2)] to gain insight into how patients/customers perceive aspects of their involvement with us. Customers are directed to the appropriate service or receive a response from the most qualified Castle associate or department to resolve concerns, complaints, and information needs. Aggregate data from these mechanisms is analyzed by the Patient Experience Team to improve healthcare services to refine our approaches and to enhance the patient/customer experience.

In addition to rounding and other immediate feedback approaches, we also use post discharge surveys to obtain lagging comparative data on our performance. We have contracted with the NRC to conduct our inpatient HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) survey and other outpatient surveys. These surveys provide actionable data regarding our ability to consistently provide safe, efficient, effective, timely and compassionate care. This information is systematically analyzed by QIC, used during the annual strategic planning process [2.1a(3)], integrated into LEM goals and measures [P.2c and 5.2a(3)], and shared with all staff via Top 5 Dashboards throughout the organization [4.1b]. These data, along with the Always Behaviors [5.2a(1)] provide a clear line of sight between the voice of the customer, customer service goals, and the role of each individual associate to meet patient and other customer needs. All of these listening approaches are ongoing, making it easy

Fig. 3.1-1 Deployment of Customer Listening and Learning Approaches

LISTENING METHODS AND RELATIONSHIP STAGES	PATIENTS										OTHER CUSTOMERS	
	SEGMENTS			MAIN SERVICES				TYPES OF PATIENTS				
	IP	OP	ED	Medical	Surgical	Childbirth	Psychiatric	Former Patients	Potential Patients	Patients Of Competitors	Patients' Families	Community
HCAHPS Survey* (**Bu**, **S**)	LSDE			LSDE	LSDE	LSDE		LSDE				
NRC Surveys* (**Bu**, **S**)	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE				
Rounding Methods (**B**, **Bu**, **S**)	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE				ISDE	
Share Cards & Letters (**Bu**, **S**)	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE			LSDE	
Post Discharge Calls (**Bu**, **S**)	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE			ISDE	
Care Boards (**B**, **Bu**)	ISDE			ISDE	ISDE	ISDE					ISDE	
Patient Note Pads (**Bu**)	ISDE			ISDE	ISDE	ISDE					ISDE	
Complaint Process (**Bu**, **S**)	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE			ISDE	ISDE
Service Recovery Logs	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE				LSDE	
Patient Relations/Advocacy (**Bu**, **S**)	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE		ISDE	ISDE
Patient Experience Team (**Bu**, **S**)	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE	LSDE		LSDE	LSDE	LSDE
Website (**B**, **Bu**, **S**)	ISDE	ISDE	ISDE					ISDE	ISDE	ISDE	ISDE	IE
Call Center (**B**, **Bu**)	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE	ISDE
Social Media (**B**, **Bu**, **S**)								ISDE	ISDE	ISDE	ISDE	IE
Community Needs Assessment (**B**, **Bu**)								LSDE	LSDE	LSDE		LSDE
Health Fairs & Screenings (**B**, **Bu**, **S**)		ISDE		ISDE				ISDE	ISDE	ISDE		ISDE
Focus Groups (**Bu**)								LSDE	LSDE	LSDE		LSDE
SMS Community Org.s (**B**, **Bu**, **S**)									LSDE			LSDE
Governing Board (**B**, **Bu**, **S**)								ISDE		ISDE		ISDE
Accreditation Surveys (**Bu**, **S**)												LSDE

Relationship Stages: * = Comparative Information, **B** = Beginning, **Bu** = Building, **S** = Sustaining,
Patients and Customers: I = Immediate Feedback, **L** = Lagging Feedback, **S** = Satisfaction, **D** = Dissatisfaction, **E** = Engagement

to evaluate the impact of improvement efforts based on the next patient-rounding visit, post discharge call, or satisfaction survey result.

3.1a(2) Listening to Potential Patients and Other Customers – Fig. 3.1-1 also lists the major listening methods used for former patients, potential patients, and patients of competitors. All of these methods provide actionable information and feedback that is analyzed by the Patient Experience Team to improve healthcare services and enhance the patient/customer experience. One of the most powerful methods of listening to former patients is our post-discharge call process, which uses an internet software tool called the Patient Call Manager (PCM). Callers make up to three attempts to reach all of our patients who are discharged to ensure that they have made a smooth transition and to capture recognition opportunities and corrective actionable feedback. Feedback is automatically sent via email to appropriate leadership, and is aggregated in a monthly report which is used by a subcommittee of the Patient Experience Team to make improvements. This process has been deployed to all inpatient care areas and the ED. These calls have prevented readmissions and our callers have potentially saved lives through their quick response to serious health concerns.

3.1b(1) Satisfaction, Dissatisfaction, and Engagement – One of our primary methods of determining satisfaction and engagement is through surveys, which allow us to measure our performance compared to our competitors. NRC sends satisfaction and engagement surveys to a randomized sample of patients from all service areas throughout our inpatient, outpatient, and ED services. ***Satisfaction*** is measured through an overall rating and key drivers of satisfaction are determined through a regression analysis performed by NRC that ranks questions in descending order of importance based on their correlation to the overall rating score. ***Engagement*** is measured by whether patients would recommend our services to friends and family. Performance scores are based on "Top Box" results as measured by the percent of respondents answering "always" or "definitely yes." Survey results are updated continuously and are posted on the NRC website. We tenaciously chase "always" because "***love matters***".

The Quality Resources Department sends weekly Stoplight Reports to department leaders to keep them updated on their area's performance, but all of these leaders have access to the NRC website so analysis and learning can take place continuously. The QIC reviews and analyzes trended data quarterly to evaluate the effectiveness of our approaches to patient satisfaction and engagement, and to ensure that improvement opportunities are being addressed through the Patient Experience Team and/or through LEMs. Leaders target department-specific satisfaction and engagement goals in the Customer Experience Pillar section of LEMs and LEM 90-day action plans are reviewed with senior leaders during monthly one-on-one meetings. Over time, we have made improvements to this process by creating template goals that are shared by numerous leaders. Since LEM goals and 90-day action

plans are transparent, leaders are able to learn from each other and collaborate on improvement strategies. Associates are kept informed of hospital-wide and department-specific satisfaction and engagement performance and improvement initiatives through monthly postings on the Top 5 Dashboards, department meetings, and the Weekly Huddle (Fig. 1.1-1).

Associates are also engaged in improving satisfaction and engagement through the use of CAP tools [P.2c and 6.1b(4)] during staff meetings and unit-based councils. High performing areas are recognized at CLIs, and all departments performing in the top decile receive a banner to hang in their department. Quality Resources staff provide physician-related patient satisfaction and engagement results at medical staff department meetings, including scores and percentile rankings for individual physicians. Best practices are shared [4.2b(2)] along with the scores and high performing physicians are recognized at Quarterly Staff Meetings.

Patient and other customer ***dissatisfaction*** is determined through direct patient conversations during patient rounds, post discharge calls, results and comments on patient satisfaction surveys, the Patient and Family Advisory Council, and numerous other listening methods (Fig. 3.1-1). Complaint data [3.2b(2)] are captured and aggregated to identify common themes and root causes by the Patient Experience Team to enable systematic solutions. The Patient Experience Team is composed of CAP trained "Change Agents" who facilitate improvements throughout the organization.

Most NRC and HCAHPS survey questions are written as observable behaviors such as, "After you pressed the call button, how often did you get help as soon as you wanted?" Scores falling below the 75th percentile are further investigated by members of the Patient Experience Team to determine the percentage of customers reporting dissatisfaction through "never" or "sometimes" responses. Because these survey questions address specific behaviors, they capture actionable information for developing behavior standards and testing the effectiveness of process improvements. An example of this is the No Pass Zone behavior standard that was specifically implemented to address slow call light response times. This behavior standard requires any associate who may be walking down a patient hallway to enter the patient's room if they see a lit call light above the door, even if that associate is a non-clinical member of the hospital staff. No one is allowed to pass a call light! Often, the associate may need to get the assistance of a nurse or other clinical staff member, but call lights are answered quickly and the patients do not feel ignored by hospital associates walking past the patient's room.

3.1b(2) Satisfaction Relative to Competitors – We primarily use two different methods to obtain and use comparative information on patients, families, and communities: 1) market research, including patient, family, and community groups, and 2) patient surveys through HCAHPS and NRC, which provide satisfaction and engagement comparisons to other hospitals. Market research is supplemented with community perception surveys, social media monitoring, rounding, and other listening approaches to ensure that patients and other customers are both satisfied and engaged in their care compared to other hospitals. HCAHPS is a standardized, publicly-reported survey instrument and data collection method for measuring inpatients' perceptions regarding their hospital experience. This survey allows us to compare our results with other hospitals by size, type, and name, including other Hawai'i hospitals. NRC surveys such as the ED, ASF and other outpatient surveys such as Lab, Imaging, and Rehab allow us to compare our satisfaction and engagement with other hospitals in the NRC database. Both HCAHPS and NRC surveys allow us to compare our performance with competitors, and allow us to identify specific issues for performance improvement. Both of these data sources provide percentile rankings for industry benchmarking and setting priorities for improvement through the strategic planning process [2.1a(1)], daily operations [6.1b(4)], and all components of our integrated performance improvement system [P.2c]. Castle performs favorably against other Hawai'i hospitals, hospitals across the nation, and especially to hospitals similar to our bed size [7.2a(1)].

3.2 Customer Engagement

3.2a(1) Service Offerings – As shown in Fig. 3.1-1, we use both formal and informal listening and learning approaches to determine customer needs, expectations and requirements. Data from these approaches are systematically reviewed by the Patient Experience Team and the QIC on a quarterly basis, and annually during the strategic planning process. These elements are then translated into new healthcare services, behavior standards, performance measures, marketing plans, and process improvements through the strategic planning [2.1a(1)] and quality improvement [6.1b(4)] processes using the Healthcare Service and Work Design Process (Fig. 6.1-1) as appropriate. The introduction of our CV Surgical Program is an example of this process [6.1a(3)]. The process to adapt our services to meet community/patient needs and exceed expectations occurs throughout the spectrum of care. For example, at the bedside, the nursing staff ask patients "What does excellent care mean for you?" The response is written on the Patient Care board [6.1b(2)] in the patient room to individualize care and to differentiate our services from other organizations. Managers and directors review comments from post-discharge patient phone calls, tease out themes, and share with their associates. Combined with review of the NRC Patient Experience reports and utilizing the GE CAP tools at staff meetings, focus areas for improvement are selected, and action plans developed, following the PDCA model of quality improvement [P.2c].

3.2a(2) Patient and Other Customer Support – Fig. 3.2-1

Fig. 3.2-2 Relationship Building Methods

ACQUIRE NEW PATIENTS AND OTHER CUSTOMERS	RETAIN PATIENTS AND OTHER CUSTOMERS	INCREASE ENGAGEMENT
• TV & Radio • Website • *Windward Health* • Social media • Health fairs, Classes and Screenings	• Always Behaviors • Rounding Methods • Care Boards • Patient Advocate • Complaint Process • Post Discharge Calls	• Rounding Methods • Care Boards • Bedside Shift Reports • Patient Advocate • Participation on Patient Experience Team

Fig. 3.2-1 Castle's Customer Support and Communication Mechanisms

SUPPORT AND COMMUNICATION MECHANISMS	PATIENTS										OTHER CUSTOMERS	
	SEGMENTS			MAIN SERVICES				TYPES OF PATIENTS				
	IP	OP	ED	Medical	Surgical	Childbirth	Psychiatric	Former Patients	Potential Patients	Patients of Competitors	Patients' Families	Community
Website	S F	S F	S F	S F	S F	S F	S F	S F	S F	S F	S F	S F
Website Class Scheduling								S O	S O	S O	S O	S O
Patient Handbooks	S	S	S	S	S	S	S	S			S	
Interpreter Services	S O F	S O F	S O F	S O F	S O F	S O F	S O F				S O F	
My Adventist Health	S O	S O	S O	S O	S O	S O	S O	S O	S O	S O		S O
Windward Health	S	S	S	S	S	S	S	S	S	S	S	S
Annual Quality Report	S	S	S	S	S	S	S	S	S	S	S	S
TV & Radio	S	S	S	S	S	S	S	S	S	S	S	S
Call Center	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F
Social Media	S F	S F	S F	S F	S F	S F		S F	S F	S F	S F	S F
Satisfaction Surveys	F	F	F	F	F	F	F	F				
Rounding Methods	S O F	S O F	S O F	S O F	S O F	S O F	S O F				S O F	
Bedside Shift Reports	S O F		S O F	S O F	S O F	S O F					S O F	
Share Cards & Letters	F	F	F	F	F	F	F	F			F	
Discharge Folder	S			S	S	S		S			S	
Post Discharge Calls	S O F		S O F	S O F	S O F	S O F	S O F	S O F			S O F	
Care Boards	S O F			S O F	S O F	S O F					S O F	
Patient Note Pads	S			S	S	S	S				S	
Complaint Process	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F			S O F	S O F
Patient Advocate	S O F	S O F	S O F	S O F	S O F	S O F	S O F	S O F			S O F	S O F
Patient Experience Team	F			F				F				F

Key: S = Seek Information, O = Obtain Services, F = Provide Feedback

lists Castle's customer support and communication mechanisms that enable patients and other customers to seek information, obtain services, and provide feedback. The listening methods described in Fig. 3.1-1 are used to obtain actionable information about our services and to learn about our patients' and other customers' support requirements. These requirements are deployed to all associates through customer service skills training and behavior standards training during General Orientation [5.1a(4)]. Support requirements are further deployed and reinforced through competency assessments for AIDET use, hourly rounding, bedside shift reports, AIDET coaching, *Hoku* Award celebrations, and Weekly Huddle articles. Learning takes place as we track the consistency of rounding, conducting post discharge calls, analyzing complaints, and refine strategies through the Patient Experience Team .

3.2a(3) Patient and Other Customer Segmentation – At Castle we are committed to providing healthcare services to the Windward O'ahu population and do so in a non-discriminatory and inclusive manner. Efforts to improve capture of this Windward market are ongoing and have resulted in impressive volume growth over the past five years (Fig. 7.5-9 to 12). The geographic isolation of the facility creates a naturally defined market for consumers of the healthcare services provided by Castle. According to SMS research, Windward residents stated they are more likely to use a doctor or medical facility associated with Castle. Referring physicians greatly influence customer utilization, while the payment method, insurance, and reimbursement schedules are secondary factors in determining target markets.

The Playbook Team uses patient, competitor, and market information annually as part of the SPP [2.1a(3)]. Comparative data on competitive hospital services are analyzed and summarized annually for members of this team. Castle also has the advantage of reviewing comparative data from the AH Corporate headquarters, which allows us to compare service lines with 20 sister hospitals. Our Marketing Team gathers data from Hawai'i Health Information Corporation and Solucient and analyze this to determine growth opportunities. SMS Research is hired to do market preference analysis every 3-4 years. During the Strategic Planning process the team uses these data to determine customer perception of services, prepare strategic objectives to better meet requirements, and to help project penetration of campaigns.

Healthcare providers are the single most influential factor in choosing a healthcare facility. Healthcare providers are segmented by age, specialty, and level of activity, and then an appropriate relational strategy is determined and implemented over time. With that in mind, we launched a concerted effort in 2001 to continue building strong relationships with our healthcare providers and in 2012 reinvigorated (CHG). The most recent physician development plan outlines the critical factors to its success as:

- Developing a Patient Centered Medical Neighborhood
- Developing a Clinically Integrated Network
- Appropriate mix of primary care and specialty physicians practicing within the Windward market
- Strong physician loyalty, commitment, and satisfaction
- Succession planning for physicians nearing retirement

3.2b(1) Relationship Management – Relationships are based on trust. Our core competencies of tenaciously "chasing zero" harm and providing compassionate care because "***love matters***" greatly enable us to build trusting relationships with our patients and other customers.

We use various customer support and communication mechanisms (Fig. 3.2-1) to market, build, and manage relationships with our patients and other customers. Fig. 3.2-2 shows the primary methods used to acquire, engage and retain new patients and other customers.

Each strategic planning cycle begins with a review of market and community data to identify and clarify our current position. We currently have a market development initiative in our Playbook to grow inpatient market share to [redacted]% by 2020 through targeted expansion and creation of new partnerships [Fig 2.2-1]. As a result of this initiative, we have entered into a joint venture with Cancer Center of Hawai'i to expand services and ultimately build a cancer center for the Windward community. This will provide access to a needed service for our community and grow our oncology market share. In addition, our market development initiative also includes project action plans to further develop our primary care provider base by developing an infrastructure to support provider employment and open new primary care clinics. These clinics will also increase Castle's market share, enhance our brand image, and meet a vital community need. Both of these initiatives were developed through our strategic planning process. [Fig. 2.1-1]

Our Wellness Department, along with our social media efforts, also play an integral role in enhancing patient and other customer relationships with our hospital. We collaborate with other community agencies, merchants, and churches to carry out our vision for improving the physical, mental and spiritual health of our community. We use social media to provide patients and other customers with information regarding upcoming community events, such as our annual Christmas tree lighting, public service announcements to educate the community, highlight care providers, Bible verses, patient testimonies, and inspirational quotes to give hope, as well as health and wellness announcements and links to encourage patient and customer engagement. Programs to engage the community include pre-diabetes classes, fitness classes, wellness seminars, grocery shopping tours, vegan cooking classes, free tobacco cessation programs, and various support groups (Fig. 7.4-13). Brand management of these health services improve the perceived value of Adventist Health Castle and loyalty. The effectiveness of building relationships and engagement through social media is determined by closely monitoring feedback regarding community events, quality of service, and the amount of visits made to our social media sites and the attendance of participants at our community held events (Fig. 7.2-21).

3.2b(2) Complaint Management – We are tenacious about quality improvement, but we do not chase zero complaints. We believe that complaints are valuable "nuggets" of information that enable the organization to respond to problems on a situational level, and to make process improvements on a systems level. While we work to reduce complaints, we would never set a goal of zero complaints, which could inadvertently discourage learning how we need to improve.

All patients (IP, OP, ED) and their families are given information about how to share concerns or complaints upon arrival to the hospital through the Patient Information Handbook, including a welcome message from our CEO that encourages patients to ask their physician or nurse if they have any questions or concerns, and to call her directly if they still feel something is not right (her office number is provided). This information is reinforced by the Patient Advocate during patient rounds, who also provides his own business card for follow-up concerns. To ensure prompt and effective resolution of complaints, all associates are trained during general orientation to resolve issues at the point of service. This is evidenced by the following Always Behavior [5.2a(1)]: "Always ACT on complaints: Apologize, Correct, and Thank. Never pass on a complaint to someone else without following up to make sure it was resolved." Associates are also empowered to use service recovery gift certificates, which are redeemable at our gift shop and cafeteria, The Bistro. Service recovery gift certificates are deployed to all patient care areas and other departments who interact with patients or their families. Patients and their families are usually very reassured by our genuine concern about their complaints, and then quite impressed when they are provided with a service recovery gift certificate. Castle associates are trained that prompt and effective resolution of complaints at the point of service often creates better customer loyalty than mere satisfactory service. Once the patient/family is updated on the actions taken to resolve the complaint, the associate records the service issue through a link on the hospital's intranet home page for future aggregation and analysis by the Patient Experience Team. Monthly reports provide a formal feedback loop to each unit/department director for trending their complaints and improving their systems to avoid similar complaints in the future.

Patient complaints that are too broad in scope or that cannot be resolved immediately at the point of service are referred to Quality Resources. Social media experts in the Marketing department also refer complaints to Quality Resources for resolution. These complaints are categorized for aggregation and analysis, and tracked for resolution.

Category 4

4.1 Measurement, Analysis and Improvement of Organizational Performance

4.1a(1) Performance Measures – Castle uses a comprehensive process for selecting key performance measures and indicators, gathering data, comparing performance against appropriate benchmarks, and using the reports to support fact-based decisions that set and align organizational performance review (Fig. 4.1-1). This process is designed to ensure that key organizational measures (i.e. Fig 2.1-2, and Fig 6.1-2) are mapped to their source(s) and that the responsible leaders are held accountable through action plans and scheduled LEM reporting meetings with senior leadership. Key measures used in strategic planning, the Governing Board Report, and the Quality Dashboards are also found in one or more director LEMs. This measurement system allows the GB and senior

leaders to monitor organizational performance, and allows timely intervention on measures that are not meeting targets.

Strategic objectives are aligned and deployed through Castle's set of key performance indicators, the LEM measures (Fig. 2.1-2). Director LEM measures are reviewed monthly by senior leaders and LEM 90-day action plans provide cycles of learning and improvement. All strategic objectives and goals are tracked by the Playbook Team. (4.1b).

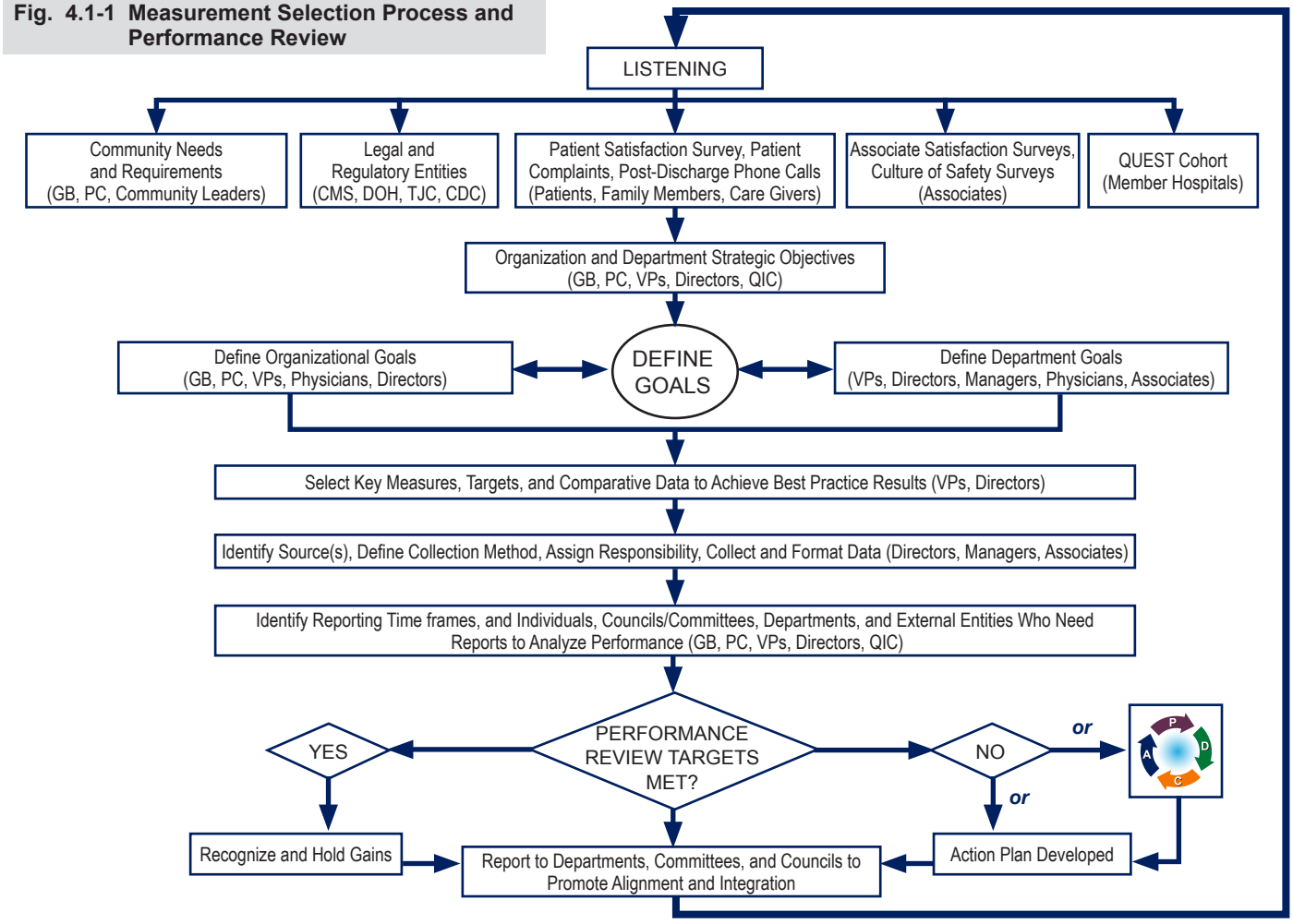
For Financial and Growth Pillars, Castle produces a monthly financial report, incorporating major business volume indicators with financial operating statistics. This report gathers data from the general ledger and integrates them with patient volume data tracked by the automated Admission Discharge Transfer (ADT) system. Daily census reports are provided to leaders in support of productivity management.

At least annually, the Operations Committee in conjunction with all directors, reviews the important, relevance, and criticality of all LEM performance measures. If an indicator no longer meets these needs, it can be dropped and is usually replaced by another indicator that is more sensitive to current customer/stakeholder needs and regulatory requirements. Measures often change as a result of patient and other customer feedback, regulatory change, or new research. Of course the appropriateness of any indicator can be reviewed at any time, and leadership considers updates whenever they review professional literature, attend an educational program or receive new regulatory requirement information.

4.1a(2) Comparative Data − Selection of comparative data is an integral step in our Measurement Selection Process that supports operational decision making and overall performance reviews (Fig. 4.1-1). Comparative data are selected based the availability of published data (e.g. CMS, TJC, Premier, NRC, Gallup, HHIC, HMSA, AH) and regulatory requirements. Castle also aims to select comparative data from sources that mirror our size, service, and payer mix. One of the most dynamic sources is the Premier Quality Advisor online system, which contains detailed patient data that allows comparison against 33% of all U.S. discharges. We have developed customized comparison groups out of this database that closely match our hospital. This facilitates realistic comparisons of clinical and financial performance for particular diagnoses using data that are risk-, severity-, and wage-adjusted. Recently, these comparative data have been integrated with the re-credentialing process for our physicians. In addition, we compare our performance to the Premier QUEST Cohort—a group of 350 top-performing hospitals within the Premier HEN. Premier QUEST allows us to benchmark with top performers, and to identify best practices.

We also select comparative measures based on regulatory requirements. For example, TJC mandated that each hospital track key clinical guideline measures, known as Core Mea-

Fig. 4.1-1 Measurement Selection Process and Performance Review



sures, for certain high risk populations (Fig. 7.1-11). National best practices or top performers (subject to availability from the vendor, e.g. 75th, or 90th percentile) are the first choice as a benchmark, followed by state best practices. If national or state benchmarks are unavailable, historical AHC performance and corporate AH comparisons are used. In the selection process, we identified certain high risk, high volume diagnoses that are tracked and compared to national benchmarks. As a result, the Core Measures are aligned with service lines and integrated into the strategic planning Playbook.

NRC provides service line comparative data and statistical analysis at the 95% confidence level for HCAHPS patient satisfaction survey results. Hawai'i comparative data are obtained from the Hawai'i Health Information Corporation (HHIC), and the State Health Planning and Development Agency (SHPDA). Both of these sources provide important patient service utilization and market share comparisons.

To ensure effective use of comparative data, the QIC has integrated these reports into the quality measurement system so that the GB, Playbook Team, Patient Experience Council, People Team, Operations Committee, Patient Safety Council, LEMs, and medical staff departments can benchmark their performance and identify improvement opportunities and innovative solutions.

4.1a(3) Patient and Other Customer Data – We use voice-of-the-customer data from listening and learning approaches [3.1a(1)] along with market data and information from the SPP [2.1a(3)] to develop strategic initiatives that are aligned with the Customer Experience Pillar measures on leadership LEMs. These goals and performance measures are communicated to associates through 90-day action plans, Top 5 Dashboards, staff meetings, and the Weekly Huddle. The CEO's *Aloha* Friday Report always concludes with a quote from a patient or other customer regarding our services. The Patient Experience Team also provides aggregated complaint information [3.2b(2)] obtained from surveys, post discharge calls, social media, and other listening and learning approaches to department leaders to assist them in learning what their customers are saying and to develop corrective action plans. Progress

Fig. 4.1-2 Castle's Performance Reviews

VENUE	PARTICIPANTS	PURPOSE	MEASURES REVIEWED	ANALYSIS	FREQ.
AH GB	Governing Board / Senior Leaders	Drive system-wide performance improvement	Key organizational performance measures in all categories	Dashboard, trended data compared to targets, benchmarks	Quarterly
GB	AH Regional President, Senior Leaders, Medical Staff, Community Leaders	Ensure community needs are met through hospital, and medical staff performance	Strategic goals, Hospital Pillar measures, CEO performance	Dashboard, trended data compared to targets, benchmarks	Quarterly
MEC	Medical Executive Council	Oversight of medical staff and performance	OPPE measures, peer review outcomes	Trended data compared to targets, benchmarks, due dates	Monthly
PC	Senior Leaders	Set and align organizational direction and alignment	Hospital Pillar measures, SP measures, Approval of LEM measures	Trended data compared to targets, benchmarks, target dates	Weekly
Playbook Team	Senior Leaders, GB Members, Medical Staff, Department Leaders	Ensure strong competitive position and plan for future success	Previous SP performance, new market data, and Healthcare trends	Trended data compared to targets, benchmarks, target dates	Monthly
Patient Experience Team	VP of Patient Care, Department Leaders, Former Patient	Ensure exceptional patient experience and drive improvement strategies	HCAHPS, NRC, and Internal Customer surveys, and patient complaints	Trended data compared to targets, benchmarks, and competitors	Quarterly, or more often if necessary
QIC	Senior Leaders, Quality Director, Medical Directors	Select and track priority hospital improvement goals	Key organizational performance data, progress on QIT goals	Dashboard, trended data compared to targets, benchmarks, target dates	Quarterly
People Team	Director of HR, cross section of associates	Enhance workforce environment, and engagement	Associate engagement and physician satisfaction	Trended data compared to targets and benchmarks	Monthly
Operations Committee	VP of Operations, VP of Finance, Key Department Leaders	Oversight of work processes, service design, & LEM measures	Key work process measures and budgets	Trended data compared to targets, benchmarks, and competitors	Monthly
Finance Committee	CFO, Finance Board Chair	Monitor financial performance, and identify priority improvement goals	Financial Pillar measures including Income statement, balance sheet, audits, and investments	Trended data compared to targets, budget, benchmarks, target dates	Monthly
Patient Safety Council	Risk Manager, Clinical Leaders	Monitor patient safety measures, and select priority improvement goals	Patient safety measures, Incident Report data, RCA and FMEA corrective action plan data	Trended data compared to targets, benchmarks, target dates	Bi-Monthly
EOC	Multidisciplinary	Ensure facility safety and compliance to regulations	Security, utilities, medical equipment, fire safety, hazardous materials	Trended data compared to regulatory requirements, targets, and due dates	Monthly
Capital Review Committee	Multidisciplinary	Ensure due diligence review of capital	Cost / Benefit data, ROI, improved patient outcomes	Trended data compared to targets, benchmarks, ROI	Twice monthly
Leadership Meeting	Senior Leader / Directors / Managers	Ensure leadership and department performance	Pillar performance on LEM measures, 90-day action plans	Trended data compared to targets, benchmarks, target dates	Monthly or more often if necessary
Dep't. Meetings	Department leader / associates	Communicate updates, review department performance and improvement plans	Department Pillar performance on LEM measures, Top 5 boards, 90-day action plans	Trended data compared to targets, benchmarks, due dates	Monthly
Hui	All AHC associates / Senior leaders	Promote two-way communication between senior leaders and associates	Key organizational performance measures, Hospital Pillar performance	Trended data compared to targets, benchmarks, due dates	Quarterly
NEC	Chief Nursing Officer, Nursing Directors	Review nursing operations, and plan improvements	Excellent Care Pillar performance measures	Trended data compared to targets, benchmarks, due dates	Monthly
NMC	Nurse Managers	Coordinate activities and communications	Excellent Care Pillar performance measures	Trended data compared to targets, benchmarks, due dates	Monthly

on action plans is reported and monitored at quarterly Patient Experience Team meetings.. All of these methods are fully deployed to all leaders, departments, and associates. Learning takes place with the analysis of each report in QIC meetings, LEM one-on-one meetings, and department meetings to understand opportunities for improvement or breakthrough innovation.

4.1a(4) Measurement Agility – Listening approaches are ongoing so they can identify unexpected organizational or external changes. Once a change has been identified, the measurement selection process (Fig. 4.1-1) starts. The final step of the measurement selection process is a report to the appropriate department(s), committees, or councils. The leadership system (Fig. 1.2-1) ensures that new performance measures are rapidly aligned and integrated into appropriate department(s) or organizational performance reviews (i.e. Department LEMs, Customer Experience Team, Playbook Team, People Team, Operations Committee, etc.). Each of these teams/committees uses PDCA improvement cycles to respond quickly to these changes and to address any performance gaps. In addition, the QIC reviews the appropriateness and performance of these measures at least once a year .

4.1b Performance Analysis and Review – Fig. 4.1-2 describes our system for reviewing performance data, identifying improvement priorities, and deploying that information to associates, partners, and suppliers. The Quality Resources Department and CAP-trained Change Agents assist directors, QITs, and others to select the most appropriate performance analysis methods, such as proper sample sizes, statistical process control charts, and Pareto diagrams, to ensure that conclusions are valid. All of these performance-review processes have direct access to the listening and learning approaches [3.1a(1)] that identify customer and stakeholder requirements, including competitive/comparative data whenever available. This allows us to respond quickly to changing needs and requirements. Coordination of these changes is facilitated by senior leaders who are represented in each of these performance reviews. If there is a need for transformational change in work systems or organizational structure, senior leaders are able to take this information back to PC to facilitate rapid change and potentially modify our Playbook (2.2b). The GB is updated quarterly regarding performance measures and strategic objectives via the Governing Board Quality Report

Fig. 4.2-1 Quality of Data and Information

PROPERTIES	MANAGEMENT APPROACHES
Accuracy / Validity	• Data audits/reviews • Financial reconciliation • Software/hardware /operating system/updates • Standardization of codes to enable data comparison
Integrity / Reliability	• Monthly systems audits by Financial Services, Quality Resources, and Health Information Management departments to identify gaps, reconcile data and improve data integrity • Environmentally controlled facilities • Equipment redundancy/replacement process • Disaster recovery planning/downtime processes • Generator back-up/uninterrupted power supplies
Currency	• Scheduled and emergency software/hardware /operating system/ updates • Annual assessment of network and phone infrastructure • Routine meetings with hardware/software vendors

Our Leadership System (Fig. 1.2-1) supports open communication regarding rapidly changing organizational needs. Weekly PC meetings ensure we can respond rapidly to improvement opportunities and deploy resources to meet identified action plans. For example, the start-up of our Cardiovascular (CV) program in 2013 required significant capital. Our senior leaders presented this proposal to the AH Governing Board and once approval was received, cross functional teams were involved to support the project development, capital improvements, and implementation. All stakeholders were involved from start to finish through participation in one or more meeting venues (Fig. 4.1-2). In addition to these reviews, physicians and other partners, suppliers and collaborators are included in the prioritization process by participating in strategic planning, QIC, and/ or the Patient Safety Council.

Fig. 4.2-2 Data and Information Availability

USERS	ACCESS AND AVAILABILITY	TYPE OF DATA/INFORMATION
Patients	• Direct mailings • Castle website • My Adventist health • Hourly rounding • Care Board • Discharge folder • Email • Phone • Radio / TV • Cozeva	• Personal health information • Annual Quality report • Individualized care plan • Patient Experience • Statements/payments • Medical record
Community	• Annual Quality Report • Castle website • Windward Health community classes • Wellness Center • Marketing	• Ranking in community • Physicians and services • Wellness management • Addiction, chronic disease management • Exercise, diet and nutrition information • Medical self-help (CPR) • Community partnerships
Physicians / CHG	• Medical staff meetings • Med staff committees • Operational committees • Provider Feedback System (PFS) • Physician Connect • Cerner, PACS, Medicity, BEAM, RRD, McKesson • Castle MD	• Core measure • Financial measures • HCAHPS • Infection control • RCA sentinel events • Recalls, alerts, reminders • Physician-focused events • Physician satisfaction survey • Occurrence reporting • Policies and procedures
Associates	• CLI, *Hui* • Weekly Huddle • *Aloha* Friday Report • *Ulupono* • Connect page and Collaborate • LEM, staff meetings • Timeclock • Safety Huddle • Top 5 boards • Email, newsletters, signage • RADAR	• Infection Control • Castle finances • Census • Payroll • RCA • Sentinel events • Leader goals and progress • Drill performance results • Performance dashboard • Satisfaction survey • HCAPHS/ Patient satisfaction results • Culture of Safety survey • Patient safety story • Survey Says!
Partners / Vendors / Collaborators	• Vendor Mate • Workgroup meetings • Contracts and agreements • Collaborative websites	• Policies and procedures • Education • Quality/performance measures
Regulatory Bodies	• NHSN • Premier • Quest • HealthSentry • GWTG • QualityNet	• Core measures • Infection control data • Performance improvement • Quality/performance measures • Regulatory compliance

Fig. 4.2-3 Knowledge Management Approaches

AREA	KNOWLEDGE MANAGEMENT APPROACHES
Collect/ transfer workforce knowledge	• Rounding • Satisfaction surveys • Policies and procedures • Training/cross training/required annual education • Orientation • Department meetings • Weekly Huddles • Top 5 Dashboards • Performance reviews • Intranet • Skills Fairs • Competencies through Healthstream • Time clock messaging • Unit newsletters • Break room and associate restroom posters
Blend and Correlate Data	• Strategic Planning SWOT Analysis • Governing Board Quality Report • Pillar Performance Analysis at CLI's, Leadership Meetings, and LEM 90-day action plans •QIT reports to the QIC
Transfer knowledge to / from stakeholders	Patient/Family Knowledge: • Rounding • White boards in patients' rooms • Satisfaction surveys • Complaint/compliment process • Patient Promise posters in each room • Banners in units that achieve top-decile performance, COE and other achievements Community Knowledge: • Publicly published data • Annual Quality Report Supplier/Partner/Collaborator Knowledge: • Contracts, contract review and performance evaluation • e-mail/phone updates • Vendor orientation
Share and implement best practices	• Collaboration sites • PC and leadership meetings • CLI • QITs • Unit-based councils
Transfer knowledge for use in innovation and strategic planning processes	• Operations Committee • Playbook Team • Innovation Station • PC • Leadership meetings • Collaborate sites • CME • Involvement with physicians with Studer/Leadership Initiatives • Medical Staff Meetings/Medical Office Staff Meetings

Those not directly involved in the decision making process are informed through other routine meetings and publications.

Numerous reporting systems and resources support daily operations and organizational decision-making. This includes supporting computerized data gathering and reporting systems that provide real-time information and performance feedback to key users whenever possible. Processes are in place to extract and trend historical performance data to support operational and strategic initiatives.

4.1c(1) Future Performance – During establishment and review of measures in the strategic plan, forecast, and LEM goals, the data owner is required to project future performance for selected key measures. Projections are estimates of future performance based on 1) an understanding of past performance; 2) anticipated capacity for improvement; 3) assumptions about process changes; 4) surpassing competitors and achieving best-practice goals, and 5) ***chasing zero harm***. Projections are reviewed by senior leaders to ensure alignment with Castle's vision and to reconcile any differences between these projections and strategic planning goal projections. Prior to approval, senior leaders also ensure that future goals are realistic and, in the case of LEM goals, equitable across the organization.

4.1c(2) Continuous Improvement and Innovation – The Quality Resource Department serves as the foundation for process improvement through systematic data analysis and performance review to identify opportunities for improvement and innovation. Improvement results are accomplished through the systematic and repetitive application of Deming's PDCA cycle [6.1b(4)]. All associates are encouraged to innovate and share ideas with their leaders [6.1d]. As initiatives are developed or modified, teams or owners are identified and held responsible for developing action plans. Castle also encourages collaboration and innovation with suppliers, partners, and collaborative work groups [P.1b(3)] to develop or modify innovative practices and technologies to improve the health of our community. An example of this is the recent implementation of the Studer Group's Provider Feedback System (PFS), which enables goal alignment with physicians, similar to the way that the LEM aligns goals for hospital leadership. The main difference is that the PFS can track both group performance measures as well as individual physician performance measures. Like the LEM, PFS utilizes PDCA and is completely transparent, which provides for collaboration between physicians. PFS was initially implemented with the hospitalist group, but has now expanded to the intensivists, and psychiatric hospitals, with plans to expand to other groups including our primary care clinicians .

4.2 Information and Knowledge Management

4.2a(1) Quality – We manage data and information using the approaches shown in Fig. 4.2-1. Using information technology reduces the likelihood of medical errors and allows clinicians and patients to have the information they need to promote health and make the most informed decisions about treatments. Data are collected and transferred among various systems employing industry standard interfaces thus improving data transfer reliability and accuracy. The use of Cerner's highly integrated electronic medical record (EMR) provides timely, secure, accurate data and information to physicians and staff within the hospital, and wherever there is an Internet connection, while bedside charting provides immediate and accurate capture of information.

4.2a(2) Availability – Our various methods to provide data and information to stakeholders are shown in Fig. 4.2-2. We communicate with our associates through a variety of methods that include, email, newsletters, Weekly Huddles, Top 5 Dashboards, *Aloha* Friday Report, AHC Connect, and E-learning resources such as HealthStream. Senior leaders, directors and managers have access to quality and financial resources such as NRC and VisionWare.

Named as one of the nation's "most wired" health systems by Hospitals & Health Networks magazine, AH and Castle ensure connectivity between providers and patients through a robust infrastructure, business and administrative management, clinical quality and safety, and clinical integration. Enhancing information technology has long been one of AH's and Castle's key strategic priorities to improve patient care and to increase operational efficiencies.

Patients and physicians access information through our internet portal (My Adventist Health), physician connect, Windward Health, direct mailings and Castle MD. Electronic

health information can be printed for the patient for education and continued care. In collaboration with HMSA, community physicians and CHG use the web-based tool Cozeva to assist in management of patient care planning. Patients utilize Cozeva to manage their care. This web tool allows them to request appointments on-line, message their physician, receive preventive care reminders, request prescription renewals, and find healthy community activities.

4.2b(1) Knowledge Management – Fig. 4.2-3 details the process Castle uses to systematically build and manage organizational knowledge and transfer that knowledge to those who can use it including our patients, community, suppliers and other partners. The 5 Pillars provide a consistent structure for managing "big data" collection, analysis, and communication whether the focus is on strategic planning, LEM goals, PFS goals, or educational presentations.

4.2b(2) Best Practices – A number of methods are used to share best practices and organizational learning internally, including at Leadership meetings, Nurse Executive Council meetings (NEC), Nurse Managers meetings and the Clinical Care Council. Castle Leadership Institute (CLI) agendas include sharing of best practices and acknowledging departments for their innovation and sustained results. Learning from each other is part of our culture. For example, the director of the Birth Center recently shared their success of utilizing shared governance to facilitate TJC survey preparations, and unit-based education during a recent NEC meeting. Nurse leaders then incorporated these ideas into their own units using checklists, teams, and other best practices from the Birth Center .

We identify best practices by review of LEMs, financial performance and other metrics. Directors meet with their VP monthly, and the supervisory monthly meeting agenda includes sharing of best practices. All leaders have access to several resources to identify best practices in their area. These include consultants such as Studer Group, Premier, The Advisory Board, and AH collaboratives. In 2011, AH developed an ED collaborative that resulted in several improvements in our ED, for example immediate bedding, which decreases the time for the patient to see the physician. We are currently participating in a similar AH collaborative for Sepsis care.

4.2b(3) Organizational Learning – We systematically embed learning into all aspects of operations so it is a part of everyday life. Key learnings and best practices are shared among departments with similar goals. LEM 90-day action plans are transparent which supports collaboration and sharing of effective improvement strategies. Organizational learning is embedded in the PDCA process improvement cycle [6.1b(4)] through data collection, analysis, planning, testing, and cycles of improvement. Results from solving problems at their source is deployed through multiple communication tools such as Top 5 Dashboards which are updated monthly, newsletters, shift huddles, and the Annual Quality Report. For example in the ED, the shift huddle includes a "medical minute" where a physician shares information that could improve patient care. Knowledge is deployed through the Workforce Learning and Development System [5.2b(1)]. Increasingly we are exploring how to leverage technology to enhance organizational learning. External resource examples include NRC which provides managers and directors with patient feedback information. Internally Healthstream provides more than 3,000 educational opportunities to all associates.

Ultimately our goal is to utilize these learning opportunities to bring about innovative and meaningful change that will help us fulfill our MVVs.

Category 5

5.1 Workforce Environment

5.1a(1) Capability and Capacity – Our workforce capability and capacity are led by a variety of stakeholders including Human Resources (HR), Operations Committee, and Education & Training, who work closely with leadership to identify current and anticipated needs. HR is involved in the SPP and develops plans to implement new or expand service lines through staff training and/or recruitment. The Operations Committee assesses workforce capacity through evaluation of all replacement and new positions to align with strategic goals and is further enhanced by our Education & Training Department, which ensures the capability needs of both associates and physicians are met.

Our workforce consists of associates, physicians, and volunteers. Among associates, the largest segment (32.7%) is Registered Nurses. Our primary goals for this segment are to improve quality and capability, support and promote RN specialty certification, develop new talent, and implement evidence-based practice measures in alignment with our strategic plan [2.2a(4)] and core competencies. These initiatives improve not only our capability and capacity, but also the Windward community, and have a far-reaching impact through statewide partnerships.

Another workforce segment that requires capacity and capability planning is independent physicians. The information from the most recent 2014 CHNA [2.1a(3)] resulted in developing a physician recruitment plan to better serve our community. High quality services from our physicians are maintained by mandating board certification in the physician specialty area and an Ongoing Professional Practice Evaluation (OPPE) that highlights key quality measures unique to their specialty. This practice led to improved patient safety and improved physicians' engagement results [7.3a(3)].

5.1a(2) New Workforce Members – When a new position is to be filled, the hiring manager, in collaboration with the HR Director, develops a job description with the initial set of skills and characteristics needed. Human Resources leads the recruitment efforts using traditional resources (internal posting and advertising with local universities/colleges); and sophisticated methods that allow us to easily see the effectiveness of a campaign (e.g. internet advertising).

Our innovative approach of requiring applicants to take

a science-based behavioral assessment allows us to consider if potential associates have the behavioral characteristics for a good fit with our MVVs and culture. This guides us to hire not only highly skilled associates, but also those who value integrity, compassion, respect, and excellent patient care.

Some positions require prospective associates to pass a skills test and/or to exhibit certain traits for which they are tested. If a decision to hire is made, we conduct extensive background checks including primary source verification of licensure and educational degrees.

Whenever possible, we fill positions with local candidates in a concerted effort to provide local jobs, increase retention, and enhance our mission. Currently, 60% of our associates live in the Windward O`ahu region. By hiring local candidates we strengthen cultural diversity due to Hawai'i's demographics. Because of the large military presence on the Windward side, we hire qualified spouses of military personnel, even though they may leave due to military transfers. Positions that remain hard-to-fill are offered relocation support. Multiple generations of family members have been welcomed into our Castle *Ohana*.

Physician recruitment and retention efforts are focused around the Community Health and Physician Needs Assessments [5.1a(1)]. Whenever possible, we recruit local physicians who embrace our MVV, and who represent the demographics of Hawai'i.

Recognition and appreciation are a primary focus for increasing associate and physician retention. During monthly leadership rounds, department leaders ask associates for the name and a brief description of someone, including physicians, they feel deserves special recognition for a job well done (1.1b). Associates also have access to senior leadership in an open-door policy. Leaders are trained to be coaches and mentors to associates. Coaching occurs during regular rounding and *Hoku* (star), Solid, Needs Improvement (HSN) annual conversations.

Key indicators such as associate turnover rate, 1st year turnover rate, and productivity are used to assess the current state and trends in retention with plans developed and implemented as issues arise. For example, the People Team developed a first year onboarding plan for new hires, called the *Okupu* program (to sprout or make grow) when a recent trend showed higher than normal first year turnover rate. It refined selection methods, improved the HR onboarding process, and developed one-year onboarding plans for new hires. Its success resulted in significant reduction in first year turnover (Fig. 7.3-3)

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5.1a(3) Workforce Change Management – The interdisciplinary People Team systematically monitors and evaluates the data for key capability and capacity performance measures to identify changing needs and improvement opportunities [7.3a(1)]. Monthly, the team chair presents performance data and improvement strategies to PC, and annually it is presented to QIC. PC and QIC provide feedback and if needed resources to make necessary improvements that ensure continuity of care for our patients.

With the rapidly changing healthcare industry, our approach to prepare the workforce for ongoing change is to train leaders in the use of rapid deployment GE CAP tools [6.1b(4)]. These tools facilitate involvement in the process and decision making, which empowers associates. Change becomes a natural part of work as our "Change Agents" apply the tools in meetings, find solutions to problems, and integrate solutions into daily workflow .

Efforts have been made to minimize significant associate reductions because we have allowed natural attrition to take place for some positions and have been able to repurpose some job roles to meet the needs of patients in the changing healthcare environment. For example, some nurse assistants have been trained as unit secretaries, monitor techs, and sitters to create a new role called Patient Care Technician. Similarly, OB Techs have been trained to scrub in for c-section cases and are now called OB Scrub Techs. We developed a Resource RN float pool where nurses are cross-trained between multiple departments including critical care. This additional training has increased our associates' capability and our ability to efficiently support our capacity. We continuously monitor census and productivity to minimize any flexing of staffing.

An example of management of workforce changes and growth is the implementation of the recent CV service line. A cardiovascular surgeon was identified as a project champion in tandem with a service line director. Together, they developed a plan that included a workforce capacity and capability analysis. Castle recruited for some positions, but also trained extensively to increase our existing workforce capability. Our core ICU staff had more than 1,400 total hours of dedicated cardiovascular training, which was highlighted by TJC as a best practice during a recent accreditation survey.

5.1a(4) Work Accomplishment – We manage a full range of outpatient and inpatient services including community health and wellness programs through an organizational structure aligned with our strategic plan and based on our 5 Pillars.

Work accomplishment – Collaboration across the organization is essential to manage our work. Work is accomplished through interdisciplinary/interdepartmental teams including internal and external stakeholders, such as physicians, to meet the needs of our patients and community. An example is the daily Safety Huddle [1.1c(1)] with both clinical and non-clinical leaders. At the departmental level, work is segmented according to departmental functions and professional disciplines. The broad spectrum of collaboration among varying disciplines is one factor contributing to high quality of care scores by physicians [7.3a(3)] and associate engagement scores.

Capitalizing on our core competency – In our culture there is an understanding that we are here to serve our patients, our community and one another with the same *Aloha Spirit* that makes our island home so unique. Castle has nurtured

the spirit of *Aloha* and combined it with AH's tradition of healthcare ministry to produce our core competency of "*love matters*". In addition, our commitment to quality improvement, especially in regard to preventing harm to our patients, has produced our competency for tenaciously "chasing zero" harm. We believe that our associates' primary motivation comes from an intrinsic desire to perform meaningful work at a high level, and our strategy has been to develop these competencies in our associates and to recognize and thank them for their accomplishments. Capitalizing on these competencies produces exceptional results [7.1a, 7.2, and 7.3a (3)].

Focus on patients and other customers – Meeting our core competency of "*love matters*" is accomplished by focusing on the care we provide to our patients and other customers. All Castle staff are trained at general orientation to use AIDET in all interactions to ensure clear, complete, and respectful communication in all job settings. Customer Experience and Clinical Outcomes Pillar goals in leadership LEMs align with Pillar goals on the Strategic Plan, and LEM 90-day action plans include strategies for improving the care and services provided to patients and other customers. Customer Experience and Clinical Outcome performance is communicated to front line associates through the Top 5 Dashboards [1.1a(1)] which list the top 5 goals for each department and their alignment with the strategic plan. The boards are updated monthly and provide a clear line of sight showing how front line associates can contribute daily to department and hospital goals. Department meetings, and CAP tools engage associates in the quality improvement process. The Always Behaviors reinforce a focus on AIDET and other behavior standards under the heading of "Caring for our Patients and their Families" and a different Always behavior is reinforced each week during Weekly Huddle meetings. Associates are recognized during *Hoku* Award ceremonies for exemplifying Always Behavior standards.

Exceeding performance expectations – We focus on exceeding performance expectations through our core competency of "***tenacious quality improvement and chasing zero harm***" to our patients. We set high quality goals [4.1a(2)]. Empowered QITs design processes to improve the care by identifying and using evidence-based practices with results shared with QIC and GB. Our quality measures pertaining to sepsis care guidelines are an example of exceeding performance expectations. QIC assembled an interdisciplinary team of ER physicians, ICU intensivists, hospitalists, nurses, clinical information systems, pharmacists, clinical Documentation Specialists, coders, and abstractors to implement these best practice guidelines. Together, this team reached top decile results (Fig. 7.1-14).

5.1b(1) Workplace Environment – At Castle, we want to provide care without adverse environmental factors that may affect health and security (Figures 5.1-1). Our Environment of Care Committee, comprised of associates from a variety of departments (employee health, safety and security, and infection prevention, etc.) manages the health and safety of the work environment by monitoring and reviewing the areas of safety, security, hazardous materials, emergency management, fire safety, medical equipment, and utilities. When necessary, the committee implements measurable corrective action plans to address issues . This team also conducts regularly scheduled EOC inspections.

Fig. 5.1-1 Workplace Environment Measures and Goals

FACTOR	MEASURE	GOAL	RESULTS
Employee health	OSHA Recordables	< 7/100 FTEs	7.3-5
Fire safety	Staff knowledge during drills	>95%	7.1-34
Security	Reported thefts	<33 annually	9
Hazardous materials	Hazardous spills	0	0

The health and well-being of our associates is of utmost importance. Flu shots are made available to associates, physicians and volunteers to prevent the spread of communicable disease in our community. For additional protection of our

Fig. 5.1-2 Workforce Benefits and Policies

FOCUS	BENEFIT PROGRAM
Health & Wellness	• Low-cost medical, vision, dental coverage; flexible spending; long-term care & disability; • Annual health screenings • Associates participating in our LivingWell program receive benefits in The Bistro and in 2015 reduced health insurance premium rates • Flu and hepatitis vaccinations • Preventive ergonomics program • Injury-illness-infection prevention education • 24-Hour fitness center membership • Vegetarian cafeteria
Financial	• 403(b) retirement plan with employer matching • Tax sheltered annuities • Financial counseling • Retirement plan loans
Work-Life Balance	• On-site care center for infants 6 weeks to 3 years old • Flexible job share work arrangements • Financial fund for medical emergencies • Voluntary legal plan • Voluntary critical illness insurance • Voluntary pet insurance • Voluntary accidental death and dismemberment insurance for family members • Personal accident insurance for family members
Professional Development	• Tuition Assistance: $1000 annually for up to six years • RN to BSN completion bonus of $2,000 • Education fund of up to $250 per associate per calendar year for continuing education as well as paid education days of up to 40 hours per calendar year
Associate Assistance Program	• Confidential and personal professional counseling and education to all associates and their immediate families provided at no cost to the associate
Discounts	• Meals in cafeteria • Recreational passes • Wireless calling plans • Pharmacy and prescriptions • Medical allowances • 24-Hour Fitness memberships for Castle Wellness members • Meal tickets for volunteers
Other	• Associate housing • Paid-leave cash-out provision • Computer loan/purchase program • Paid-leave sharing program • Complimentary notary services • Internet on-line learning programs for all associates • Meal cart delivery twice daily with assortments of food and snacks

community, associates that choose not to receive the flu shot are required to wear a mask within 6 feet of patients. Our Living Well program encourages associates to be responsible for their health by providing fun, engaging opportunities, challenges, prizes, and incentives to be healthy. Since 2015, we've provided reduced health insurance premiums to associates actively participating in the Living Well program resulting in increased participation.

One of our prior strategic initiatives was to be recognized as the wellness hospital of Hawai'i and a place of choice to work. We have been designated as one of the healthiest workplaces in Hawai'i for the past four years. In 2015, Castle became the first Blue Zone employer in Hawai'i, demonstrating commitment to our Castle *Ohana.*

5.1b(2) Workforce Benefits and Policies − To tailor benefits and policies to the needs of our diverse workforce, we seek input for changes and improvements through a variety of means, including associate surveys, executive and leader rounds, share suggestion cards, wellness performance measures, health plan utilization reviews, and market data comparisons. As a result, benefits align with both personal needs and organizational objectives (Figure 5.1-2). The People Team reviews policies and makes recommendations to PC for improvements; annually PC, the HR director, and benefits coordinator evaluate all benefits.

5.2 Workforce Engagement

5.2a(1) Organizational Culture − Castle is known in our community for having an *Ohana* culture which is regularly noted by our patients, physicians, and associates. As one of our core competencies, it is vital that we infuse the *Aloha Spirit* in all that we do.

The introduction to our culture begins on day one of orientation as directors and managers meet new associates, escort them to orientation and join them for lunch. The *Aloha Spirit* is reinforced through conversations on our faith-based and wellness heritage that is part of AH and our unique culture based on our location in Hawai'i. The faith-based aspect of our culture is emphasized through reminders such as daily overhead prayers at 8 AM and 8 PM, devotional thoughts and prayers before meetings, and praying for patients when requested. This embodies our whole person philosophy of healing that includes body, mind, and spirit. The *Aloha Spirit* is an important theme throughout the day as new associates are introduced to various aspects of our organization.

The culture is fostered through ***open communication, high-performance work, and an engaged workforce***. To reinforce the desired behaviors among associates, we developed our Always Behaviors to guide our interactions with each other when:

- Caring for each other
- Caring for our patients and their families
- Communicating with a positive attitude
- Growing professionally
- Maintaining a safe and clean environment

The Top 5 Dashboards list hospital-wide associate engagement scores along with the individual department's associate engagement scores, and a list of things associates can do to enhance engagement in their department. This list of behaviors is developed by associates in each department using tools that empower associates and foster open communication.

Since our inception, we have embraced the diverse cultures represented in our Windward O'ahu community and it is reflected in our workforce demographics (P1a3). Since 60% of our associates live in Windward O'ahu, we reflect the diversity of the community we serve. We consider associates' diversity and expertise as a basis for mentoring, in-service training, quality improvement team membership, new ideas and suggestions. Associates learn that diverse cultures in the workplace generate ideas and innovation that enhance everyone's work environment and contribute to the excellent care we provide to our diverse patient population.

The workforce is empowered through involvement in the process of change using CAP tools and participation in unit-based councils. Our 2015 engagement survey results indicated an opportunity to improve associates' perception on how their opinions counted. In response, we created unit-based councils that empowered associates to identify and address changes needed on their units.

5.2a(2) Drivers of Engagement − Workforce engagement of our associates, physicians and volunteers is aligned with our People Pillar. We determine drivers of workforce engagement (Figure 5.2-1) through formal and informal processes such as annual associate engagement and physician satisfaction surveys, rounding, HSN conversations, and more.

Fig. 5.2-1 Workforce Drivers of Engagement

SEGMENT	KEY DRIVERS OF ENGAGEMENT
Associates	Commitment to mission/purpose Know what's expected Opportunity for development
Physicians	Patient Safety Nursing Care Hospitalist Services
Volunteers	Sense of purpose and service Recognition

In 2014, as part of a system-wide initative to align with best practices, AH and Castle made the strategic decision to change the associate satisfaction survey vendor from PRC to Gallup. The physician satisfaction survey remained with PRC. Both PRC and Gallup statistically determine at both an organizational and departmental level, key drivers for our associates and physicians. Results are analyzed on workforce characteristics such as clinical versus non-clinical associates and functions.

Volunteers' elements of engagement are determined using a formal survey and rounding. Our volunteers' years of service and number of hours are also indicative of engagement. Engagement elements include ensuring recognition through a multitude of actions, including an annual appreciation luncheon; thank you cards for a job well-done; and the Heart to Heart newsletter spotlighting volunteers' personal stories.

5.2a(3) Assessment of Engagement − Workforce engagement is assessed through our associate and physician surveys. They are benchmarked against peer organizations for Gallup Engagement Grand Mean or As a Place to Practice Medicine, respectively, along with identified key drivers from the surveys. Comparative results allow us to assess our relative improvement.

Survey results are reviewed by executives, our management team, and the People Team who discuss and plan focused actions. Department leaders share results with their associates to get additional feedback, build action plans, and update the Top 5 Dashboards. Engagement goals are included in our leaders' LEM and are updated every 90 days to track progress and action plans. This process ensures alignment, integration, and accountability to overall engagement goals, and helps us remain tenacious in our pursuit of excellent engagement.

Workforce retention is used as an indicator of engagement and organizational performance. The *Okupu* Program was designed to reduce first year turnover, which it successfully accomplished during its first year of implementation (7.3-3). The onboarding interventions include regularly scheduled 1:1 leader meetings with the new associate, reunion lunches with other new hires from their general orientation group and executive leadership, and the assignment of a volunteer peer "buddy". All of these interventions have enhanced associate engagement.

For many of our volunteers, the satisfaction of serving a non-profit organization meeting the needs of their community brings intrinsic satisfaction and value. Annually they are recognized for their service to the organization and, in turn, the community. Volunteer survey data are reviewed with concerns and recommendations used in process improvement planning. This integration allows us to produce action plans through the same process as our associates and physicians. Volunteers are invited to and included in hospital activities and receive lunch vouchers each time they volunteer.

5.2a(4) Performance Management − Leadership rounding, the use of CAP tools, the LEM, the Top 5 Dashboards and our *Hoku*-Solid-Needs Improvement (HSN) conversations support high perfomance and workforce achievement. Leadership rounding on associates has shifted our focus to a servant-leadership model designed to recognize high performance, identify processes that are not working well, and ensure that associates have the right tools and equipment to do their jobs. During leadership rounds and through Leadership Stoplight Reports leaders keep associates updated on improvement opportunities.

We conduct HSN conversations annually. These performance-based coaching conversations are designed to re-recruit high performers, encourage and give pointers to solid performers, and coach associates that need improvement up or out of the organization. The process begins with the CEO having coaching conversations with senior leaders in January and ends with associate conversations in the months before the annual engagement survey. (Fig. 5.2-2)

Fig. 5.2-2 HSN Coaching

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Executive Coaching								
		Director Coaching						
			Manager Coaching					
			All Associate Coaching					
								Gallup Survey

CAP tools [6.1b(4)] engage associates, physicians, and other stakeholders in the PDCA process, encourage ***intelligent risk taking and innovation,*** and allow us to manage change efficiently. Leaders use these tools in a variety of settings including department meetings, task forces, QITs, and workout sessions.

LEM goals are structured around our Key Pillars. The Customer Experience and Clinical Outcome Pillars reinforce the ***focus on patients***, customers, and healthcare. The LEM 90-day ***action plans*** provide a roadmap for achieving our performance goals and the *Hui* sessions keep our workforce updated on the results of those action plans.

Physician partners receive individual Ongoing Professional Practice Evaluations (OPPEs) every six months and contain physician-driven performance measures specific to the physician's specialty that focus on providing high-quality care to our patients. Low performing results can trigger a Focused Professional Practice Evaluation (FPPE). Physicians are also recognized for high performance and patient satisfaction during CLIs, Quarterly Medical Staff meetings, and through handwritten thank you notes. Annually, a physician of the year is recognized based on measurable clinical outcomes and for exemplifying our mission through physical, mental, and spiritual care.

As a mission-driven organization, we are committed to maintaining a fair and competitive compensation package for all our associates. Each year we participate in community wage surveys to benchmark against other healthcare organizations. Associates may also receive other compensations, such as shift/weekend differential pay, tuition reimbursement [5.1b(2)], and longevity bonus checks for those at the top of their wage scale.

In addition to monetary rewards, we reward and recognize to bring accountability, alignment and build community among our associates. This reinforces high performance and a focus on patients and other customers and includes:

- Pillar awards to departments in the form of trophies, banners and other gifts at CLIs for outstanding performance in associate and physician satisfaction and engagement, patient satisfaction and engagement, support department satisfaction, clinical care performance, growth volumes, and financial performance
- Bi-monthly, peer nominated *Hoku* Awards awarded to associates who are cultural role models based on Always Behaviors or fulfilling our mission. They receive recognition, financial rewards, and special parking permits.

Hoku recipients are peer nominated, and selected by senior leaders.
- At leadership discretion, a spot bonus of up to $250 is given to associates going above and beyond the call of duty.
- Share *Aloha* Cookie Cards redeemable for a freshly baked cookie or healthy snack in The Bistro are a fun way for leaders to recognize associates.

5.2b(1) Learning and Development System − Our learning and development system is driven by and aligns with our Strategic Plan when an assessment of organizational capability is conducted [5.1a(1)]. For example, when the Cardiac Service Line (CSL) was identified as a key strategic initiative a few years ago, we lacked organizational capability. To achieve the desired outcome and accomplish the action plan, key players at the point of care received training and skills needed to build this program. To date, Castle has performed over 177 successful surgeries since the fall of 2013.

All associates participate in mandatory safety education required by regulatory agencies. Other topics provided are based on feedback from associates and input from leaders, quality improvement performance activities and topics identified from performance data.

We provide training sites, clinical rotations, student internships, and have formal affiliations with all nursing schools, rehabilitation, pharmacy, dietitian, social work, and medical institutions on the island of O'ahu and other selected academic institutions in other States. We have increased the number of student rotations over the past three years to accommodate growing demand but give preference to students from Hawai'i. When new policies or new technology are introduced, Castle utilizes web-based technology, general training sessions, associate meetings, in-services, and email to effectively convey information and educate associates.

Associates can access budgeted Education Funds for external seminar attendance. Three to five paid education days are available annually for associates to attend local seminars. Funds are also available for associates for specialty certification. To support educational goals, associates are eligible to receive up to $1,000 annual tuition reimbursement assistance for qualified academic programs. Castle also funds corporate education for leaders, and directors can attend their professional organization's conference biannually.

Core competencies, strategic challenges, and achievement of action plans – Our learning and development system supports our two core competencies beginning with customer service training and patient safety training on the first day of general orientation. This is followed by clinical orientation for all clinical associates and "In Their Shoes" empathy training for all associates during their first 90 days of employment. All associates learn about quality improvement by participating in staff meetings using PDCA and CAP tools to improve goals on their Top 5 Dashboards. The Top 5 Dashboards are aligned with LEM goals and SP goals.

To address SP action plans related to nursing and retention, Castle collaborated with a local university to develop its RN-BSN Program for existing Castle RNs to earn their Bachelor's Degree in Nursing in order to meet the IOM standard of 80-by-20 (80% BSN by 2020). All 12 students entering the program, which made university courses available on Castle's hospital campus, graduated with their BSN. Currently, 75% of our RNs hold a BSN. In 2013, Castle graduated its first cohort of nurse residents, in a partnership with the Hawai'i State Center for Nursing, which provides new graduate nurses additional preceptorship and educational sessions for their first year of nursing, as well as mentoring for the first three years, aligning with our strategic plan for retention. For our non-nursing associates, there also are educational opportunities available. For example, lab techs perform College of American Pathology proficiencies that help them maintain and develop their skills in a variety of tests and procedures. These agreements remain in place today and continue to support the personal development needs of our workforce.

Organizational performance improvement, change, and innovation – Annual education topics include information on performance improvement (PI) so our associates understand and are able to apply methods to improve and innovate processes. Our CME programs offer topics based on quality improvement issues, medical journal reviews, and best practices. In 2014, Castle received a $48,000 Innovations Grant from AH to improve empathy amongst our associates through "In Their Shoes" to support our core competency of *Love Matters* and improve our meaningful interactions with our patients [21.a(2)].

Castle's leadership development program achieves high performance through various leadership training sessions such as the CLI three times a year. The training curriculum is founded on developing essential leadership and business skills needed to better manage people and processes. A recent CLI topic focused on addressing action plans for maximizing associate engagement, selecting talent, and first year retention. Pre-work and breakout sessions were held to verify skills and consistency in deployment. Leadership symposiums at our corporate headquarters provide opportunities for education and networking among all leaders within the AH Corporation.

Ethical healthcare and ethical business practices – New associates receive on the job training until they complete all orientation requirements and function at a high level. The desired outcome of orientation is for associates to develop a strong understanding of Castle's MVV, strategic plan, and culture. Review of our code of conduct, which includes standards for ethical behavior, is included in orientation.

Focus on patients and other customers – In alignment with our MVVs, Castle is committed to improving the physical, mental, and spiritual health of our community, and enhancing interactions with our patients and other customers. AIDET competencies are required during the first 90-days of hire, and all associates receive AIDET coaching quarterly, which is tracked for validation on leadership LEMs. We support and sponsor external educational opportunities for attendance for our associates as well as our patients, customers, and commu-

nity members. Weekly CME meetings, available to physicians, address their current learning needs to provide optimum patient care. Castle is an accredited provider of Continuing Education Credits and sponsors events across the state for medical professionals and the general public. Our wellness program classes are available to our associates and the community.

Learning and development needs – Learning and development needs are systematically gleaned during annual HSN conversations when associates are asked how Castle can do to support them with education or mentoring to help them reach their immediate and long-term goals. Associates are also asked at this time if they have any recommendations for training or support. This information is aggregated to identify common education needs and to develop education strategies and resources.

Reinforcement of new knowledge and skills – In the first 90 days of hire, associates complete a competency assessment that reinforces new associate awareness of the basic components of their jobs. We provide an online education system that allows associates to review their own training requirements, take mandatory and elective education classes and obtain CE credits. A medical resource library is available at all times through the Castle intranet, which includes the ability to research medical and nursing journals and best practices. For example, a link to Lippincott Procedures is available on every bedside computer to provide real-time access to step-by-step guides for over 1,600 evidence-based procedures (EBP) and skills in a variety of settings. Associates use these resources to assist with EBP and PI projects, to affect change and introduce new processes within the organization.

The CME committee, made up of physicians and Castle associates, meets regularly to review medical staff needs so appropriate learning can occur. Associates are invited to CME courses and may earn CEUs if they attend.

5.2b(2) Learning and Development Effectiveness – Associate and leadership input is essential to evaluating the effectiveness and accessibility of training. Castle actively solicits suggestions about training options in the form of surveys, quality improvement team recommendations, associate meetings, leadership meetings, course feedback forms, email, preceptor orientation, and informal discussion. The information is used in PDCA cycles to adopt, adapt, or abandon training and development approaches. Various methods are employed to verify successful transfer of knowledge, including practical demonstration, multiple-choice tests, role-playing, simulations, case studies, and discussion.

Senior leadership reviews data related to patient/clinical outcomes, quality outcomes, operational metrics, financial performance, and patient satisfaction data to determine effectiveness of training programs. Castle continually seeks opportunities for improvement and utilizes this data to drive our educational plans and programs. In 2016, the Education and Training Department surveyed selected workforce segments to assess learning needs and preferences. The information was used to craft curriculum to address our needs.

5.2b(3) Career Progression – We manage effective career progression and succession of leaders through several approaches, including ongoing leadership training, leader boot camp [1.1c(1)], emerging leader program, nurse leader program, mentoring, and skill building sessions. Senior leaders establish policies and practices regarding internal promotions. Through our performance appraisal system, identified high performers may receive training to further develop their skills for their new role as a leader. For example, CLI often provides opportunities for high performers to acquire new skills through break-out learning sessions. These learning sessions equip new leaders with knowledge to successfully navigate their new roles and responsibilities.

Associates lead teams for various projects and committees, and improve their abilities through mentoring and precepting others. Support is provided with the availability of continuing education funds and tuition reimbursement to attend conferences, and apply new knowledge [5.2b(1)]. Opportunities are available for associates to travel to AH headquarters to network with other leaders, represent Castle through their sharing of best practices, and acquire new skills and learning. Associates are encouraged to speak at national conferences and lead internal training presentations, such as our ongoing CAP training that focuses on elevating leaders and providing them the avenue to affect change. Associates receive mentoring by leaders to help meet the demands of their role.

Category 6

6.1 Work Processes

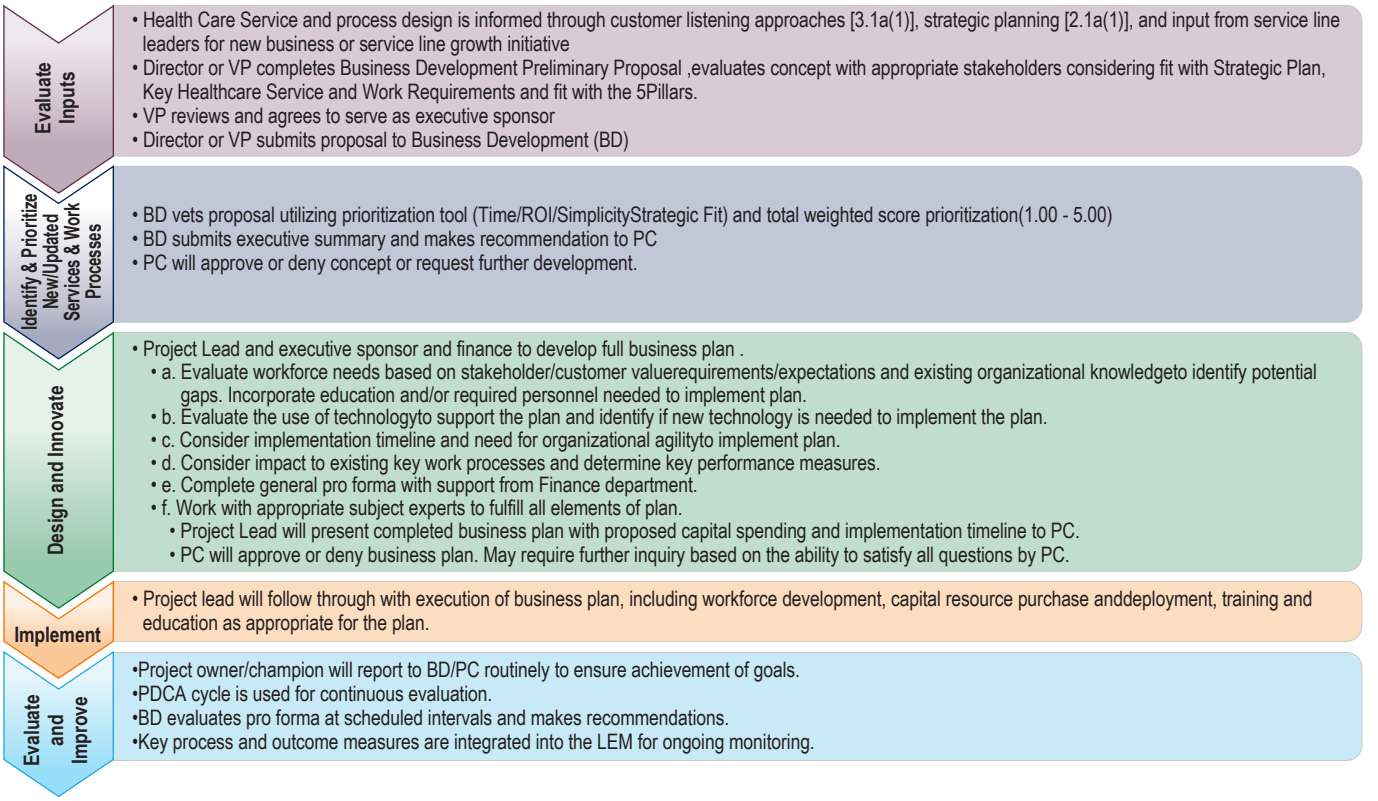
6.1a(1) Service and Process Requirements – Key work process and healthcare service requirements are determined during Step 2 of our SPP [2.1a(1)] and are inclusive of the MVV [P.1a(2)] and 5 Pillars. In our relentless effort to continually improve, we set these requirements at top decile performance whenever we have available benchmarks. Input from our customers and our community through both formal and informal listening approaches [3.1a(1)] is essential to determining these requirements. New ideas and innovations that may help us address changing customer requirements and expectations are evaluated and implemented through the design process (Fig. 6.1-1).

Performance measures, also listed in Fig. 6.1-2, are included as goals on appropriate leaders' LEM and evaluated at least monthly with a focus on action plans for the next 90 days to achieve the stated goal. These measures tell us if these processes were successful at meeting the requirements and ultimately our organizational success.

6.1a(2) Key Work Processes – Our key work processes are listed along with the requirements for all of our service offerings in Fig. 6.1-2.

6.1a(3) Design Concepts – Work processes and healthcare services are decided on and prioritized based on feedback from our patients [3.1a(1)], physicians and associates, or may

Fig. 6.1-1 Healthcare Service and Work Design Process



come about from the SPP [2.1a(1)]. Senior leaders evaluate and prioritize projects for implementation as described in Fig. 6.1-1. Once the decision has been made to implement a new work process, subject matter experts engage with the team to design systems and processes that are customer oriented and structured around identified best practices. Much thought and consideration goes into developing performance measures [4.1a(1)] for key work-process requirements. These measures are designed in concert with the program or service to align with key work processes and requirements (Fig. 6.1-2). If a process involves more than one department, such as the ***evidence-based measures*** for the Sepsis Bundle, performance measures may be shared between several leaders to increase alignment and accountability across the organization.

An example of a new healthcare service that was designed and implemented using this process is our Cardiac Surgery Program. When a local hospital that offered open heart surgery closed, senior leadership identified this service line as a critical community need and began the process to start a program at Castle. Through input from physicians, community members, internal leaders, and through the development of an ROI, it was determined that this program was a strategic fit for our 5 Pillars and strategic plan. We also identified that the community need was such that we needed to move quickly. Through the business planning and evaluation process, we determined that we did not have the ***organizational knowledge*** or ***technology*** to implement this service. Therefore a plan was enacted to obtain the necessary expert personnel, training, and capital for equipment and facilities.

We recruited a Cardiovascular Service Line Director and an open heart surgeon. With this new knowledge and expertise in place we began planning for required equipment, suppliers, personnel, and training. We reorganized several departments and established a CVSL to leverage the Director's subject matter expertise and increase organizational ***agility***. ***New technology*** was implemented in the form of a new cardiovascular operating room (CVOR) and a new high-tech combination CVOR and Cardiac Cath Lab called a Hybrid Room. ***Evidence-based*** training was provided using the computerized patient simulation lab at the University of Hawai'i, where we authored 12 real world patient scenarios for open heart post-operative critical care. ***Customer value*** was enhanced by using a multidisciplinary approach for improving the results of patients suffering from a heart attack or STEMI.

We studied the many steps in the continuum of emergency and CV care and broke down each significant step. We then established targets for each segment of care. Since the program started, we have continued to evaluate and improve using the PDCA process. For example, we learned that we needed to implement a "results debrief" after treating each heart attack patient. This process has yielded a dramatic reduction in time from when a patient arrives at our ED to when blood flow is restored to their coronary arteries, called 'door to balloon time'.

6.1b(1) Process Implementation – Castle's key work processes are integrated with our healthcare service and work process design (Fig. 6.1-1). Implementation of new or updated processes is managed by teams of subject matter experts. The project teams deploy key processes following development of process maps, policies, and staff training. Processes are improved through PDCA [6.1b(4)] and performance management [5.2a(4)]. Key measures of success are developed to support clinical processes designed to meet the needs of our

Fig. 6.1-2 Key Work Processes, Requirements and Measures for Castle's Healthcare Service Offerings (Behavioral Health, Birth Center, Emergency, Medical/Surgical/ICU, and Surgery) *Crosswalk 2017 LEM

PROCESS	REQUIREMENTS	PROCESS MEASUREMENT	I/O	RESULTS
Patient Access • Scheduling • Admissions • 24-hour Emergency	Timely, efficient	Reroute hours	O	7.1-24
	Timely	ED patients left without being seen	O	7.1-22
	Timely, Safe	Length of time to see ED MD	O	7.1-21
	Timely, Efficient	ED length of stay for discharged patients	O	7.1-23
	Timely, Efficient	CG CAHPS	O	7.2-13
Assessment Diagnostic • Physician H&P • Nursing PDP • Lab • Imaging	Safe	Workforce flu vaccine participation	I O	7.3-3
	Timely, Effective	Average Door to Balloon times	I O	AOS
	Timely, Caring	CG CAHPS	O	7.2-13
	Safe	CPOE orders	I O	7.1-31
	Timely	Lab & Imaging turnaround times	I O	AOS
	Timely	VTE prophylaxis for surgical patients	I O	7.1-12
	Effective	PN appropriate antibiotic selection	I O	AOS
Provision of Care • Multidisciplinary Team • Care Plan • Care Board • Patient and Family Education • Rounds	Effective	Sepsis Bundle	I O	7.1-14
	Effective	Stroke EBM	I O	7.1-15
	Efficient	Uptime of electronic medical record	I	7.1-30
	Timely	H&P transcription	I	7.1-27
	Safe	Code Blue outside ICU/RRT volumes	I	7.1-28
	Safe	Patient falls	I	7.1-8
	Safe	Barcode scanning	I O	7.1-32
	Effective, Safe	CAUTI, CLABSI, MRSA, Cdiff, and SS infections rates	I	7.1
Discharge, Education and Care Coordination • Multidisciplinary Team • Case Management • Windward Partners	Safe, Timely, Effective, Caring	HCAHPS Care Transitions	I	AOS
	Timely	Discharge Summaries	I	7.1-27
	Safe, Caring	Post discharge calls completion rate	I O	7.1-26
	Effective, Safe	30 day readmissions	I	7.1-19
SUPPORT PROCESSES				
Human Resources	Recruit, train and retain highly-qualified people	Physician Satisfaction, Associate Engagement, Turnover Rates, LEM, Paid Hours per Weighted Patient Day	I O	7.3
	Accurate, timely, friendly, effective	Internal customer survey	I O	7.2-14
Supply Chain Management	Ensure high-quality supplies are provided at low cost and timely	Fill rates, Supply cost as a % of TOR	I O	7.1-35, 36
	Accurate, timely, friendly, effective	Internal customer survey	I O	7.2-14
Revenue Cycle	Ensure financial viability; effectively manage the revenue cycle	Days Revenue in AR, cash collected to goal, discharge not final billed, denials, days cash on hand, average length of stay	I O	7.5

Key: I = In-process Measures; O = Outcome Measure; AOS = Results are Available on Site

community, capitalize on our core competency and produce evidence-based clinical outcomes. The key work processes creating value for our patients and other stakeholders are shown in Figure 6.1-2, along with their key performance measures. Each of these processes run throughout our key work systems: ED, IP, and OP.

Key measures are selected to ensure patient, customer, stakeholder, regulatory requirements, and strategic initiatives align with our core competencies while achieving short and long-term results. The PDCA cycle is used to evaluate the success of new services and programs and key measures are identified and added to the program leaders' LEM goals which are evaluated at least monthly during 1:1 meetings. Ninety-day action plans are developed with senior leaders and directors, and are monitored until the measures are meeting performance targets. Through deployment of standardized best practices and ongoing feedback, we are well-positioned to respond to deviations and address gaps. Leadership conducts routine rounds with patients, families, physicians, and collaborators to ensure timely feedback and communication (Fig. 1.1-1). These processes maximize efficiencies across the organization through increased coordination and integration of services and effectively managing processes.

6.1b(2) Patient Expectations and Preferences – Each patient's needs, preferences, and expectations are addressed during the initial interdisciplinary assessment and subsequent reassessments that occur throughout the delivery of care. Information gathered during assessments is used to develop an individualized plan of care for each patient and also guide the way we manage patient expectations and how the patient and family members will participate in decision-making related to care delivery. Each patient's plan of care is developed in conjunction with physician orders and standardized protocols designed to facilitate the delivery of best practice.

Throughout the course of care, patients and families are provided with information and the opportunity to establish realistic expectations about care processes and anticipated outcomes (Fig. 6.1-3). Nurses are taught to update the Care Board and discuss the 4 Ps during their hourly patient rounds. The fourth "P" stands for "plan," which includes both the overall plan of care and what will happen between this visit and the next hourly round.

Fig. 6.1-3 Integration of Patient Preferences

	APPROACHES
Patient Expectations and Preferences	• Care Board • Patient Handbook • Patient notepad • Consents for procedures and testing • My Adventist Health
By Physicians	• Consult specialty physicians • Communicate with PCP • Rounds with Nursing and Case Management • Consult Pharmacist • Advanced care planning – Palliative Care • Identify patient's preferred pharmacy
Other Approaches	• OPI© • AIDET • Listen Up™ • Always Behaviors • Ethics Committee • Patient Advocate • Hourly Rounding and 4Ps • Call Don't Fall signage • Ongoing assessments and listening
Innovations	• Pharm2Pharm • My Adventist Health • Bedside shift report • Quiet at Night Kits • Bedside discharge meds • Empathy training

Continuity of care post discharge is addressed through the deployment of the Cerner EMR to AHC clinics and CHG physicians. Post discharge calls ensure that the patient understands their discharge instructions, are taking their medications properly and have a scheduled follow-up appointment with their PCP.

6.1b(3) Support Processes − Support processes (Fig. 6.1-2) are critical to achieving our key work requirements and thus follow the same design process (Fig. 6.1-1) to ensure that the desired performance measures are achieved. Support processes are also reviewed during the strategic planning cycle (Fig 2.1-1) and are updated to reflect changing organizational priorities, a changing external environment, or may become strategic initiatives of their own. In our most recent playbook, elements of Human Performance, Supply Chain Management, and Revenue Cycle are identified as key strategic initiatives.

6.1b(4) Service and Process Improvement − Each year, the QIC develops a Quality Improvement Plan based on strategic planning goals [2.1b(1)], performance measures that are not meeting targets, and processes showing undesirable variation. Depending on the scope and urgency of the goal, it is assigned to a director through the Operations Committee, an interdepartmental QIT, or to a one-day bureaucracy-busting Workout Session. All of these approaches use the scientific method of ***Plan*** (the change), ***Do*** (test the change), ***Check*** (results of the change) and ***Act*** (adopt, adapt or abandon the change). In addition, CAP tools are used to enhance stakeholder acceptance, alignment, and accountability. Examples of CAP tools include: Threat/Opportunity Matrix, Stakeholder Analysis, Attitude/Influence Matrix, Write-it Say-it Slap-it, Storyboarding, and Who-What-When to engage stakeholders in the change process. Stakeholder acceptance, alignment, and accountability have been identified as differentiating factors for successful and unsuccessful implementation of good technical solutions.

The Operations Committee ensures that all LEM goals have appropriate work process measures and outcomes, targets, target weights, and alignment. Directors are responsible for developing 90-day action plans to improve their work processes and reduce variation. Progress is monitored during monthly 1:1 meetings with senior leaders. QITs address interdepartmental work processes and report progress to the QIC. All QITs have a senior leadership sponsor and a team leader, who is the process owner. CAP-trained "Change Agents" facilitate the team and ensure proper utilization of appropriate CAP tools.

Workout sessions address clearly defined problems that can be solved in a one-day planning marathon and implemented within 30-60 days. These sessions eliminate organizational barriers such as numerous meetings, reports, and approvals by empowering associate stakeholders to develop solutions together. Workout sessions are facilitated by individuals who have been trained as a "Change Agent Plus."

All of these methods reduce process variability and enhance our core competencies by improving our ability to provide safer, more efficient, timely, caring, and efficient services to our community (CC1 & CC2).

6.1c Supply Chain Management − The medical supply chain is managed through the Materiel Management department in partnership with our group purchasing organization, Premier, and the AH corporate supply chain branch. Pharmaceuticals, food, and IT supplies are managed by AHC department directors in collaboration with the AH corporate supply chain branch. Premier, our group purchasing organization, works with AH corporate supply branch to leverage efficiencies resulting in cost reductions, from all of our suppliers. Additionally, the corporate leveraged partnership with Jones Lang La Salle (JLL) achieves efficiencies throughout AH for facility related supplies and services.

Selecting suppliers is championed by the AH supply chain branch in partnership with AH facilities and Premier. Suppliers are selected based on cost, outcomes, and quality. The selection process ensures that suppliers who cannot meet our operational needs are excluded from the selection process. Supplier contract agreements include measurable performance expectations such as fill rates, response times, and meeting TJC requirements through compliance with Vendormate, our corporate vendor credentialing program. Castle's Pharmacy director works with our physicians and our primary pharmaceutical distributor, McKesson, to ensure a streamlined and cost effective formulary is used at Castle to meet our medication needs.

Measuring and evaluating suppliers performance – The Directors of Materials Management, Perioperative Services, CV Services, and Imaging participate in the monthly system-wide webinar conference call facilitated by AH Supply Chain. Vendor performance issues are discussed to include action plans for improvement in support of all AH facilities. Cardinal Health is measured and evaluated on their fill rates of orders and locally stocking a core list of supplies for our facilities at their warehouses located closest to our AH facilities. Other measurements of supplier performance include

accuracy of orders, number of back ordered products, and pricing discrepancies.

Feedback to suppliers – The Materials Management director and Perioperative Services director meet bi-weekly with Cardinal Health to provide feedback, discuss improvement opportunities, discuss supply chain concerns, and any efficiency or cost savings opportunities. Implementing new contracts, product conversions, or new products to drive savings and improved outcomes are some examples. The strong partnership with Cardinal Health and our collaborative approach helps achieve efficiencies for both parties and reduces delays and costly freight charges. This philosophy is also used for food products and pharmaceuticals.

Poor Performance - Poor performance by vendors are addressed by the director of the service line in collaboration with the director of material management, AH Supply Chain, and Premier, if escalation is necessary. Vendors may be dismissed immediately for unacceptable conduct, failure to meet contractual expectations, or noncompliance with Castle vendor protocols. Corrective action plans may be developed at the discretion of the respective service line director and Materials Management director. Poorly performing supplier issues are discussed on the monthly AH supply chain webinar meetings to determine if the situation is isolated to a single facility or corporate wide.

6.1d Innovation Management – Our stakeholders and customers generate ideas for innovation. Our systematic approach to harvest and prioritize ideas begins with patient rounding and includes ideas received via other listening posts such as post discharge patient phone calls and our survey (Fig. 6.1-4). Our associate and physician rounding process also generates ideas with the specific question asked during rounding "Do you have any innovative ideas that you would like to share?" Unit based councils and other departmental committees also produce ideas for innovation. Directors and managers are asked during their supervisory monthly meeting the question "Do you have any innovative ideas you have been able to harvest from associates? If yes, using the PDCA model, what progress has been made toward implementation?" Finally in the first quarter of each year, a deliberate push for innovation is made throughout the organization at staff meetings and at a leadership meeting. Exercises geared towards harvesting ideas collectively are completed in groups and these are documented on an Innovations Request form for follow up.

Departmental innovations that are aligned with our SP and can be implemented with reasonable workflow adjustment and current resource limitations are pursued immediately. These are documented on departmental stoplight reports and move from yellow (work in progress) to green (completed). Ideas that cannot be implemented immediately are documented in the red column with a corresponding explanation.

Innovations that require significant additional resources or adjustment in workflow are pursued with executive leader sponsorship, and presented to the Operations Committee to determine if the innovation is an intelligent risk. Final approval is requested from President's Council, which may assign resources or determine that an innovations grant application be submitted to the Adventist Health system for funding. If successful, Adventist Health provides up to $50,000 per innovation. Castle has successfully received 4 grants over the last 5 years for large projects.

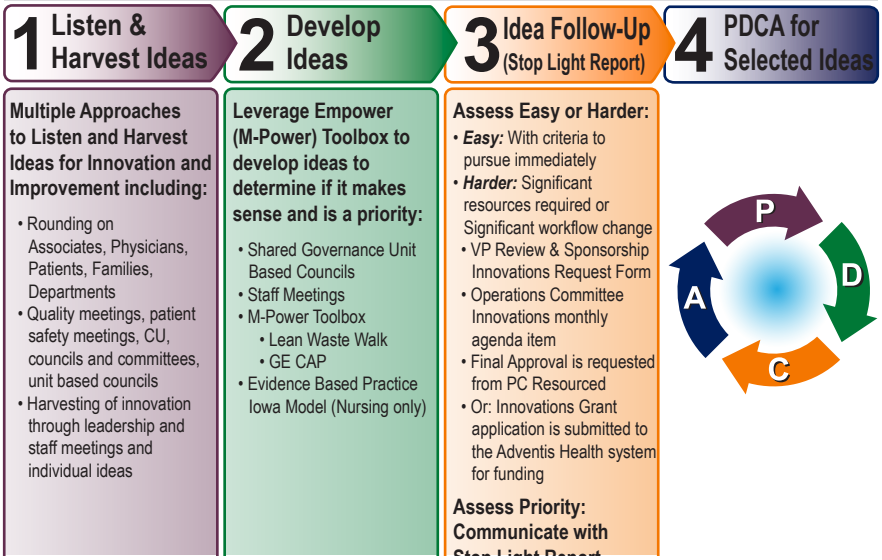
Innovations are monitored at the appropriate leadership level to determine their success. Those that do not meet expectations may be modified or retired to enhance support for higher priorities. An example of this was a rooftop garden innovation that was revised due to a need for roof reconstruction.

6.2 Operational Effectiveness

6.2a Process Efficiency and Effectiveness – Castle controls overall costs through the integration of evidence-based practices and new technology. Cost control at Castle also is achieved through:

- ***Cycle time, productivity and effectiveness:*** Directors are required to explain monthly FTE and operational expense variances within 10 days of distribution of reports. Directors with labor expense variances attend monthly "Grey Zone" labor expense meetings to explain root causes for labor variances, and their action plans for improvement. Current financial performance measures requiring leadership action are communicated by senior leaders at monthly leadership meetings. All FTE requests, including new positions and replacement of existing positions, are reviewed by the Operations Committee as a cost control measure. Streamlining and cross training staff is encouraged when possible. New technology is reviewed by the Operations Committee through an interdisciplinary, integrated process. Proposals for new technology or innovations that may improve efficiency or process effectiveness are evaluated through the Healthcare Service and Work Design

Fig. 6.1- 4 Chain of Innovation (Updated since submission)



Process (Fig. 6.1-1). The due diligence process for new equipment begins with the Operations Committee and includes return on investment, pay back and cost benefit analyses. The Operations Committee makes recommendations for new technology, capital equipment, and other capital projects to President's Council for final decisions. ECRI input is used to obtain technology assessments and to provide recommendations on vendor-provided quotations. Key productivity, costs, and cycle time measures are assigned to appropriate leadership LEMs, which require 90-day action plans and are monitored monthly to determine effectiveness.

- ***Rework and errors*** are minimized by using failure mode and effect analysis (FMEA) for high-risk procedures

Fig. 6.2-1 Methods Used to Prevent Rework and Errors

METHOD / PROCESS	USED BY	DESIRED OUTCOME
FMEA	Patient Safety Council	High risk procedures are evaluated to prevent patient harm
SBAR	All Clinical Associates	Communication tool used to provide accurate, concise information and recommendations regarding safe patient care
Quiet Zones	All Patient Care Areas	Provides quiet, uninterrupted physical zone for medication delivery areas
CPOE	Nursing & Pharmacy	Ensures accuracy of physician orders that may be due to poor penmanship
Hourly Rounding	Nursing	Proactively addresses basic patient needs and reduce fall risk
Root Cause Analysis	Patient Safety Council	Systematic process to identify root cause of patient harm
Medication Alerts in EMR	Pharmacy & Nursing	Alerts clinician for potential dosage, or medication discrepancy for patient
BCMA	Nursing	Verifies correct patient prior to medication administration
Department Environment of Care Rounds	EOC Committee	Ensures physical and environment safety throughout our facility
Infection Prevention Rounds	Infection Prevention Specialist	Mitigate potential sources for infection throughout the facility
Unannounced TJC Visits	Entire hospital	Ensures TJC standards are met; and verifies corrective actions.
Clinical Documentation Reviews	Clinical Documentation Specialists	Ensures documentation standards are met; develop action plan / education plan for deficits

to minimize the probability of failure or the effects of a failure . National Patient Safety Goals are routinely monitored during nurse leader rounds and verified during unannounced TJC mock surveys. Additional processes and methods shown in Fig. 6.2-1 help us prevent rework and eliminating errors and meet the goal of avoiding unintended harm to our patients by ensuring a safe patient environment. Additionally, many of these methods and processes also help us to minimize the cost of inspections, tests, and process performance audits.

- ***Minimizing the cost of inspections, tests, and process or performance audits –*** Castle provides statistically significant sample sizes of medical records and physician files for reviews. QITs use statistical process control charts, Pareto charts, Ishikawa cause-and-effect diagrams, and other quality improvement tools to locate and eliminate root causes to poor performance. These methods help identify and correct problems early and effectively before they create a medical error, other problems or increase expenses.
- ***Cost control when needs of our patients and other customers differ –*** We balance the need for cost controls with the needs of our customers through daily monitoring of our inpatient census levels, and adjusting or flexing staffing needs to meet actual patient care volume. We continuously evaluate new technology and determine if its cost outweighs the benefit to patient outcomes and customer satisfaction. Suppliers are often requested to provide high-priced low utilization products on consignment as a cost containment strategy. Consignment agreements provide our physicians with readily available supply items without having to purchase the item until it is actually used.

6.2b(1) Information Systems Reliability − To ensure reliability, Castle aligns with AH to standardize and integrate hardware, software and clinical devices across the corporation. The learning and familiarity of hardware and software among associates is increased by the use of standardization while improving the user experience. Data are collected and transferred among various systems employing industry standard interfaces thus improving data transfer reliability and accuracy. The use of Cerner's highly integrated EMR provides timely, secure, accurate data and information to physicians and staff within the hospital and wherever there is an Internet connection. Additionally, bedside charting provides immediate and accurate capture of information.

6.2b(2) Security and Cybersecurity − Castle ensures security and confidentiality of all data including Protected Health Information (PHI) by limiting access and data input to authorized users only. Staff's access privileges are based on the role of the user. Those allowed access are required to review security and confidentiality policies yearly utilizing Healthstream training modules following Health Insurance Portability and Accountability Act (HIPAA) guidelines. Forced password changes occur every 180 days to ensure security and integrity.

AH maintains a risk-based enterprise information security program. In addition the IT department maintains a centralized Information Security Department (InfoSec). The annual InfoSec program is based on a combination of the Verizon Data Base Incident Report's incidents identified within healthcare, the SANS Top 20, results of the AH annual penetration testing, and Meaningful Use Assessments.

The AH defense in-depth strategy includes a layered approach including encryption and authentication. The InfoSec technologies are used in assessing vulnerabilities, monitoring the environment, reducing risk, and as a resource to develop and deploy targeted information security awareness notifications. All IT locations are monitored by security cameras and include badge entry for authorized personnel only.

6.2c(1) Safety − AHC is committed to the provision of safe care in a safe environment. Safety is addressed through the Environment of Care (EOC) Committee, the Patient Safety Council, daily Safety Huddle, associate education, and integrated into our patient care. While there is no simple formula

for providing a safe environment, prioritization considers the following factors: patient safety, regulatory requirements, cost, relationship to MVV, and the importance to our customers. Our EOC Committee manages the health and safety of the work and patient care environment through the implementation of seven monitoring and improvement plans: Safety, Security, Hazardous Materials, Emergency Management, Fire Safety, Medical Equipment, and Utilities. The EOC Committee developed a rounding tool based on these seven areas. This multi-disciplinary team which includes members from Biomedical Engineering, Employee Health, Environmental Services, Infection Control, Facilities, Pharmacy, and Security round weekly. Clinical areas are rounded on biannually, and nonclinical areas are rounded on annually. Findings are reported to area managers with the expectation that fallouts be rectified within 30 days. Rounding team members work with area managers to help resolve findings  . Castle received no environmental safety findings during our last TJC survey which is extremely rare for hospital surveys.

In instances where safety issues are reported individually, cases are reviewed and where possible, a process is put in place to help prevent the issue from recurring. For instance, some sidewalks are in shady/wet areas and get slippery over time. These areas are now monitored by preventive maintenance procedures which power wash the areas periodically. Another example is routinely trimming the dead branches from the parking lot trees. This proactive posture is an improvement over the previously reactive posture.

Our Patient Safety Council is responsible for identifying high-risk processes, implementing best practices, identifying solutions for problematic processes, and conducting at least one proactive FMEA on a high risk process every 18 months. When indicated, this committee reports on any RCA findings, corrective action plans, and shared learnings. This reporting records events that are outside the usual activities, including patient events and equipment failures. Our director of compliance and director of quality investigate incidents and report findings to leadership, the Patient Safety Committee and/or the EOC Committee to resolve occurrences or improve processes and policies.

Upon hire and annually, all associates must complete education and training in the seven areas of the EOC. Throughout the year, associates participate in announced and unannounced safety drills to prepare them to manage fires, infant abductions, and other potential disasters. In response to a general increase in healthcare setting violence, we now offer Crisis Prevention training and armed intruder training to associates in high risk areas.

6.2c(2) Business Continuity − We ensure emergency and disaster preparedness by using a systematic approach to identify hazards that may affect the organization and our community through implementation of a comprehensive Emergency Operations Plan (EOP). To ensure a coordinated response with the community, we actively participate as a member of the HAH Emergency Services Coalition. Due to our location in the middle of the Pacific Ocean, it is imperative that we have contingency plans for supplies. Cardinal Health is our primary medical-surgical supply distributor on island. They maintain on-island warehousing of stocked medical supplies used at Castle. Cardinal Health maintains their own emergency management and response plans and provides Castle with emergency contact information should the need arise. HAH also maintains a cache of supplies that is available to healthcare facilities. We have access to these supplies in case of emergency.

Prevention − Mitigation activities are completed to reduce the consequence and probability of high-risk hazards. For example, we are at high risk for hurricanes that may result in loss of routine communication systems. To mitigate this risk, we have created redundant communication systems which include an amateur radio system and a satellite radiotelephone, which are tested monthly. The Emergency Program Manager is responsible for the development of the Emergency Operations Plan (EOP) and works with a multidisciplinary committee that includes representation from Administration and the Medical Staff. We promote constant readiness by performing exercises and reviewing our performance in both exercises and real events. An After Action Report (AAR) is completed with Opportunities for Improvement (OFIs) and an action plan is developed. These reviews have led to several improvements in surge capacity, communication, decontamination, patient tracking and the EOP. Planning for information technology backup [4.2b] is a subset of overall emergency readiness .

Continuity of Operations − To ensure effective management of an emergency or disaster, and to promote continuity of critical operations, all associates receive appropriate training for their roles. This includes required NIMS training, decontamination training and evacuation. Critical operations are also ensured through exercises, memorandums of understanding (MOUs) with HAH and vendors, and development of continuity plans.

Recovery − Our goal is to return the entity to its usual state as soon as possible. Incident planning and return to readiness activities begin during the event and are coordinated through the HCC. Costs associated with the response are tracked using FEMA forms. In a declared state or federal disaster, guidelines to complete request for reimbursement by the appropriate entities are followed. One of the most important recovery activities from an event is capturing lessons learned and incorporating improvements in our EOP.

Reliance on Workforce, Suppliers, and Partners during disasters − Reliance on Workforce - Reliance on Workforce - Our workforce is critical to our daily operations, but becomes even more important during times of crisis. Depending on the type of disaster, they or their families may be personally affected. If the issue is a pandemic, they may worry about their own susceptibility and absenteeism will further complicate the situation. We address these issues in a number of ways. One of the best ways to ensure the workforce can be relied upon during times of crisis is to properly care for them every day. We truly value all of our associates as if they are family. It is through this day-to-day relationship of trust we know we can rely upon our workforce when the need arises. We also build

this reliance by ensuring they are adequately trained, prepared, and equipped. Our exercises test influx of patients under various scenarios and we maintain Personal Protective Equipment (PPE) that may be needed during a pandemic. Subject matter experts keep abreast of the latest issues. Some of the most common methods of protecting ourselves in a pandemic are practiced daily here at Adventist Health Castle as a matter of routine. Our hand hygiene and flu vaccination programs are robust. Thus, during times of crisis, the staff is less prone to fear due to their familiarity through training.

Our plan also takes into account other staff support activities that may be needed such as housing, transportation, incident stress management, hydration, nutrition, morale, and mental health. Other aspects such as child care, pet care, and communications with staff also play a role in ensuring our staff can be relied upon.

Adventist Health Castle maintains relationships with the local Kailua Community Emergency Response Team (KCERT) which may be able to provide volunteers and assist with staff needs. Volunteer practitioners are accounted for in our EOP, giving us the ability to utilize licensed or registered volunteer practitioners in the hospital. Lastly, our close relationship and membership in HAH allows us to request additional staff resources and tap into the coalition.

Reliance on Suppliers – The best way to ensure reliance of suppliers is to leverage our existing relationship with HAH. During a disaster, HAH will have access to higher level state and federal government officials and resources. Requests for assistance (RFAs) are sent to HAH. HAH then coordinates with other agencies or hospitals to provide the necessary resources.

Like our workforce, reliance on suppliers is also built and sustained through relationships. Many vendors have stated they feel something special when coming to Castle, in the way our associates act and how Castle makes them feel. This trust, built by many years of cultivating relationships, yields dividends not only during times of crisis, but also in our daily routine.

Reliance on Partners – We have various entities who could be considered partners during a crisis. First and foremost are our partner hospitals. Every major hospital on the island is a member of HAH. Through HAH, we can rely upon our partners to provide assets and resources throughout the coalition as the situation dictates. Instead of being some nebulous entity, the coalition is a vibrant group that meets regularly and that know each other. Through these relationships and trust, we are assured that all members of the coalition will work together for the common good.

IT Security and Availability – Castle's EOP [6.2c(2)] ensures that hardware and software systems, data, and information continue to be secure and available to effectively serve patients, customers, and organizational needs during an emergency. Castle participated in the AH Information Systems Disaster Planning Committee which developed the disaster recovery plan for all locations. In the event of a disaster, continuous availability of data is ensured through onsite generators securing critical systems and computer processes. The generators are tested monthly and during emergency preparedness exercises. New downtime software on local workstations (7X24 Local Access System) provides pertinent patient information to clinicians. Staff follow downtime procedures found in the Project Intellicare Global Downtime policy. The AS400 registration/financial software and Cerner EMR System are the cornerstones of our IT software infrastructure. Uptime of these systems is continuously monitored, with a 100% uptime for the AS400 and 99+% for the Cerner system respectively.

Castle's server room ensures data remains operational

Fig. 7.1-1 Premier QUEST Composite Measures - AHC vs. Other Adventist Hospitals

	SAFETY (↓ BETTER)			EVIDENCE BASED CARE (↑ BETTER)			MORTALITY (↓ BETTER)		
	2014	2015	2016 Q1-Q3	2014	2015	2016 Q1-Q3	2014	2015	2016 Q1-Q3
Adventist Health Castle	70.3	68.0	58.5	97.7%	99.0%	98.9%	0.924	0.819	0.844
Adventist Hospital A	50.9	65.8	61.6	96.9%	91.2%	89.0%	0.788	0.800	0.966
Adventist Hospital B	87.2	92.9	93.8	94.5%	98.2%	98.3%	0.982	0.927	0.973
Adventist Hospital C	87.2	63.7	98.3	100.0%	66.7%	71.4%	1.927	0.947	1.204
Adventist Hospital D	68.2	110.0	78.4	97.1%	94.3%	97.6%	0.995	0.921	0.937
Adventist Hospital E	125.9	120.6	122.2	98.9%	95.5%	96.8%	0.592	0.569	0.597
Adventist Hospital F	113.4	91.9	81.4	66.7%	60.0%	50.0%	1.532	0.850	1.454
Adventist Hospital G	110.0	106.6	95.4	100.0%	97.9%	95.7%	0.883	0.970	1.225
Adventist Hospital H	139.1	130.9	121.5	97.4%	95.8%	97.2%	0.827	0.954	0.988
Adventist Hospital I	100.6	102.3	73.4	94.3%	94.2%	99.1%	0.710	0.864	1.133
Adventist Hospital J	117.8	95.8	82.6	87.2%	97.5%	98.5%	0.799	0.919	0.913
Adventist Hospital K	134.5	129.1	117.3	93.8%	89.4%	93.6%	1.323	0.983	0.882
Adventist Hospital L	116.9	116.7	105.7	92.9%	93.4%	90.0%	1.466	1.222	1.271
Adventist Hospital M	121.4	139.1	60.2	96.0%	96.5%	94.4%	0.737	0.816	1.182
Adventist Hospital N	114.2	131.2	81.9	96.5%	98.6%	98.8%	0.900	0.938	0.803

Achieves or Surpasses Top Quartile

by the installation of a chemical fire suppression system, redundant air conditioner units, cloud infrastructure and water shields over hardware while backups are immediately available and stored in a secured off-site location in California.

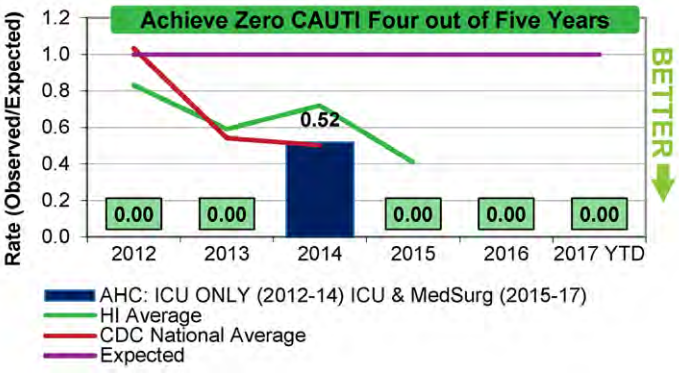
7 Results

7.1 Healthcare and Process Results

7.1a Healthcare and Customer-Focused Service Results – We are tenacious about quality improvement, especially in regard to chasing zero harm to our patients. As an early member of the Premier Quest collaborative, we began benchmarking ourselves against high performing hospitals many years ago. We strive to improve the health of our broader community, regularly sharing practices and leading the way for others beyond our walls. Serving as a role model to the AH system and Hawai'i we led the way for them to join so that we can actively benchmark and improve together. For Premier Quest composites (Fig. 7.1-1) we perform best in AH for Safety, in the top two for Evidence Based Care and in the top three for Mortality. We are one of only two hospitals in the system to perform in the top quartile within the Quest network for all three composites.

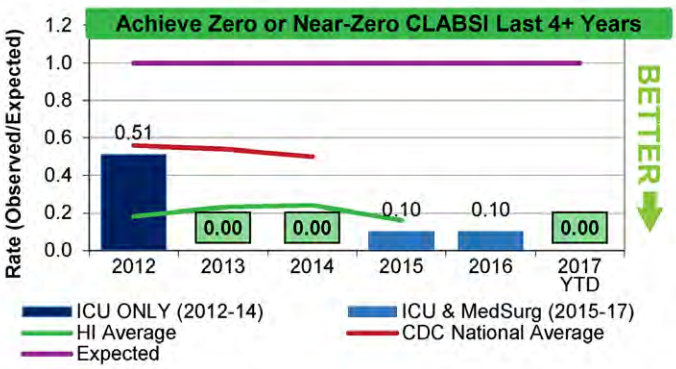
Safety: Core to our commitment to quality is avoiding patient harm. Catheter-associated urinary tract infections (CAUTIs) cause over 35% of all U.S. hospital-acquired infections. AHC has a multifaceted, evidence-based approach to prevent them. For example, Infection Prevention began reporting patients with urinary catheters to unit leaders in daily Safety Huddle in 2013. Patients with catheters in place greater than 2 days are highlighted as high risk. Days since last CAUTI is announced weekly in Safety Huddle where in early 2017 we celebrated 1000 days. AHC is a national top performer in this measure where we have achieved zero four out of the last five years (Fig. 7.1-2).

Fig. 7.1-2 CAUTI SIR – ICU & MedSurg (2015/16)



Central line-associated bloodstream infections (CLABSIs) can increase patient mortality rates up to 25% and cause severe illness, extended lengths of stay, and loss of function. Historically, CMS required reporting of ICU CLABSIs only. Since 2015, all inpatient CLABSIs have been included (Fig. 7.1-3). According to NHSN, the top 10% of ICUs have had CLABSI rates of zero for the last four years. Our ICU has not had a single CLABSI since May 2012. Best practices used to drive this performance include hand hygiene before touching

Fig. 7.1-3 CLABSI SIR – ICU & MedSurg (2015/16)



a central line, daily patient bathing with CHG, using a sterile drape under dialysis catheter limbs during dialysis, and decreasing the number of days that patients have a central line.

Surgical site infections (SSIs) are the most common health care–associated infections in the US, occurring in approximately 2% of surgical procedures. SSIs can result in substantial morbidity, prolonged hospitalizations, and death. Up to 60% of all SSIs are preventable using evidence-based guidelines. AH teams have developed a SSI prevention bundle policy. Example preventive measures include: preoperative bathing with CHG, MRSA / MSSA screening, appropriate preoperative antimicrobial prophylaxis within 60 minutes prior to the surgical incision, preoperative skin preparation of the incision site with an alcohol based antiseptic agent, hand and forearm antisepsis, reducing IUSS (flash sterilization), and patient education. Surveillance is performed on all abdominal hysterectomy cases for 90 days postoperatively per NHSN where we have achieved zero infections for the past five years (Fig. 7.1-4).

Fig. 7.1-4 SSI - Abdominal Hysterectomy SIR

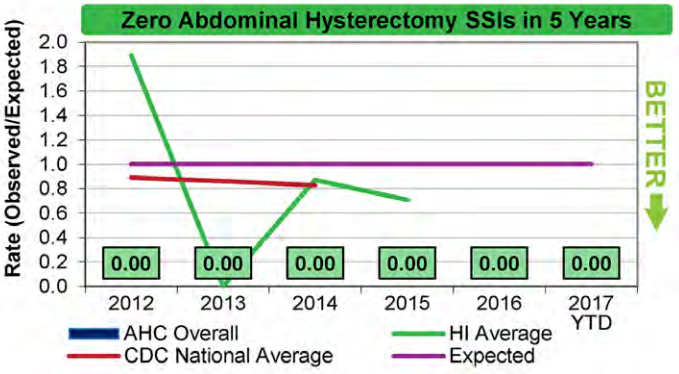
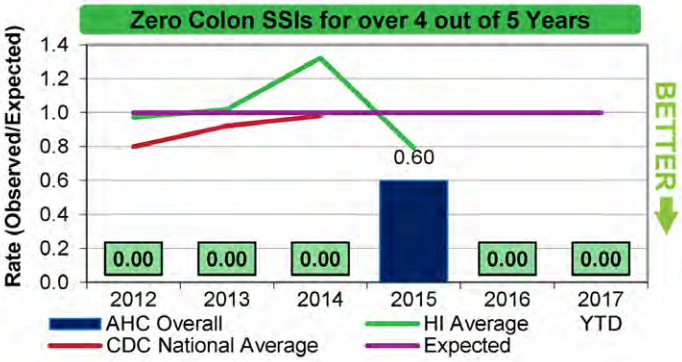


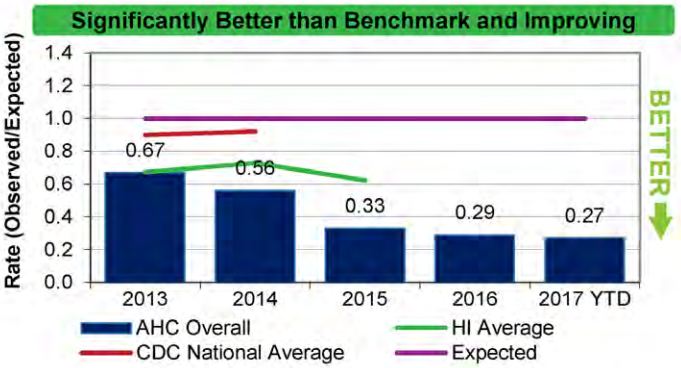
Fig. 7.1-5 SSI - Colon SIR



In addition to the preventative measures listed above, AHC is a member of Hawai'i's Surgical Unit Safety Program (SUSP) collaborative to reduce colon and other SSIs. All SUSP facilities implemented evidence-based practice use of a separate instrument closing tray and re-gloving prior to closing for all colon surgeries. Castle has kept our patients safe, outperforming HI and the nation with zero colon SSIs for four of the last five years (Fig. 7.1-5).

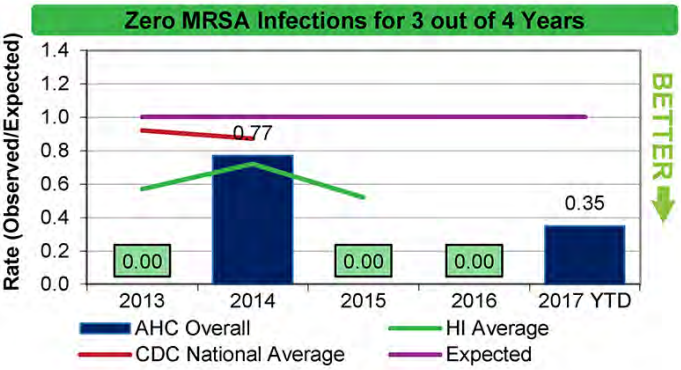
Clostridium difficile infections (CDIs) can cause severe complications and are linked to the use of antibiotics. AHC uses evidence-based practices and participates in a statewide hospital antimicrobial stewardship collaborative. In 2013, AHC instituted methods to reduce bacterial spores on surfaces and in 2014 partnered with physicians to test earlier for CDI in suspected patients to minimize clinical illness. Leading the way within AH, AHC piloted the successful corporate CDI Nursing Bundle. AHC performance in 2013 was already significantly better than expected by the CDC and we have improved each year since so that now AHC sees only 29% of the expected rate, significantly better than benchmarks (Fig 7.1-6).

Fig. 7.1-6 Clostridium difficile SIR



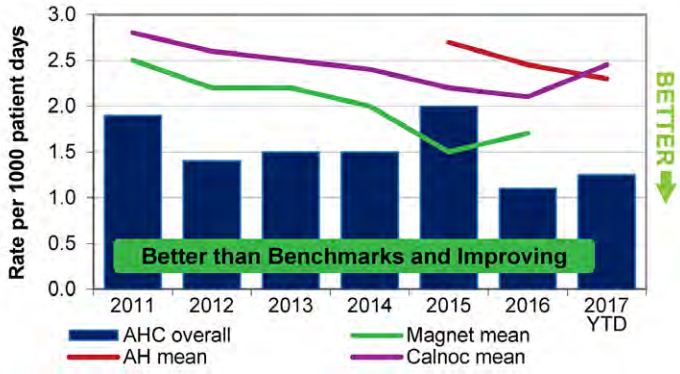
MRSA is a bloodstream infection caused by Staph bacteria that have developed resistance to many antibiotics. It can cause serious infections including over 40% of SSIS and 50% of CLABSIs, significantly longer hospital stays and higher costs. AHC has implemented a multifaceted approach including prevention and surveillance. A few examples include: daily CHG bathing of all patients with central line catheters, Laboratory and Infection Prevention collaboration with ED nursing to reduce the blood culture contamination rate which improved early identification of MRSA in patients that may be admitted. Only one case of hospital onset MRSA bacteremia has been identified at AHC since public reporting began in 2013 (Fig 7.1-7).

Fig. 7.1-7 MRSA SIR



AHC's multidisciplinary Fall Task Force includes nursing, pharmacy, imaging, physical therapy, and quality. Ongoing efforts have resulted in performance better than AH and other benchmarks. We have achieved the lowest fall rate in our history to date in 2017. Still we believe that even a single patient fall is one too many, and we continually seek ways to prevent falls and any associated injuries entirely (Fig. 7.1-8).

Fig. 7.1-8 Patient Falls per 1000 patient days



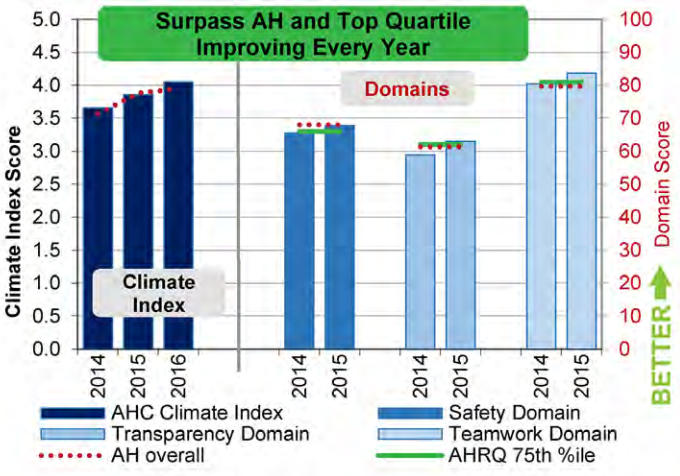
While we utilize trends extensively, a few snapshots are provided to enable comparison to multiple competitors. Fig. 7.1-9 shows that AHC performs better than local hospitals and to the most recent Baldrige award recipient for HACs, consistently performing in the top quartile and often top decile.

Fig. 7.1-9 Snapshot of HACs vs. Competitors and Recent Recipient

	RATE (↓ BETTER)					%ILE RANK (↑ BETTER)				
	CLABSI	CAUTI	MRSA	C DIFF	PUI CER	CLABSI	CAUTI	MRSA	C DIFF	PUI CER
Adventist Health Castle	0.2	0	0	0.5	0.2	86	99	99	84	76
Competitor A	0.2	0.5	0.5	0.8	0.3	87	73	73	65	67
Competitor B	0.7	2.4	1.9	1.2	1.1	63	4	13	28	7
Competitor C	0.2	0.9	0.5	1	0.5	86	46	71	39	22
Competitor D	1.1	0.3	0.5	0.9	1.2	37	80	73	50	6
Recent Baldrige Winner	0.9	0	2	0.4	0.3	45	99	11	87	65

AHC intentionally creates a culture of safety. We surpass AH for the climate index and each of the three domains. We perform in the AHRQ top quartile for each domain (benchmark not available for climate index) and have improved every year (Fig. 7.1-10).

Fig. 7.1-10 Culture of Safety – Climate Index Score



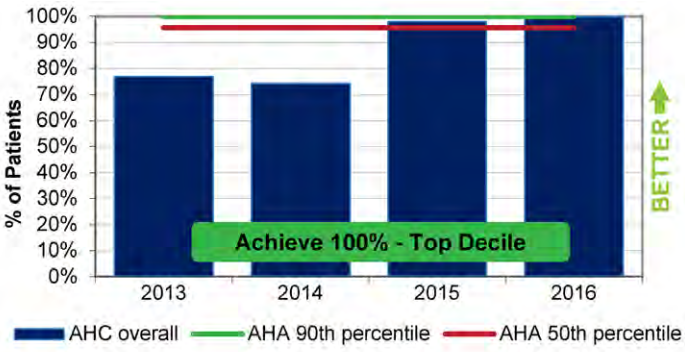
Evidence Based Care: TJC accountability measures are quality measures that meet four criteria that produce the greatest positive impact on patient outcomes when hospitals demonstrate improvement on them. Criteria include: strong scientific evidence that compliance improves outcomes, the measure is strongly connected to the outcome and accurately assesses whether the evidence-based process has actually been provided. While a comparison does not exist for the overall composite rate, AHC achieves a near perfect accountability score. AHC surpasses all competitors and benchmarks for each individual measure further demonstrating AHC's exceptional results (Fig. 7.1-11).

Fig. 7.1-11 TJC Accountability Composite Rate and Performance on Individual Measures

	PERCENT OF PATIENTS WHO RECEIVE APPROPRIATE CARE					
	AHC		Comparisons (Hospital Compare through 3/2016)			
MEASURES	Prior 4 QTRs (Q4-2014-Q1-2015)	Most Recent 4 QTRs (Q4-2015-Q1-2016)	Competitor A	Competitor B	HI Average*	National Average*
PC-03	100%	100%	NA	NA	NA	NA
PC-01	100%	100%	99%	NA	99%	98%
IMM-2	97.6%	99.6%	92%	83%	95%	94%
STK-4	100%	100%	97%	NA	92%	87%
VTE-5	100%	100%	51%	-	83%	93%
Accountability Composite Rate:	98%	99.6%	NA	NA	NA	NA

Venous thromboembolism (VTE), the leading cause of preventable hospital deaths, can cause a blood clot to form, break off and travel into the lungs. AHC achieves 100% compliance with best-practice guidelines to save lives (Fig. 7.1-12).

Fig. 7.1-12 VTE Compliance



Compared with newborns delivered at 39 weeks of gestation, newborns born at 37 to 38 weeks are at higher risk for transient tachypnea of the newborn, pulmonary hypertension, hospital stays greater than five days, and diagnoses associated with severe morbidities or death. AHC's Birth Center has developed procedural controls that have effectively prevented elective deliveries before 39 weeks achieving zero (top decile) for three of the last four years (Fig 7.1-13).

Sepsis is a complication caused by the body's overwhelming and life-threatening response to an infection. The Sepsis Bundle combines evidence based practices to achieve the best outcomes and minimize mortality. AHC consistently performs in the top decile (Fig 7.1-14).

Fig . 7.1-13 PC-01 Elective Delivery Compliance

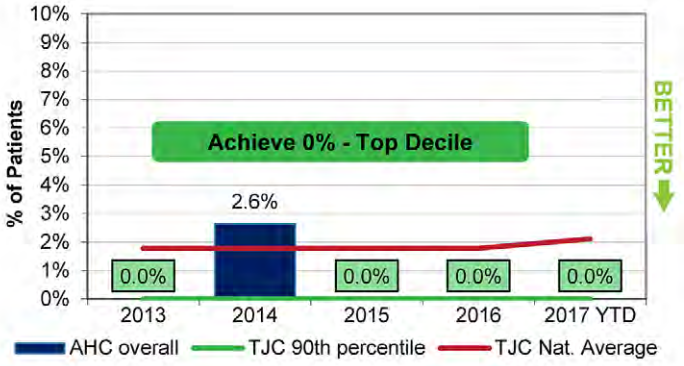
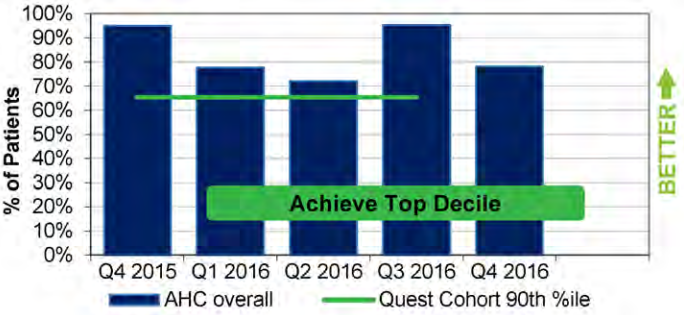
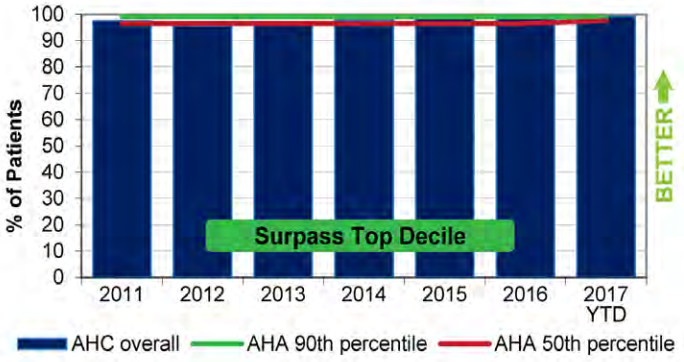


Fig. 7.1-14 Sepsis Bundle Compliance



AHC has sustained the prestigious "Get With The Guidelines®" (GWTG) designation for stroke, a leading cause of death, since 2006 achieving top decile performance (Fig. 7.1-15).

Fig. 7.1-15 Stroke Guidelines Compliance



BHS patients have the right to be free from any form of restraint that is not medically necessary. Restraints are only used as a last resort and then only in the least restrictive form. Usage has dropped due to intensive training focused on prevention, de-escalation and alternatives (Fig 7.1-16).

Fig. 7.1-16 BH Restraint Rate

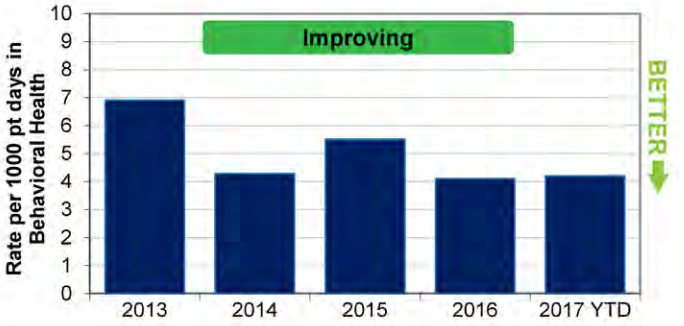
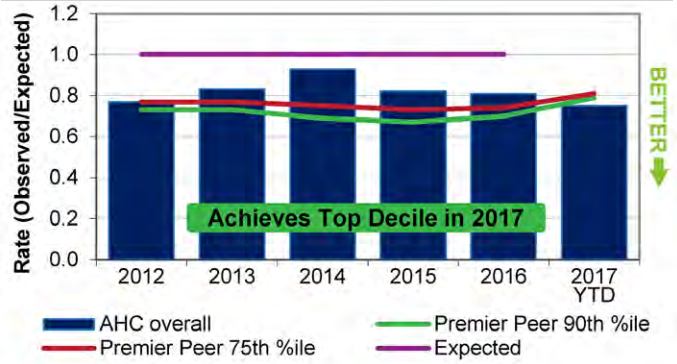
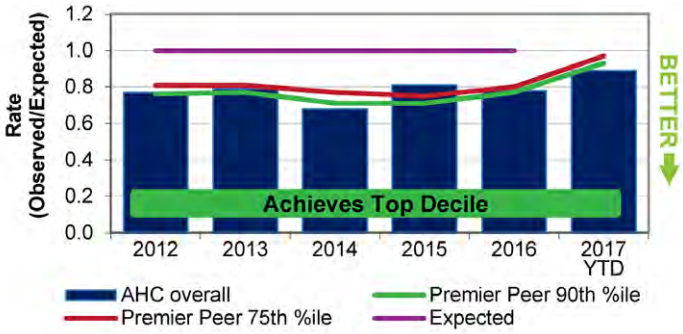


Fig. 7.1-17 Overall Mortality Rate (O/E)



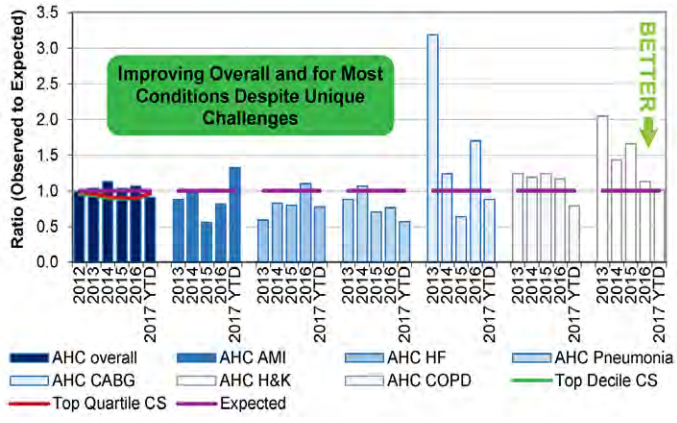
Mortality and Readmissions: Risk-adjusted mortality rate is a rate of death that is adjusted for predicted risk based on a patient's diagnosis as medically coded. The expected rate is 1.00. Our mortality rates are below (better than) expected (Fig. 7.1-17). We recently implemented a Morality and Morbidity Review Committee to gain further insight to improve. Sepsis mortality rate approaches top decile (Fig 7.1-18).

Fig. 7.1-18 Sepsis Mortality Rate (O/E)



Similar to mortality, readmission rates are risk adjusted to assess how often patients treated for specific conditions return to the hospital within 30 days vs. expected. In addition to opportunities with coding, AHC faces several unique challenges that we are working to address. The island has limited post discharge facilities and supports. The readmissions team has made improvements to address these issues such as improved medication reconciliation, discharge process, daily rounding to improve communications, post discharge calling, and outpatient care coordination. The team is currently working to improve care coordination during the transition into the community through a multidisciplinary approach. Rates are improving for some conditions (Fig. 7.1-19).

Fig. 7.1-19 Readmission Rate (O/E)



As part of the Affordable Care Act, Congress authorized Inpatient Hospital Value-Based Purchasing (VBP) for over 3,500 hospitals. In VBP, payments are based not only on the quantity of services they provide, but on the quality of care as well. AHC performs in the top 97th %ile nationwide (Fig. 7.1-20).

Fig. 7.1-20 Value Based Purchasing Total Performance Score (TPS)

HOSPITAL NAME	2016 VBP TPS	2016 % ILE RANK	2015 % ILE RANK
Adventist Health Castle	55.9	97	98
Competitor A	42.8	81	-
Competitor B	35.5	59	-
Competitor C	47.7	89	-
Competitor D	50.8	*	-
Competitor E	39.8	74	-

7.1b(1) Process Effectiveness and Efficiency – The ED is considered the front door of the hospital. AHC performs better than national benchmarks and competitors on three key measures of timely access to care including: 1) time for a patient to be seen by a physician (7.1-21), 2) percent of patients who leave without being seen (7.1-22), and 3) length of time it takes to complete care (7.1-23). Despite increasing ED volumes exceeding physical capacity, we compare favorably, and

Fig. 7.1-21 ED Door to Doctor Time

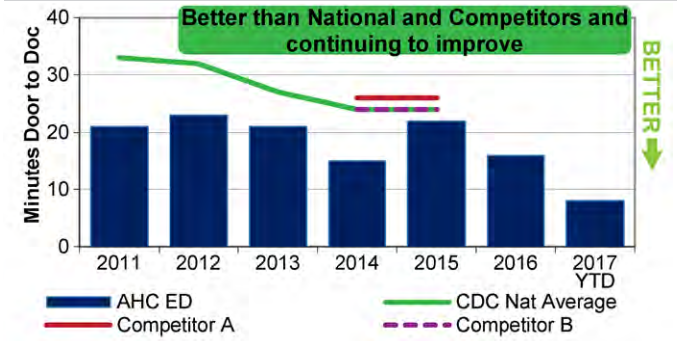
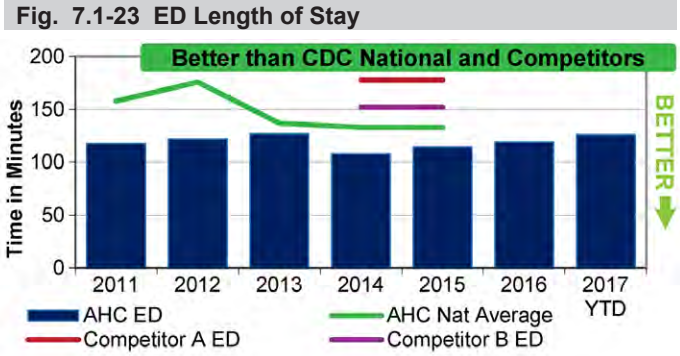


Fig. 7.1-22 ED % Left Without Being Seen

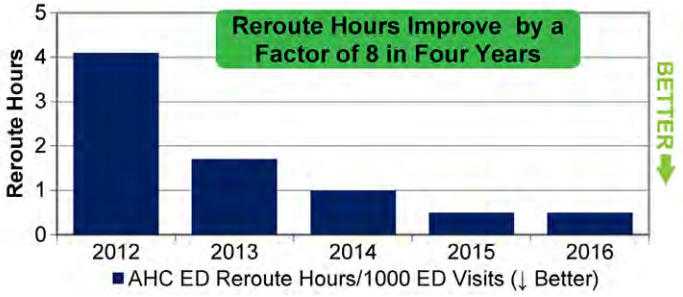
Fig. 7.1-23 ED Length of Stay



continue to improve. Queens is the largest hospital in the state and Kuakini is similar in size and our closest competitor, We perform better than both for all measures. About 2% of emergency patients in the United States leave an emergency facility without ever being seen. Despite steady growth, only 0.2% of our patients in 2016 left the ED without being seen. Examples of key improvements and innovations include a "pivot" nurse to facilitate triage, immediate bedding, bedside registration, rapid physician response, and "results pending" to decrease length of stay.

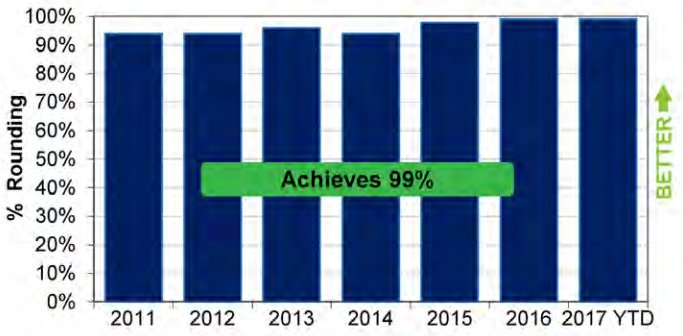
To ensure the Windward O`ahu community has unrestricted access to our ED we minimize hours that our ED cannot take additional patients. Despite increasing volume we have been able to reduce reroute hours by a factor of 8 in four years. (Fig 7.1-24).

Fig. 7.1-24 ED Reroute Hours



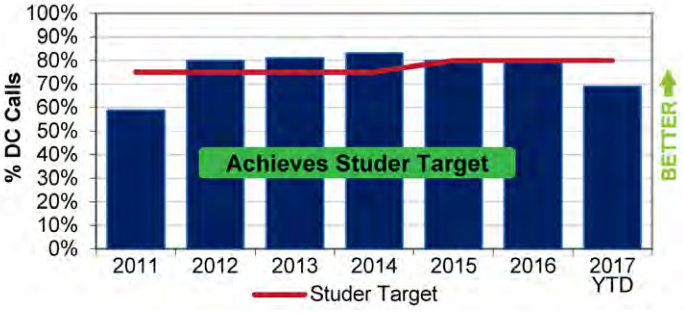
Nurse leader rounding has proven to improve care and increase patient engagement. Nurse Leader Rounding on patients is consistently conducted by charge nurses, managers and directors in all of our inpatient nursing units as well as our Emergency Department and the Ambulatory Surgical Care unit achieving 99% (Fig 7.1-25).

Fig. 7.1-25 Nurse Leader Rounding on Patients



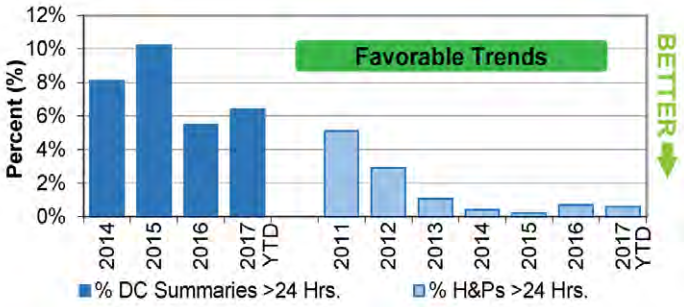
Post discharge call completion rates improve patient transition home from the hospital, reduce readmissions, and provide an opportunity to resolve issues quickly. AHC achieves the Studer organization's benchmark of 80% (Fig. 7.1-26).

Fig. 7.1-26 Post Discharge Call Completion Rate



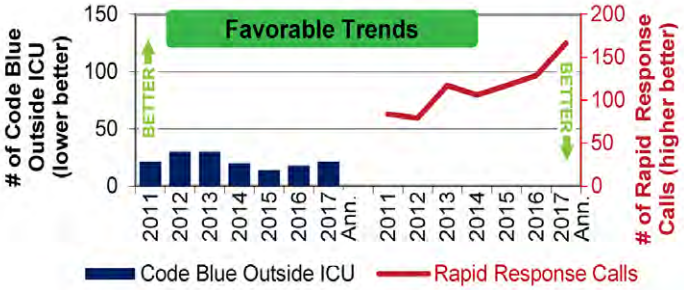
As patient care becomes more complex, the need for a timely, centralized "source of truth" has become more important than ever. The history and physical (H&P) details the admitting diagnosis, severity of presenting symptoms, risk for adverse outcome, estimated length of stay, and plan of care. A timely discharge summary provides critical information for the continuity of care with the next provider. Both show favorable trends (Fig. 7.1-27)

Fig. 7.1-27 DC Summaries, H&P Not Completed in 24 Hrs.



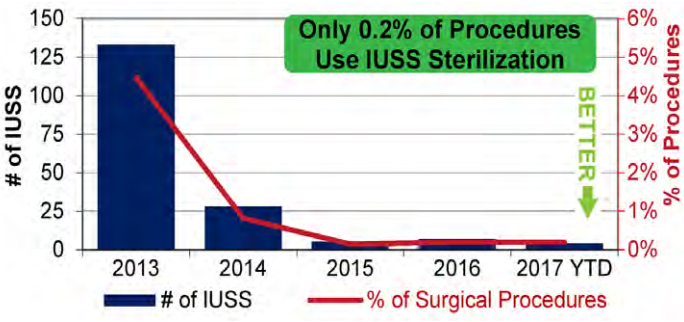
Code Blue is the overhead page for a medical emergency. Hospitals are designed to treat medical emergencies in the ED and ICU, so it is important to place high risk patients in these areas. AHC associates working outside the ED and ICU are trained to call for a Rapid Response Team if a patient's condition appears headed for a medical emergency. These teams include personnel who can rapidly assess and treat patients and avoid a Code Blue. With focused review and action, both have improved (Fig. 7.1-28).

Fig. 7.1-28 Code Blue Events Outside ICU, Rapid Response



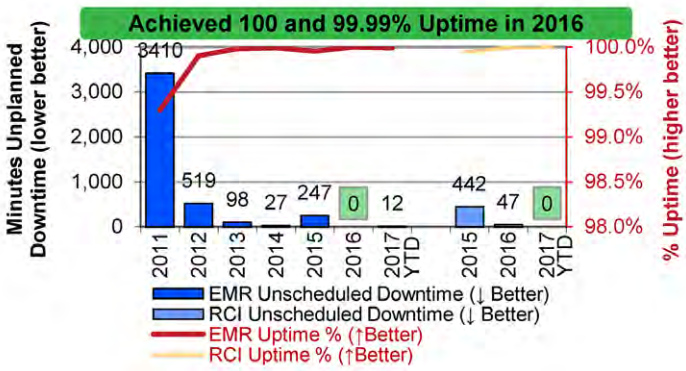
When a soiled instrument is needed in less time than a traditional steam cycle allows, immediate use steam sterilization (IUSS) may be performed. IUSS is not equivalent to a full steam sterilization cycle and may increase the patient's risk of SSIs. Although there is no benchmark, collaboration with Hawai'i Safer Care, has led to multiple improvements to enhance the flow of instruments to and from sterile processing leading to a dramatic reduction of IUSS (Fig. 7.1-29).

Fig. 7.1-29 Immediate Use Steam Sterilization



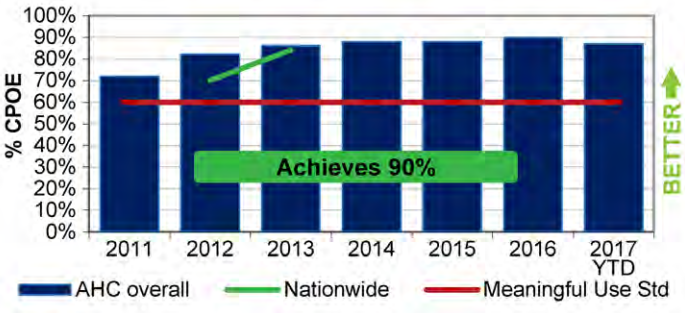
Healthcare providers depend on digital technologies to ensure high quality care and efficient management of patient records. Availability of the EMR and the revenue cycle business platform (RCI) achieved 100% and 99.99% uptime in 2016 respectively (Fig. 7.1-30).

Fig. 7.1-30 EMR Availability



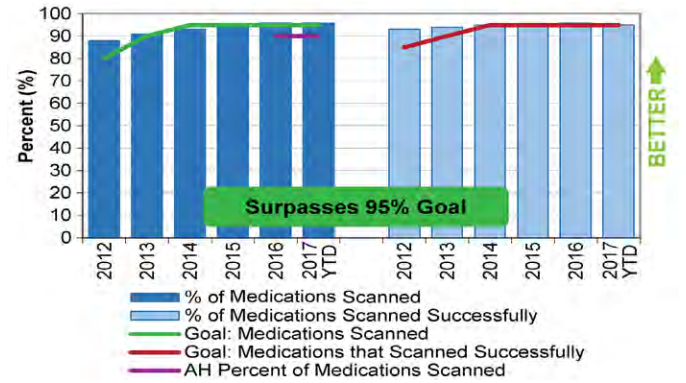
Computerized physician/provider order entry (CPOE) allows direct entry of medical orders minimizing the ambiguity of handwritten orders. AHC implemented CPOE in 2011 and usage has increased annually now achieving 90% compliance (Fig. 7.1-31).

Fig. 7.1-31 Computerized Provider Order Entry (%)



Barcode medication administration reduces medication errors when used successfully. Associates scan the patient's wristband to ensure the correct patient, dose and time. 96% of medications are scanned successfully (Fig. 7.1-32). Staff call backs for trouble calls on systems have been reduced by 23% through better management of systems and preventive maintenance (Fig 7.1-33).

Fig. 7.1-32 Barcode Medication Administration



7.1b(2) Safety and Emergency Preparedness – Emergency Preparedness is sustained though regular exercises and response to actual events to test, then evaluate and improve response plans. Fire drills prevent atrophy of skills needed to report and respond to fires. Comparison data is not applicable since requirements vary. Performing more than what is required may desensitize staff to actual emergencies. The number of fire drills has decreased over the past couple of years due to fewer construction projects, which require additional drills when building exits are altered (Fig. 7.1-34).

Fig. 7.1-33 Staff Call Back

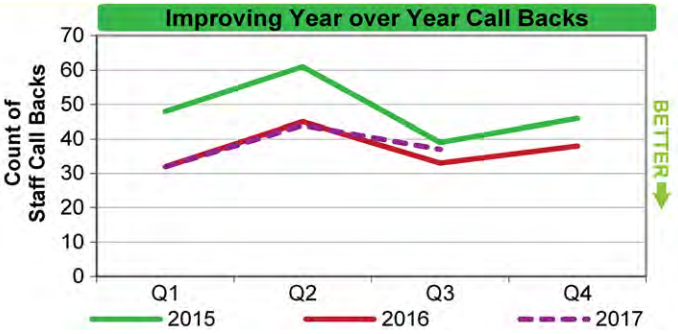
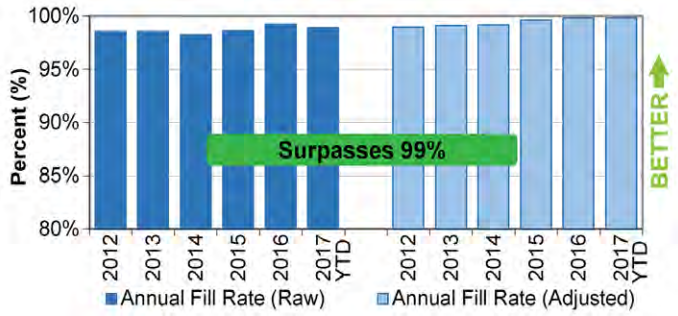


Fig. 7.1-34 Emergency Preparedness and Drills

MEASURES	2011	2012	2013	2014	2015	2016	2017 (YTD)
Emergency Preparedness (EP) Exercises/Events	4	2	2	6	2	2	3
EP Required / Goal	**2**	**2**	**2**	**2**	**2**	**2**	
Fire Drills (FD)	16	16	14	19	13	12	8
FD Required / Goal	**12**	**12**	**12**	**12**	**12**	**12**	

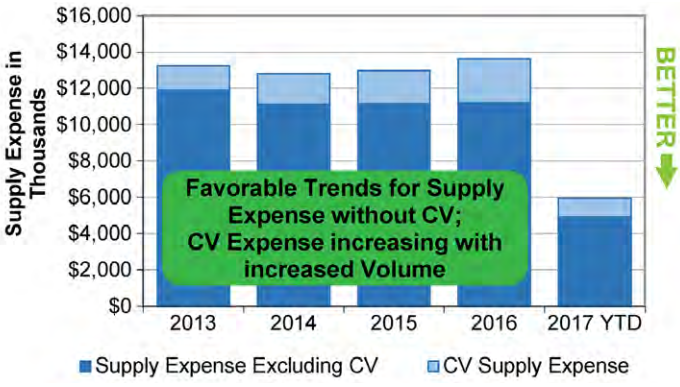
7.1c Supply Chain Management Results – Fill rates are monitored to ensure frequently used products are stocked at Cardinal distribution centers in Kapolei, Hawai'i or Ontario, California. Raw fill rates include all items direct from the manufacturer versus the Cardinal's distribution warehouse, and out of stock items (ones that are out of Cardinal Health's control). Cardinal achieves a 99.2% raw fill rate and a 99.8% adjusted fill rate (Fig. 7.1-35).

Fig. 7.1-35 Fill Rates



Supply expenses excluding cardiovascular services (CV) have declined (improved) since 2013 despite increased volume. CV service line cost have increased as that expensive service line has grown (Fig. 7.1-36).

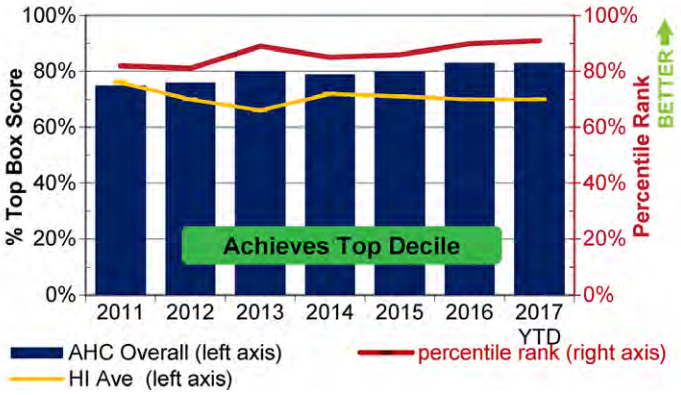
Fig. 7.1-36 Supply Expense



7.2a(1) Patient and Other Customer Satisfaction – *Love Matters:* Our compassion and *Aloha Spirit* create a palpable environment that is frequently articulated by our patients, associates, and community partners. We intentionally build on this core competency to create higher satisfaction and engagement. Most results are in the top quartile, with many in the top decile and several in the top 2% (98th %ile). Far more important than the scores, high engagement helps us build healing relationships and enhances interactions with our patients.

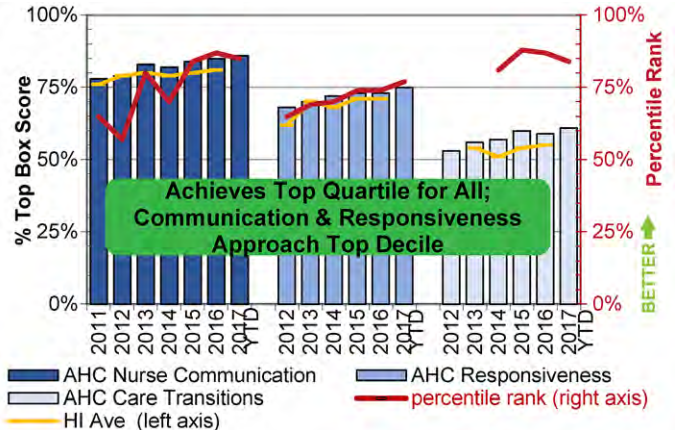
NRC administers AHC's patient satisfaction surveys. To maximize our focus on engagement we measure the percent of patients who score us in the "top box" which depending on the question is an answer of "Always," "Strongly Agree," or "Definitely Yes." Overall rating is determined by patients rating the hospital either a 9 or 10 ("top box" for the 0-10 scale). AHC has shown sustained improvement in overall satisfaction and now scores in the top 10% of the nation for this key measure (Fig. 7.2-1).

Fig. 7.2-1 IP Overall Rating



NRC uses regression analysis to determine key driver dimensions for our overall satisfaction. These dimensions are most important to our patients and are used to prioritize areas of focus. Sustained improvement has helped us achieve top quartile, approaching top decile for these key measures (Fig 7.2-2). For example, AIDET, hourly rounding, and bedside

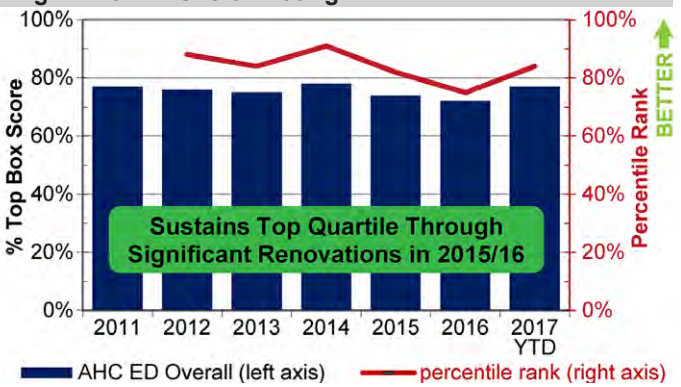
Fig. 7.2-2 IP Satisfaction with Key Drivers



shift report competencies have improved nurse communication. The No Pass Zone enhances responsiveness to call lights and hourly rounding ensures that patient needs are met proactively. RN/hospitalist team rounding, meds to bed by pharmacy prior to discharge, and enhancements to our post discharge calls have improved care transitions.

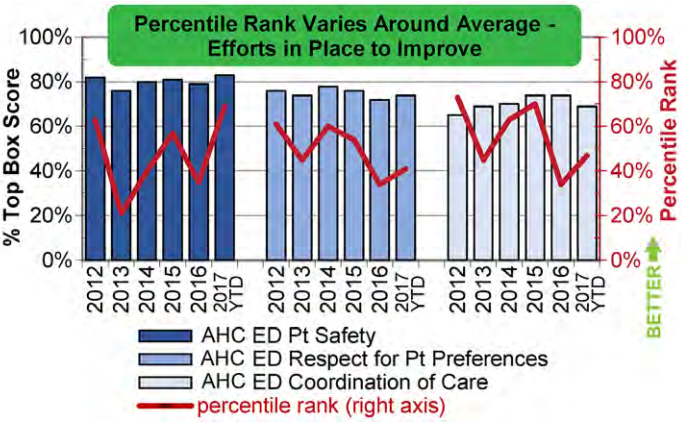
The ED overall rating is determined by the percentage of patients who rate their visit/stay as a 9 or 10. Hawai'i comparisons are not available for the ED, as CMS only reports inpatient scores. ED renovations in 2015-2016 required seeing the same number of patients in half the space until renovations were completed, yet we still maintained top quartile performance (Fig. 7.2-3). Subtle changes in top box scores can have

Fig. 7.2-3 ED Overall Rating



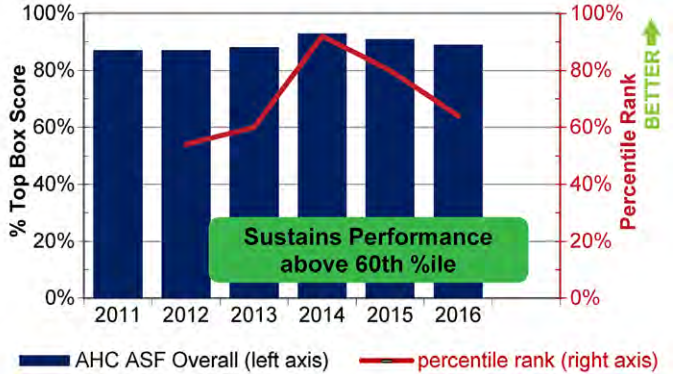
a dramatic impact on percentile rankings when competition is tight, resulting in much lower percentile scores in our ED key driver dimensions (Fig. 7.2-4). Efforts are in place to have the nurse join the physician during patient visits to ensure coordination of care, partnering with the patient to address their preferences, and using key words at key times, eg. "*I'm washing my hands/checking your ID for your safety*" to improve our ED patient experience. Early results in 2017 are very encouraging.

Fig. 7.2-4 ED Satisfaction with Key Drivers



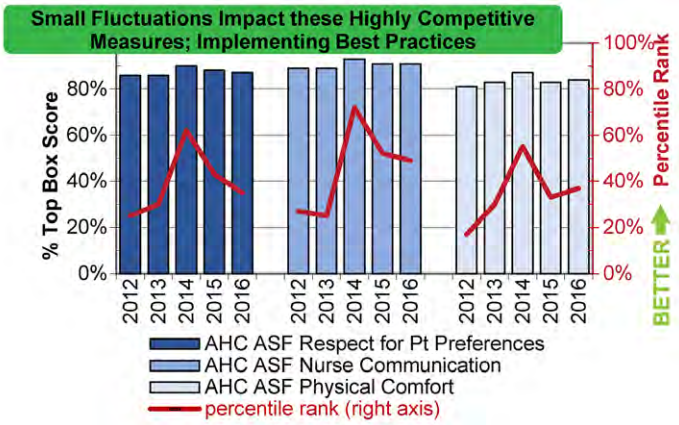
Like the ED, subtle changes in top box scores can have a dramatic impact on percentile rankings in highly competitive environments such as outpatient surgery centers (Fig 7.2-5).

Fig. 7.2-5 ASF Overall Rating



A change in leadership along with implementation of best practices from the Studer Group is showing encouraging results in early 2017 with an overall rating score at the 77th percentile. We are currently implementing best practices from Studer Group's "OAS CAHPS Compendium" a series of whitepapers that offers tools, tactics and specific examples for enhancing the patient experience for outpatient surgery patients and expect scores to continue to rise (Fig. 7.2-6).

Fig. 7.2-6 ASF Satisfaction with Key Drivers



The Birth Center provides a key service at a life changing time for our patients. We see each individual as a meaningful member of our *Ohana* (family) and are honored to achieve the 90th %ile for OB Overall. In 2011 we scored in the 85th %ile but our tenacity drove us to continue to improve each year (Fig. 7.2-7). Much of this high performance is a result of highly engaged associates who participate in shared governance and other innovations that have been shared to spread best practices (4.2b(2)).

Fig. 7.2-7 OB Overall Rating

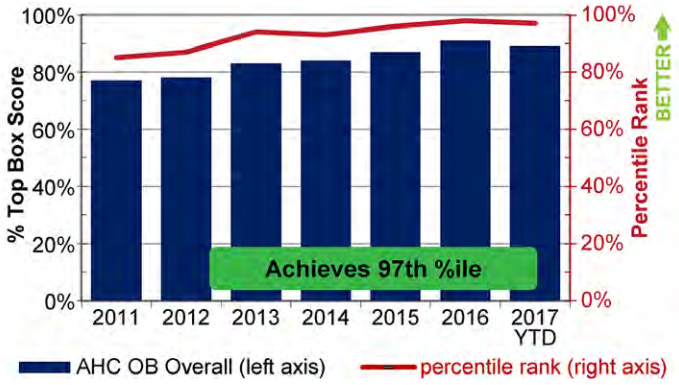
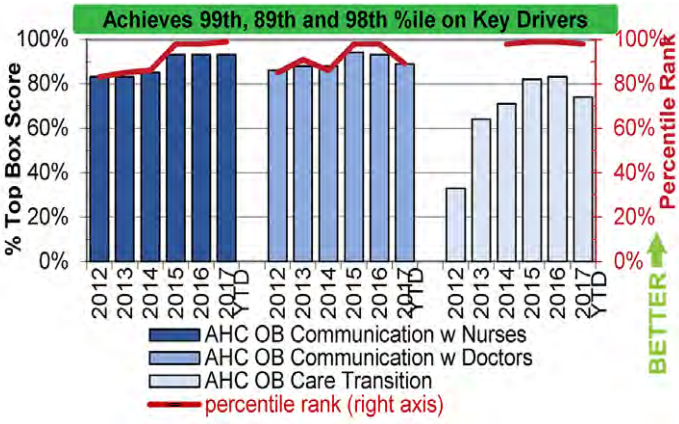


Fig. 7.2-8 OB Satisfaction with Key Drivers



Birth Center associates and physicians take great pride in their work and have hardwired key drivers of satisfaction such as communication methods, including customizing their care boards (white board) that list all the steps needed to prepare for a safe mother/baby transition of care home. These practices increase patient engagement and improve quality of care (Fig. 7.2-8).

Our Joint Care Center is another example of not only sustaining CMS top decile performance for the past 5 years but improving each year and now achieving the 99th %ile in overall satisfaction (Fig. 7.2-9). We hardwire best practices such as hourly rounding, AIDET, Bedside Shift Report, etc. and annual competencies that refine and enhance their skills and achieve 94th, 98th and 99th percentile for key drivers (Fig. 7.2-10).

Fig. 7.2-9 JCC Overall Rating

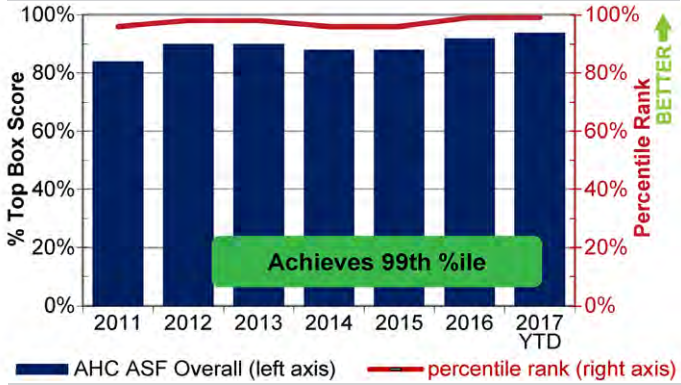
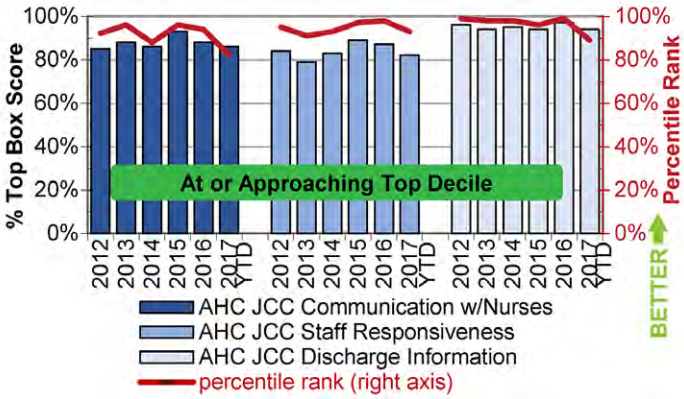


Fig. 7.2-10 JCC Satisfaction with Key Drivers



BHS overall ratings have improved and now achieve top quartile performance (Fig. 7.2-11) (Fig.7.2-12).

This is the first year that our outpatient primary care clinics have used the CG CAHPS patient experience survey tool. While not required, we believe the investment in this

Fig. 7.2-11 BHS Overall Rating

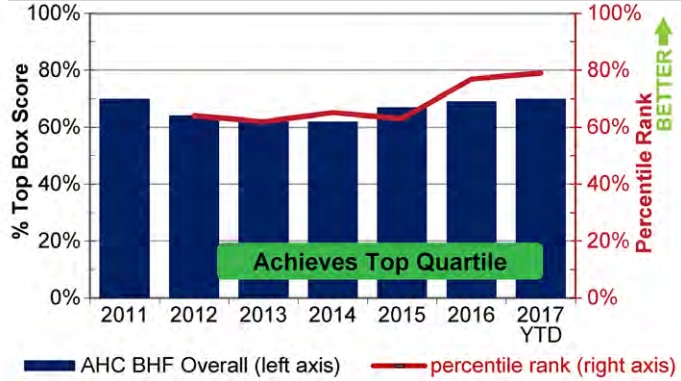
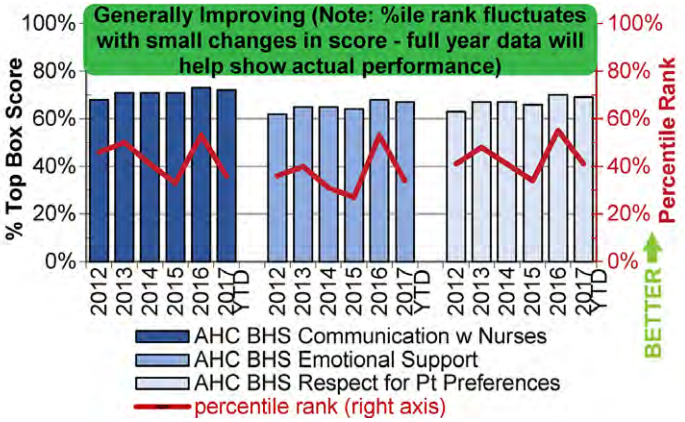
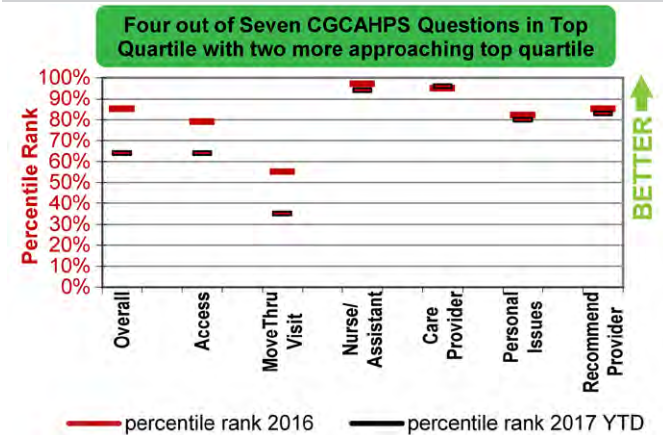


Fig. 7.2-12 BHS Satisfaction with Key Drivers



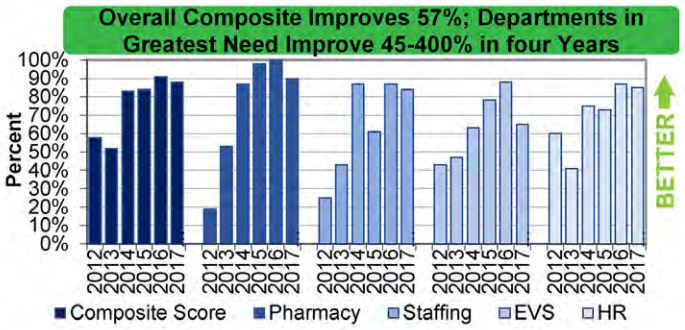
data helps us enhance interactions in all care settings. These results validate that our efforts are working with an overall rating at the 85th percentile and that five out of six dimension scores are in the top quartile (Fig. 7.2-13). This data has enabled us to respond quickly and focus our efforts to improve patient flow. "*Moving Through Visit*" achieved 71st percentile in the 4th quarter.

Fig. 7.2-13 OP Satisfaction (CGCAHPS 2016 – First Year)



Patient care areas better meet the needs of patients if support areas meet their needs. This Survey Monkey uses the same response options as the HCAHPS survey with only top box "*always*" responses counting towards a positive score. Support departments are evaluated on Accuracy, Timeliness, Friendliness, and "*Overall meets the needs of my department*"

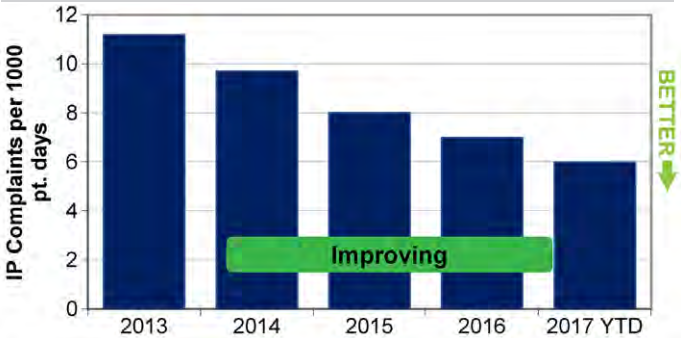
Fig. 7.2-14 Internal Customer Satisfaction (Service Depts.)



(Fig. 7.2-14). The composite score shows the aggregate of the nine departments surveyed. The four shown separately were identified as needing to make the most improvement. On average these departments improved 200% in four years due to systematic approaches including internal customer rounding and preference sheets for each patient care area.

As patient satisfaction has improved over the years, negative comments from our patient satisfaction survey have steadily decreased during the same time period, demonstrating the effectiveness of our improvement initiatives. Emphasis has been placed on proactive hourly patient rounds to anticipate patient needs, daily nurse leader rounds to identify and correct complaints, associate empowerment to resolve complaints quickly at the point of service using ACT (Apologize, Correct, and Thank), and to provide service recovery gift certificates when appropriate (Fig 7.2-15).

Fig. 7.2-15 Complaints per 1000 Pt Days



7.2a(2) Patient and Other Customer Engagement – Patient engagement is measured by the percent of patients that would definitely recommend our services to their family and friends. Interventions such as AIDET, hourly patient rounds, and bedside shift reports are designed to build trust through consistent and predictable behavior. In addition, patients are encouraged to be actively engaged in their care by participating in the

Fig. 7.2-16 IP Engagement

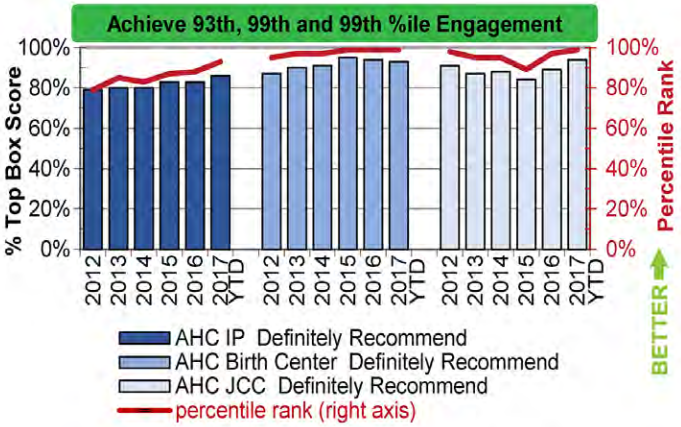
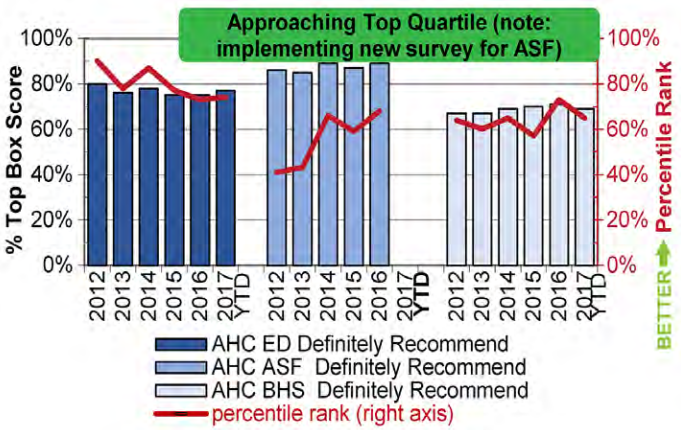


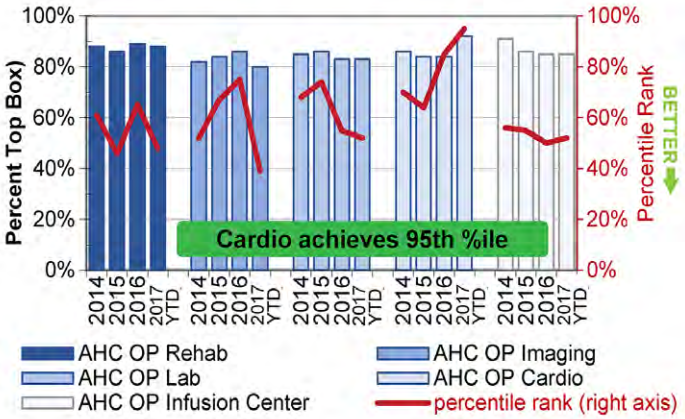
Fig. 7.2-17 ED, ASF, BHS Engagement



bedside shift report discussion, and partnering with the care team to list "Goals for the day" on their Care Board. IP, Birth Center and JCC achieve 88th, 99th and 97th %ile scores (Fig. 7.2-16). Patient engagement for ED, ASF, and BHS is very near top quartile performance (Fig. 7.2-17).

We began surveying outpatients for Rehabilitation, Imaging, Chemotherapy, Lab and Cardiopulmonary in 2014. Three of the five departments have achieved top quartile (Fig. 7.2-18). A cross-functional quality improvement team is streamlining the referral and registration process.

Fig. 7.2-18 OP Engagement



Castle is a leader amongst other AH hospitals in patient and family engagement and is one of two hospitals that consistently perform in the top quartile (Fig. 7.2-19). The other top performer, Howard Memorial Hospital, is a critical access hospital with 25 beds, serving a vital need in the small town of Willits, California.

Fig. 7.2-19 Premier QUEST Composite Measures - AHC vs. Adventist Hospitals

	PT & FAMILY ENGAGEMENT (↑BETTER)		
	2014	2015	2016 Q1-Q3
Adventist Health Castle	**75.6%**	**75.9%**	**77.9%**
Adventist Hospital A	72.4%	72.7%	73.5%
Adventist Hospital B	68.8%	70.2%	71.0%
Adventist Hospital C	71.6%	72.9%	70.4%
Adventist Hospital D	72.6%	71.5%	72.4%
Adventist Hospital E	69.7%	67.4%	70.3%
Adventist Hospital F	78.0%	78.9%	78.2%
Adventist Hospital G	65.1%	58.4%	67.4%
Adventist Hospital H	71.2%	74.2%	72.3%
Adventist Hospital I	66.4%	66.8%	66.0%
Adventist Hospital J	66.2%	66.6%	67.9%
Adventist Hospital K	67.4%	67.1%	65.3%
Adventist Hospital L	65.4%	67.6%	68.7%
Adventist Hospital M	68.8%	68.5%	67.6%
Adventist Hospital N	66.8%	67.4%	65.4%

Achieves or Surpasses Top Quartile

Our 2017 SMS Community Perception Survey asked survey participants to choose the best hospital for each service. Castle led all other hospitals in five out of six areas and tied our main competitor for the sixth. These results validate that our community sees us as the clear choice (Fig. 7.2-20). We believe that creating an environment where "***love matters***" and we are tenacious about quality improvement is felt by our community.

Fig. 7.2-20 SMS Community Perception Survey

PERCEPTION SURVEY TOPIC	AHC (↑)	Competitor A
Surgical Weight Loss	31%	7%
Serving the Community	42%	15%
Health and Wellness	30%	15%
Caring Doctors and Nurses	24%	16%
Quality of Nurses	21%	17%
Best Joint Care Center	21%	21%

Social media is an important listening post and community outreach tool. Growth in social media engagement is due to additional effort to consistently monitor, advertise, and engage (Fig. 7.2-21).

Fig. 7.2-21 Social Media Engagement

	2013	2014	2015	2016	2017 YTD 8/25/2017
Facebook Followers	928	1,099	1,126	1,569	2,213
Facebook Reach	-	36,701	17,356	124,278	75,919
YouTube Views	379	2,503	4,676	7,046	4,588

7.3a(1) Workforce Capability and Capacity

Just as ***Love Matters*** to our patients it matters to our associates and community partners. Our highly-engaged associates and physicians provide better care and create healing relationships with those we serve. We are proud of our favorable trends and performance better than benchmarks and fellow AH hospitals. However, we don't rest on our laurels as we continue to find ways to engage and develop our workforce.

Associates are our greatest asset and turnover can make it difficult to provide consistent high-quality care and customer service. We have been very intentional about reducing turnover in 2016. Our interventions have successfully reduced turnover in each of our segments this year and compare favorably to Advisory Board comparisons (Fig. 7.3-1).

Fig. 7.3-1 AHC Workforce Turnover by Segment

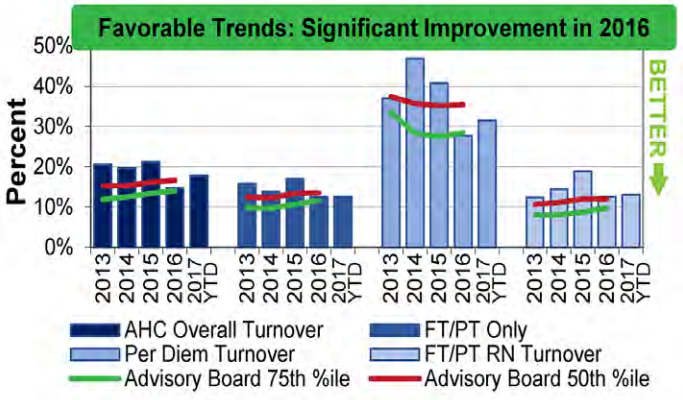
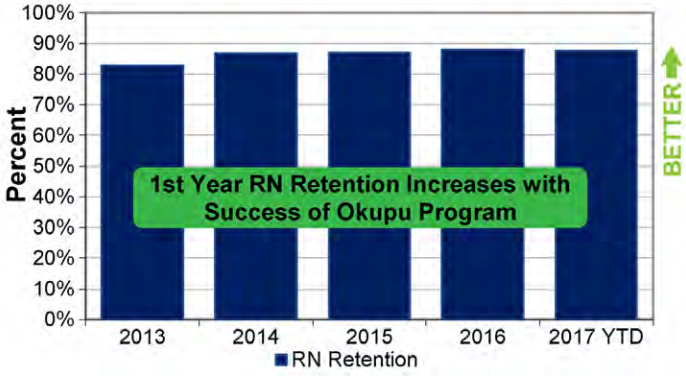


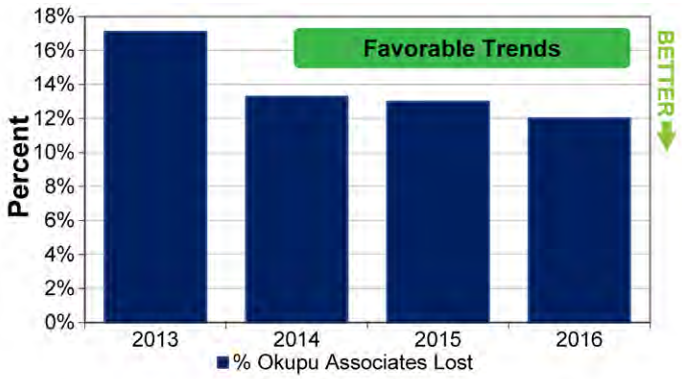
Fig. 7.3-2 RN Retention



Registered nurses are a critical component of our workforce. Their communication and skills are key drivers for patient and physician satisfaction respectively. Increased RN retention has been a key to our success in many other quality measures (Fig. 7.3-2)

The *Okupu* program was designed to reduce first year turnover of new associates, and has been very successful. We expect continued reduction in our first year turnover as we gain knowledge from our cycles of learning and refine the program further (Fig 7.3-3).

Fig. 7.3-3 Turnover Rate of *Okupu* Associates - Overall

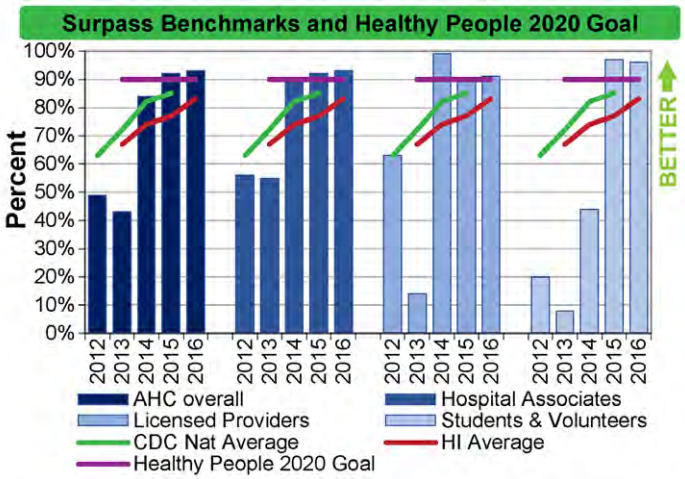


7.3a(2) Workforce Climate

Healthcare Worker Influenza Vaccination

Influenza, also known as the flu, is a contagious respiratory illness. It can cause mild to severe illness with serious outcomes such as secondary pneumonias, hospitalizations, and even death. Older adults and those with certain health conditions, including most hospitalized patients, are at higher risk for serious flu complications. Evidence shows that vaccinating healthcare workers reduces influenza transmission to patients in healthcare facilities and increasing protection in the community. The U.S. Department of Health and Human Services has set a "Healthy People 2020" goal for health facilities influenza vaccination coverage of 90% of a facility's work force. Over the last four years, Castle has substantially increased the percentage of our employees vaccinated against the flu through the use of special flu vaccine events and prize drawings for employees who are given the vaccination. Ongoing efforts are being made to improve vaccination rates amongst our students and volunteers, many of whom are in fact vaccinated at their schools or other workplaces but have simply not presented us with corroborating documentation.

Fig. 7.3-4 Healthcare Worker Influenza Vaccination



Our EOC Committee and Employee Health team have been working to provide a safer work environment. AHC has been recognized with several workplace health awards including one of ***The Healthiest Place to Work in Hawai'i by Pacific Business News, American Heart Association's Fit Friendly Gold Award Workplace, and the first Blue Zone employer in Hawai'i.*** We take health and safety seriously showing favorable trends surpassing Healthy People 2020 goal for worker vaccinations (Fig. 7.3-4) and sustaining strong performance for health and safety (Fig. 7.3-5)

Fig. 7.3-5 Healthcare Worker Health and Safety

	2013	2014	2015	2016
Total Recordable Cases	5.9	5.2	5.6	5.5
National Average Cases	6.4	6.2	6.0	NA
Days Away Restricted or Transferred	2.6	2.3	3.1	2.8
National Average Days Away	2.6	2.5	2.4	NA
Patient handling injuries	8	7	7	8
Body fluid exposures	21	19	14	18

7.3a(3) Workforce Engagement

The Gallup Grand Mean for Engagement is a critical measure combining the many facets of engagement into as singe composite score. Since beginning to use the Gallup associate engagement survey in 2014, AHC has consistently been a

Fig. 7.3-6 Engagement: Grand Mean, Overall Sat

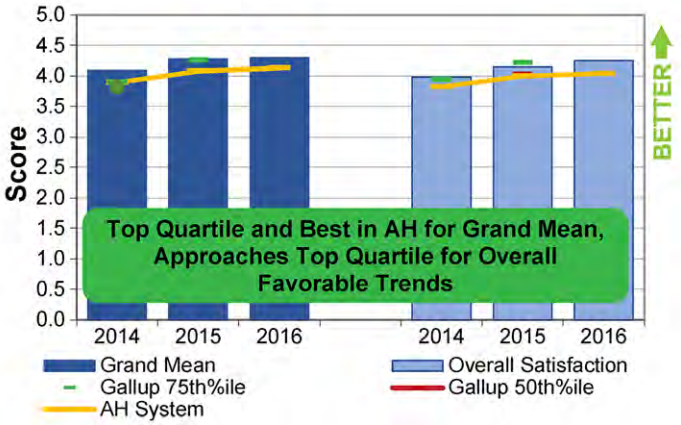
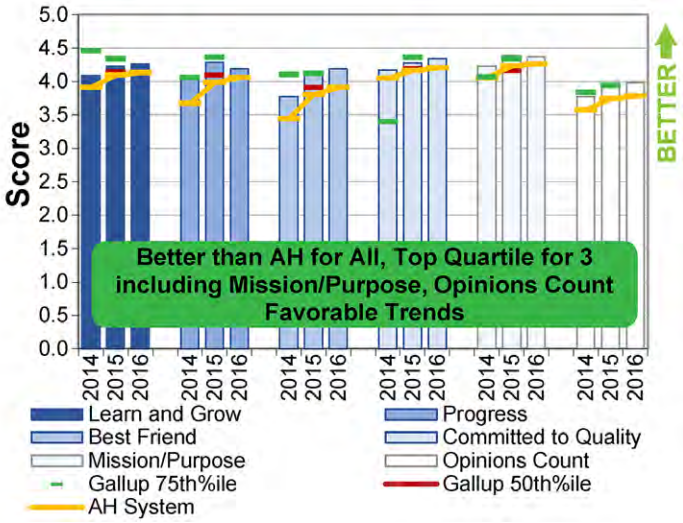


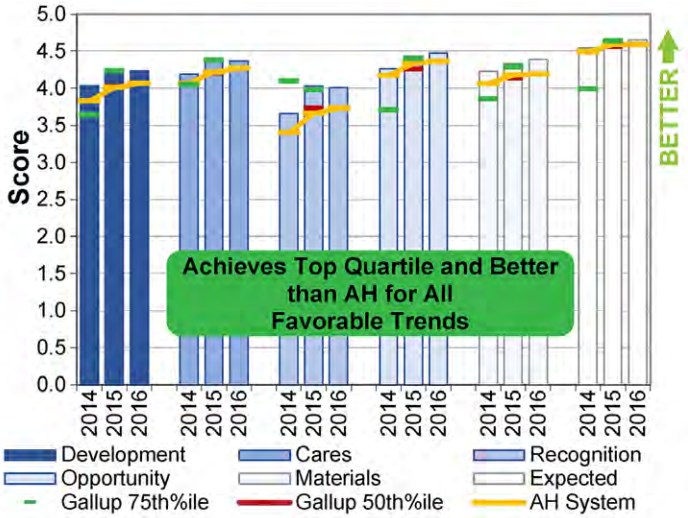
Fig. 7.3-7 Engagement: Grand Mean Q12 Ques. 1-6



grand mean top quartile performer and the top performer in the AH system (Fig. 7.3-6).

The Gallup survey is based on extensive research that has identified 12 questions that matter most to employees. These questions tie directly to outcomes such as productivity, profitability, employee retention, and turnover. These graphs show sustained improvement trends year over year with performance at the top quartile for nine of the 12 measures and better than AH for all measures (Fig. 7.3-7, 7.3-8).

Fig. 7.3-8 Engagement: Q12 - Questions 7-12



We are proud of our engaged physicians and their contribution to transforming the health experience. They are a critical part of the Castle family, tenacious about quality and bring compassionate healing to our patients. For the three key dimensions of physician engagement: safety, practice medicine, and quality of care we are proud to score in the 95th,

Fig. 7.3-9 Physician Engagement – Patient Safety

Fig. 7.3-10 Physician Engagement – Practice Medicine

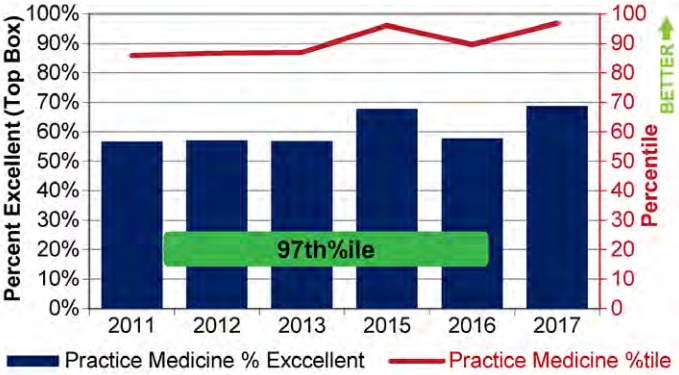
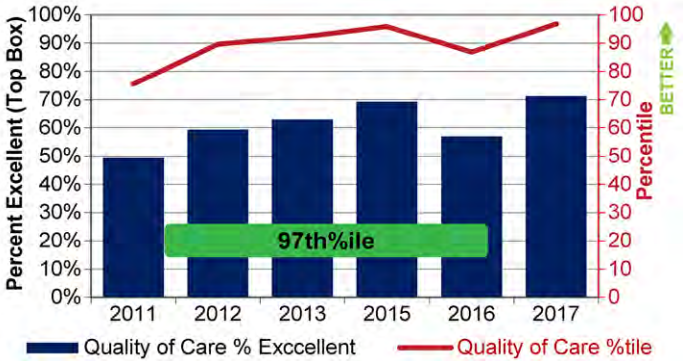


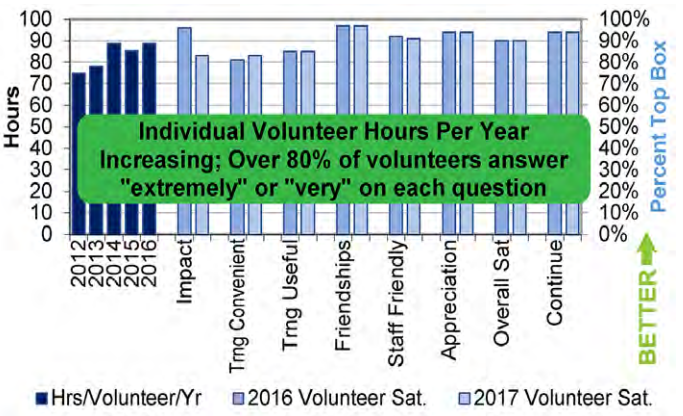
Fig. 7.3-11 Physician Engagement – Quality of Care



97th and 97th %ile (Figs. 7.3-9 – 7.3-11). Cycles of learning from each survey have identified very specific opportunities for improvement, which we leverage to consistently improve.

We have over 140 active and involved volunteers as part of our workforce at Castle. Fig. 7.3-12 is a testament to their dedication showing individual volunteer hours increasing over the years.

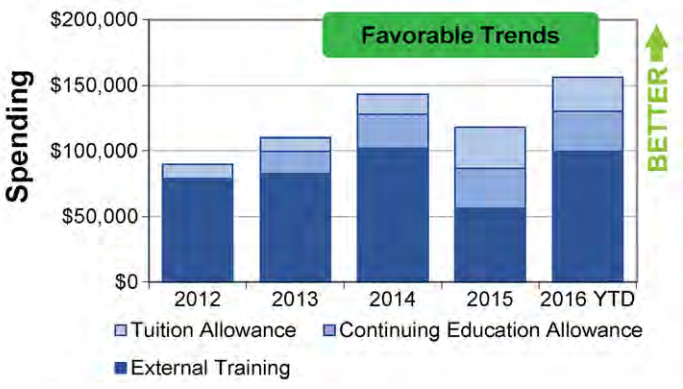
Fig. 7.3-12 Volunteer Hours & 2016 Volunteer Satisfaction



7.3a(4) Workforce Development

AHC provides all associates with unlimited access to our online learning system to ensure that education for the development of our workforce is readily accessible. We provide a catalog of over 3,000 online courses, all of which may be taken electively by our associates at any time. Mandatory education assigned to our associates is easily tracked and monitored. This education has allowed us to maintain or improve our standards in multiple areas including patient-focused care, ethical healthcare practices, and core initiatives. We consis-

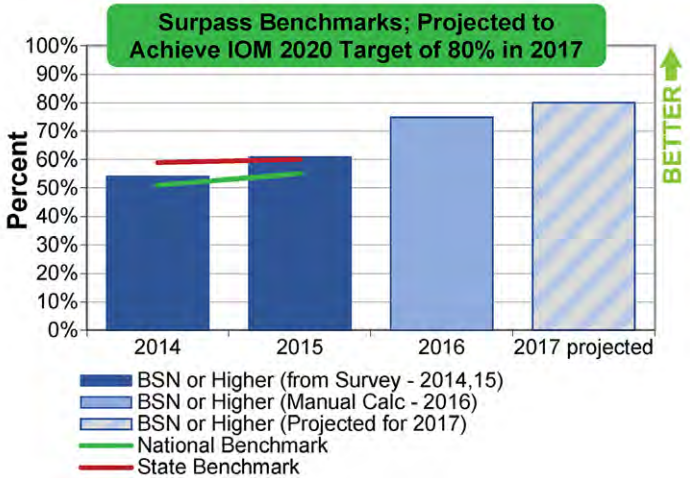
Fig. 7.3-13 Investment in Professional Development



tently provide more than $100,000 annually to develop our associates and last year we exceeded $150,000 (Fig. 7.3-13).

Nursing is more complex and more crucial to high quality care than ever before. The complexity of this care requires transitioning from skill-based competencies to those that assess knowledge and competence on health policy, system improvement, research, evidenced-based practice, teamwork and collaboration, complex decision making, and leadership. As a result, the Institute of Medicine set a goal of increasing the number of RNs with a bachelor's degree in nursing (BSN) to 80% by 2020. Castle's percentage of nurses who hold a BSN is above that of the State and the US and is on schedule to reach this goal in 2017 (Fig. 7.3-14).

Fig. 7.3-14 Percent of Nurses BSN or Higher



Many types of training are provided to maximize the capability of our workforce. We have achieved attendance targets for all mandated training. Levels below 100% are due to scheduling issues, mostly related to new associates (Fig 7.4-8).

7.4a(1) Leadership

Leaders communicate and engage our workforce as we work together to transform the health experience. Senior leaders have focused heavily on communication and engagement with the workforce to deploy our MVV, with a focus on action. Improvement strategies include handwritten thank you notes, Always Behaviors, discussion of hospital performance measures and goals at CLI and *Hui* Sessions, department meeting rounds, CAP improvement tools, *Hoku* Awards, and the *Aloha* Friday Report. As a result, senior leader's communication and engagement scores have improved each year, including recognition which is now in the top decile (Fig 7.4-1) and mission/purpose surpass the top quartile (Fig. 7.4-2).

Fig. 7.4-1 Communication & Engagement

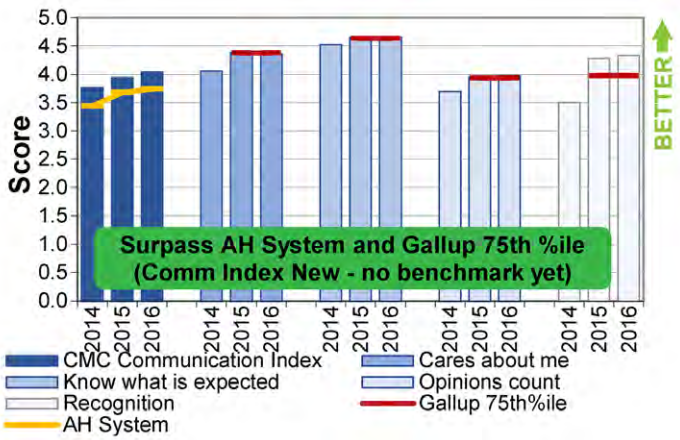
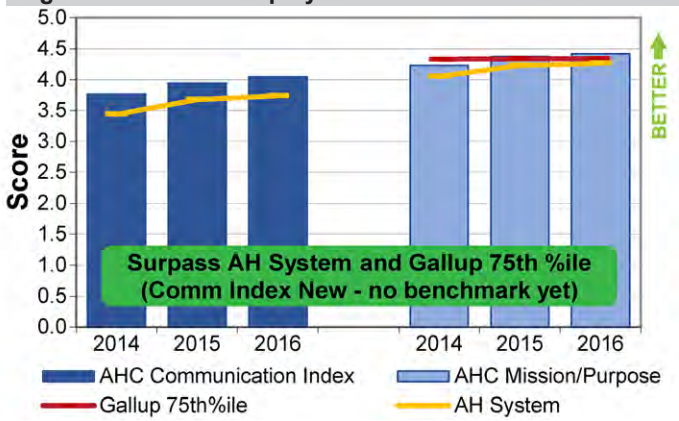


Fig. 7.4-2 Mission Deployment & Focus on Action



7.4a2 Governance

The following graph depicts the percent "Excellent" responses from the governing board's self-assessment survey. Other than the Hospital Administration scores, all other ratings are in regard to the GB's performance, not the hospital's performance. The GB identifies improvement goals in response to the results of each annual survey (Fig 7.4-3). Consistent with our value of integrity, each year Castle's Governing Board members review any possible conflicts of interest and sign a conflict of interest statement. Continuing education is also provided each year for all Governing Board members (Fig 7.4-4).

Fig. 7.4-3 GB Self-Assessment

	2012	2013	2014	2015	2016
Mission/Vision/Values	85%	78%	81%	92%	91%
Planning	77%	83%	78%	87%	73%
Quality	68%	85%	96%	95%	83%
Financial Mgt	80%	72%	76%	78%	83%
Mgt & Communication	80%	92%	85%	82%	87%
Hospital Communication	79%	100%	100%	100%	84%
Policy Management	62%	86%	89%	83%	76%
Board Effectiveness	73%	85%	85%	83%	79%

Fig. 7.4-4 Signed Conflict of Interest & Continuing Education Financial Audit Performance

	2011	2012	2013	2014	2015	2016	2017 YTD
Conflict of Interest Signed and Continuing Education							
COI Signed	100%	100%	100%	100%	100%	100%	100%
Continuing Ed	100%	100%	100%	100%	100%	100%	100%
Audit Performance							
Earnst & Young	Pass	Pass	Pass	Pass	Pass	Pass	Not Available
Medicare	Pass	Pass	Pass	Pass	Pass	Pass	Not Available
Medicaid	Pass	Pass	Pass	Pass	Pass	Pass	Not Available

7.4a3 Law, Regulation, and accreditation

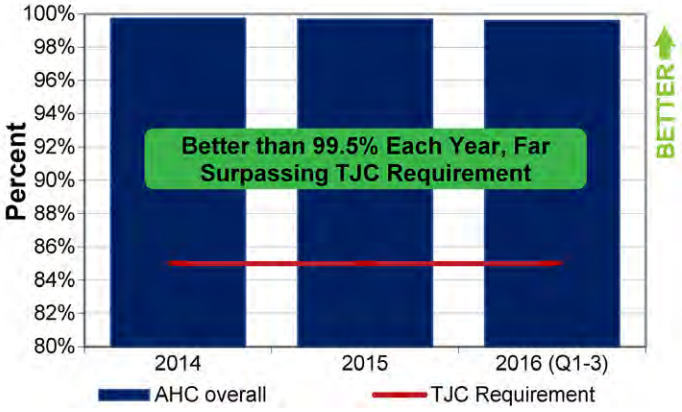
Successful completion of regulatory audits has been consistently achieved in all areas (Fig. 7.4-5). TJC provides quarterly performance reports to help guide organizations in their performance assessment of required Accountability Measures.

Fig. 7.4-5 Regulatory Survey Performance (pass/fail)

	2011	2012	2013	2014	2015	2016	2017 YTD
TJC Hospital			Pass			Pass	
TJC Lab	Pass		Pass		Pass		Pass
CMS/Dept of Health - Hospital	Pass						
Dept of Health - Nutritional Svcs	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Nuclear Regulatory Commission	Pass				Pass		
FDA/MQSA Audit (Mammography)	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Hospitals that fail to meet a minimum accountability measure composite of 85% at the time of their TJC survey will receive an RFI (Requirement for Improvement) "finding." Castle has always performed well above this requirement and received ***TJC's Top Performer on Key Quality Measures the last three years.*** This award recognizes hospitals that attain and sustain excellence in accountability measure performance (Fig. 7.4-6).

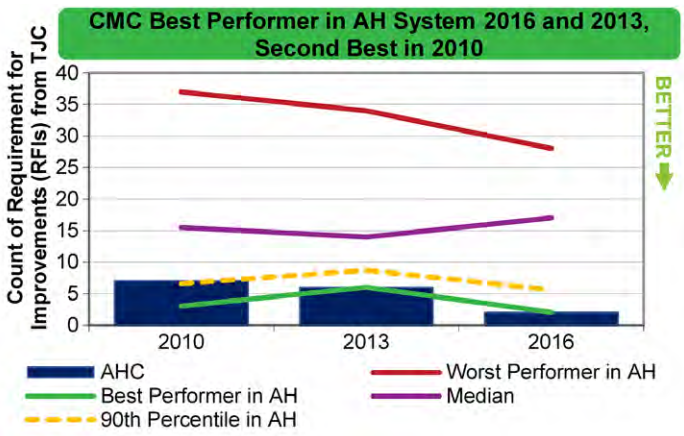
Fig. 7.4-6 TJC Accountability Measures Over Time



Regulatory survey performance (pass/fail)

Castle has consistently received full accreditation from The Joint Commission (TJC) as well as other regulatory bodies. TJC no longer provides comparative data regarding survey findings, however, we are able to compare survey results within AH. Over the past two surveys, Castle has consistently outperformed all other AH facilities, both large and small, receiving the fewest number of Requirement for Improvement (RFI) findings. As a leader in our system dedicated to improving quality for all, we share best practices with the other AH hospitals to support survey preparedness throughout the system (Fig. 7.4-7).

Fig. 7.4-7 TJC RFI Findings vs. AH



7.4a4 Ethics

Corporate Compliance Training is a AHC standard to ensure that all our associates are current with the education needed to effectively comply with federal and state laws and regulations. Corporate compliance includes a variety of topics including Workplace Violence, HIPAA, National Patient Safety Goals, and Fraud Awareness, to name a few. This education is provided on an annual basis and throughout the year as needed. Variance from 100% is due solely to timing of new hires compared to availability of the compliance classes (Fig 7.4-8).

Fig. 7.4-8 Associate Training Completion Rates

	2012	2013	2014	2015	2016
PATIENT-FOCUSED CARE					
Developmentally Appropriate Care of the Adult Patient	96	99	98	100	100
Developmentally Appropriate Care of the Pediatric Patient	96	99	98	100	100
Point of Care Testing	no data	no data	98	98	99
Infection Prevention	96	99	98	100	100
Fall Prevention	96	99	98	100	100
Identifying and Assessing Victims of Abuse and Neglect	96	99	98	100	100
ETHICAL HEALTHCARE					
Informed Consent	96	99	98	100	100
End of Life Care	96	99	98	100	100
EMTALA	96	99	98	100	100
Hazard Communication	96	99	98	100	100
Restraints	96	96	100	100	100
Patient Rights	96	99	98	100	100
CORE COMPETENCIES					
Cultural Competence	96	99	98	100	100
Diversity in the Workplace	96	99	100	100	100
Corporate Compliance	96	99	98	100	99
Security Awareness in the Workplace	50	99	99	100	99

This patient privacy measure reflects the number of privacy breaches reported to the federal Office of Civil Rights. Adventis Health Castle goes above and beyond to protect our patients' privacy. We conduct monthly audits to ensure appropriate role-based access of our patients' protected health information. Although the number of reportable breaches have increased in the recent past, this is a reflection of the robust auditing and reporting system the hospital has implemented.

Fig. 7.4-9 Reportable HIPAA & Civil Rights Sanctions; Malpractice Claims

	2011	2012	2013	2014	2015	2016	2017 YTD
Reportable HIPAA	10	4	5	0	13	11	7
Office of Civil Rights Sanctions	0	0	0	0	0	0	0
MALPRACTICE CLAIMS: PROFESSION LIABILITY CLAIMS							
Settled	0	1	0	0	1	0	1
Resulting in judgement	0	0	0	0	0	0	0
Settled or Adjudicated for greater than $500K	0	0	0	0	0	0	0

All privacy events are reported and investigated through our electronic incident reporting system. None of the reported breaches resulted in sanctions; however, all breaches are investigated and follow-up with associate education in staff meetings and department newsletters (Fig. 7.4-9).

We are committed to providing excellent care to our community. Our strong interpersonal relationships with our patients and their families engender timely investigation and resolution of quality concerns as well as equitable resolution of actionable complaints. This measure reflects the number of professional liability (medical malpractice) claims resulting in settlement or judgment against the hospital. The number of professional liability claims filed against the hospital is low; nevertheless, the Adventis Health Castle recently implemented an electronic complaint response platform to expedite and enhance our quality improvement investigation and response to complaints Fig. 7.4-10).

Fig. 7.4-10 CHG %ile Rankings (2015) and Categories (2016)

	2015 %ile Rank	2016 %ile Category
Physicals for 15-month-olds	99	90*
Advance care planning	99	95*
HbA1c control in diabetic patients	97	95*
Blood pressure control in diabetic pts	90	95*
Colorectal cancer screenings	85	90*
Retinal exams in diabetic patients	97	95*
Blood pressure control in non-diabetic pts w/ chronic disease	89	90*
Childhood immunization status		95*
Cervical cancer screening		75*

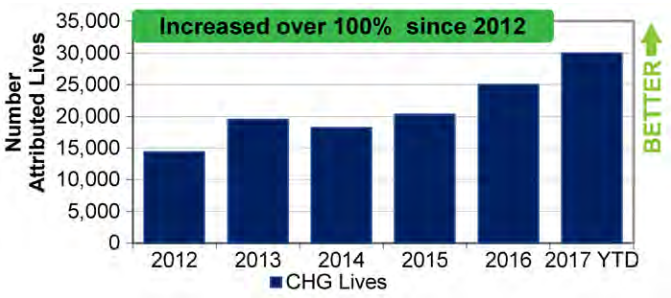
* In 2016 Results were reported in %ile category that AHC achieved

7.4a5 Society

Love Matters extends to our community. We strive to make a difference improving the physical, mental and spiritual health of our community. As a clinically integrated network, Castle Health Group (CHG) implements many programs to both prevent and to treat medical conditions in the community. ***CHG's performance is in the top decile for 8 of 9 categories*** as calculated by the National Committee for Quality Assurance (NCQA). Cervical cancer screening was a new measure in 2016 (Fig. 7.4-10).

Growing the number of "attributed lives", individuals who have been assigned to a particular Primary Care Physician, has been a key strategy. The small decrease in 2014 was a result of the removal of two physicians that did not meet quality standards (Fig. 7.4-11).

Fig. 7.4-11 CHG attributed lives



As a not-for-profit community hospital, Castle accepts all patients that come to the Emergency Department regardless of their ability to pay. Medicaid also pays less than what it costs to provide services to that population. We aggressively addressed the difficulties of private pay patients by automatically discounting their bill to levels more in line with what commercial insurance would pay. This is an important way that Castle contributes back to the community. Consistent with caring for the community, Castle is a generous partner with many organizations within our communities. We donate to many causes and to non profit groups and associations (47 in 2016), increasing our total contributions by 60% in the last three years Fig (7.4-12).

Fig. 7.4-12 Charitable Contributions ($)

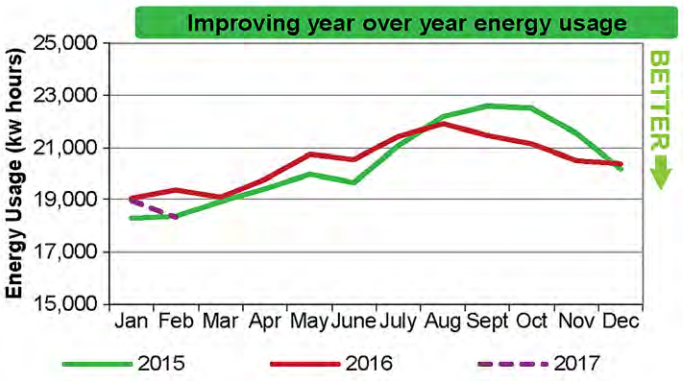
	2013	2014	2015	2016	2017 YTD
Total Contributions	**38,382**	**48,058**	**54,442**	**61,254**	**66,575**
American Heart	3,500	5,000	5,000	7,500	
American Cancer	1,500	2,500	2,500	2,500	2,500
American Diabetes	1,000	1,000	2,500	2,500	1,000
Make a Wish		3,500	5,000	5,000	5,000

Over the last few years, our Wellness and Lifestyle Medicine Center has strategically focused on managing kidney disease, and diabetes, both of which are very challenging and often lead to re-hospitalization. We are pleased with the growth in both of these community classes. Tobacco treatment services for inpatient and outpatient also continue to grow due to caring staff and a grant from the Hawai'i Community Foundation. The decline in outreach programs is primarily

Fig. 7.4-13 Wellness & Lifestyle Program Participation; Meals on Wheels

	2012	2013	2014	2015	2016	2017 YTD
WELLNESS PROGRAMS AND CLASSES						
Wellness Outreach Programs	3600	1972	2676	1368	1930	1750
IP Tobacco Cessation	647	817	785	790	710	801
OP Tobacco Cessation	95	135	151	156	162	157
Diabetes Program			279	781	744	1100
Kidney Classes			39	105	118	230
Fitness Classes		160	193	132	181	*
Cooking Classes	300	340	389	370	452	380
MEALS ON WHEELS						
Meals	10296	10114	10669	9631	11002	13290

Fig. 7.4-14 Environmental Energy Savings (kilowatt hours)



attributed to selling our Wellness on Wheels Van that had serviced schools and other community sites. We decided to replace the van with more targeted strategic focus efforts (Fig 7.4-13). The support of the Hawai'i Meals on Wheels program also demonstrates Castle's commitment to the community. We donate our labor costs to this program to provide healthy meals, including special diets, at cost to individuals who are not able to prepare their own meals (Fig 7.4-13).

Castle is dedicated to reducing its carbon footprint to support our beautiful Hawai'ian home. As can be seen from the graph of energy usage, there was a significant drop in usage starting in late August 2016 when we implemented an innovative method for running our air conditioning chillers. In October of 2016 Castle invested in an LED lighting conversion project and was completed in March of 2017. The lighting will provide savings of approximately 5% and have a payback period of four to five months. Approximately one third of the cost of the LEDs was also rebated to the hospital through an initiative with Hawai'i Energy (Fig. 7.4-14).

Castle has earned numerous prestigious healthcare awards over the years, demonstrating achievements of our MVVs. Fig. 7.4-15 contains a small sample of awards received from 2011-2016.

Fig. 7.4-15 Castle's Healthcare Recognition

AHA Gold Performance Award for Stroke Care
Best Places to Work in Hawaii – large company category
CALNOC Performance Excellence Award for Prevention of Injury Falls
CMS 5-Star Rating based on HCAHPS scores
Community Value Five-Star Award
Hawaii Award of Excellence (State Baldrige Award)
Healthiest Large Employer in Hawaii by Pacific Business News
iVantage: Healthstrong Hospital (composite score of competitive strength, market size and growth, population risk, cost, charges, quality, outcomes, patient perception, and financial stability)
Leapfrog Group "A" Grade for Patient Safety
PRC 5-Star Excellence Award – Top decile physician satisfaction in: Place to Practice Medicine, Nursing Care, Emergency Services, Surgical Services, Patient Safety, Hospitalist Services, Pharmacy, Intensivists, and Overall Quality of Care
Premier: Quest Award for High-value Healthcare, and Partnership for Patients Award
Studer Group: Excellence in Physician Satisfaction, Excellence in Emergency Patient Satisfaction, Evidence-Based Leadership Healthcare Organization of the Month
TJC: Top Performer on Key Quality Measures
Women's Choice Award: one of the 2014 America's 100 Best Hospitals for Patient Safety, Patient Experience, Obstetrics, Emergency Care, and Bariatric Surgery

7.4b Strategy implementation results

Playbook performance measures

Our MVVs are the foundation for 5 Pillars that represent our strategic categories for performance excellence. A summary of our key performance measures from our strategic planning Playbook are represented in Fig. 7.4-16. Twenty of the thirty three available measures are meeting or exceeding their current targets.

Fig. 7.4-16 Playbook Performance Measures

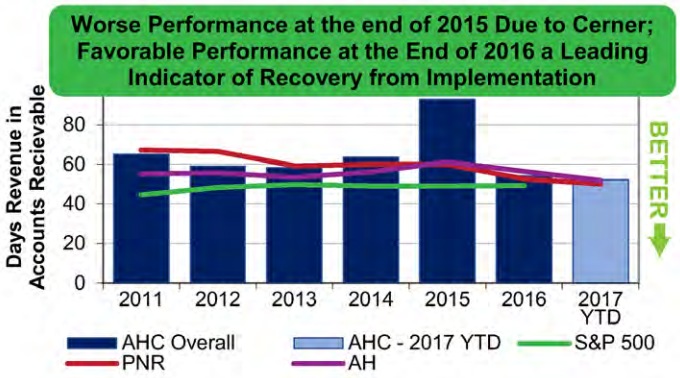
INITIATIVE	PERFORMANCE MEASURES	2016 GOALS	2016 RESULTS	2017 GOALS	2017 YTD RESULTS
Care delivery	HAI	<8	7	<6	8
	HAC	<5	10	<4	7
	H&K SSIs	0	2	0	0
	Mortality Index	<0.8	0.79	<0.75	0.75
	Readmits (Medicare)	<0.85	0.91	<0.91	0.80
	Readmits (Overall)	<0.9	1.06	<0.85	0.91
	Medicare VBP	160k	330k	160k	317k
	EBC	96%	98%	97%	100%
Population health	Health Screenings	91	95	92	95 Annualized
	Blood Pressure Mgt	87	93	88	95 Annualized
	HbA1c for Diabetes	6.7	6.87	7	NA
	PMPM Spend	$387	$383	$426	NA
	Tobacco Treatment	300	442	455	498
Patient experience	Spiritual Needs Met	87.6	86.2	88.2%	87.2%
	HCAHPS Composite	81	84	84	82
	Physician Communication	75	78	80	70
	CGCAHPS	75	86	80	56
Payer strategy	HMO/PPO Collection	43	45.2	43.1	50.5
	HMSA P4P	6%	5.78%	6%	12.50%
	CMS Bonus	1.012787	1.012787	1.014350	1.007048
Market development	Clinic Facilities	3	2	3	4
	PCP Providers	7	12	Dropped	NA
	# Lives	27k	25k	27k	30k
	PCPs in CHG	31	32	33	34
	Physician Engagement	90	97	90	90
Human performance	Gallup Grand Mean	4.3	4.3	4.32	NA
	Turnover Rate	<14	12.6	<13	14.5
	Agency Hours	<1000	309	Dropped	NA
	Productivity	100	97.7	100	101.3
	Acute Hours / WPD	<27.8	25.5	<24.9	23.68
	Salary + Benefits	<45	47.6	<45	44.80%
Supply chain	Expenses / Pt Revenue	<17.2%	17.20%	<16.9%	17.10%
	Expenses / Rev Savings	1.90%	0%	Revised	NA
Revenue cycle	A/R Days – Acute	<55	54	<49	52.2
	AR%>90 Days – Acute	<21%	27.20%	<21%	20.60%
	Clean Claims	85%	78.20%	88%	86.40%
	DNFB	<5	3	<4	10.5
	LOS	<4.41	5.28	Revised	NA
	Observation – Acute	<14.7%	14.60%	<14.2%	10.70%
	Readmission – Acute	<9%	9.50%	<7.2%	0.40%

7.5a(1) Financial Performance

AHC has sustained strong financial performance for many years. We sustain a debt to asset ratio of zero and use our current cash to invest in growth. While a system-wide Cerner implementation caused an expected, temporary dip in several financial indicators in 2016, our first quarter results for 2017 demonstrate that as expected, results are returning to prior levels and in some cases are already surpassing prior levels.

Days in Accounts Receivable (AR) is a critical measure of timeliness of collection of payments and one that is usually negatively impacted at the time of a billing process implementation. Days in AR ranged from 58-64 just prior to the

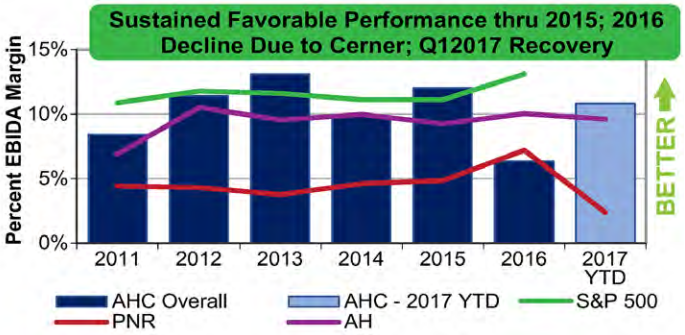
Fig. 7.5-1 Days in Accounts Receivable



implementation and then ended 2015 at a peak of 93. Over the course of 2016 AHC effectively managed the transition through training and process redesign and closed the year at 55 days, our best performance until that time. First quarter 2017 shows continued improvement as we reach 51.5 days (Fig. 7.5-1).

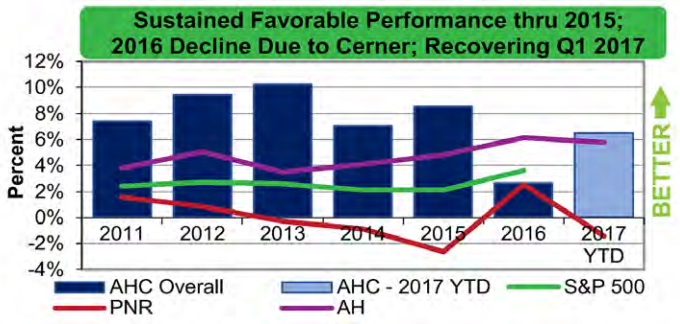
Adventis Health Castle has been a leader in EBIDA performance in AH for many years. The spike in days in AR that occurred in 2015 had a significant impact on the EBIDA margin in 2016. With the new billing software, the tools used to estimate collections were redesigned to be more conservative than those tools used historically. This conservative approach resulted in less net revenue than realized in previous years. As a result, our EBIDA margin was lower in 2016 than previous years. However, we have seen net revenue return in 2017 and our EBIDA margin at the end of the first quarter is 10%. This is further evidence that our strong financial fundamentals are in place (Fig. 7.5-2).

Fig. 7.5-2 EBIDA Margin



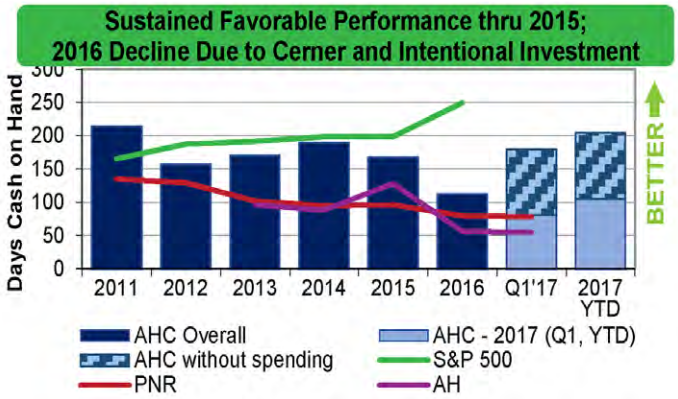
Castle has demonstrated a strong operating margin for many years, well above S&P 500, PNR, and AH performance. As with the EBIDA margin, the spike in Days in AR that occurred in 2015 had an impact on the operating margin in 2016. The new conservative approach resulted in a lower operating margin than previous years however, as expected, first quarter 2017 results demonstrate the operating margin is returning to normal levels, already surpassing S&P 500 benchmark (Fig. 7.5-3).

Fig. 7.5-3 Operating Margin



Adventist Health Castle has always had strong cash on hand due to our careful resource management. Days cash on hand declined in 2015 as a result of the spike in days in AR. Also in 2016 two major investments took place. The first was AHC became a 25% owner in a Radiation Oncology joint venture. The intent is to eventually build a cancer center on the Windward side of Oahu. At the present time, community members have to drive to Honolulu to receive radiation treatment. The second big purchase was a 130 acre college campus located approximately one mile from the current hospital campus. The property has 70 usable acres that will provide for future organizational expansion and growth in the local community. Both of these purchases totaling more than $24 million dollars were purchased with cash and Castle remains debt free. Our days cash would have been 180 if we had financed the purchases instead of paying for them in cash. Our strong financial situation enables the flexibility to grow without incurring debt (Fig. 7.5-4).

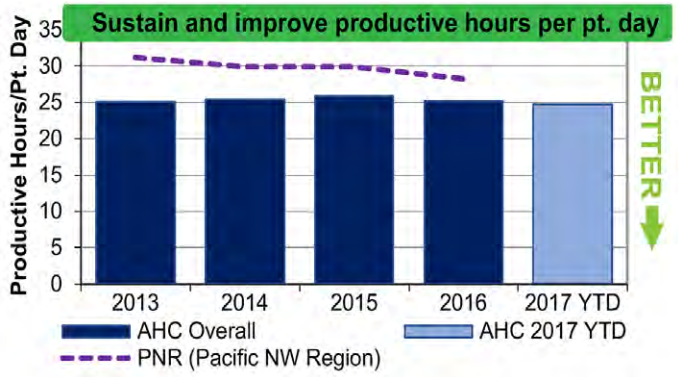
Fig. 7.5-4 Days Cash on Hand



Managing LOS is a high priority to ensure efficient resources and to enhance patient satisfaction. A statewide shortage of long-term care beds in the State of Hawai'i leads to longer acute care lengths of stay than are observed on the mainland. Adventist Health Castle has maintained LOS results that are better than expected and better than local competitors

Fig. 7.5-5 LOS, Observed/Expected LOS

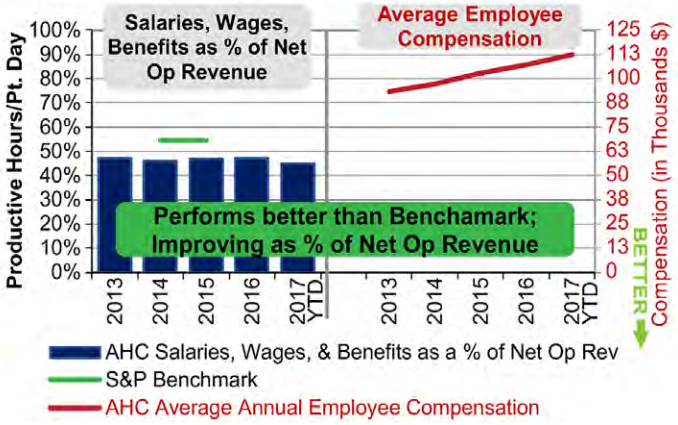
Fig. 7.5-6 Productive Hours per Pt. Day



for many years. This has been achieved through creative partnerships with local community resources such as the *Ohana* House where AHC reserves beds in advance. Q12017 shows further improvement achieving 4.5 days (Fig. 7.5-5).

Castle has sustained strong performance in productive hours per patient day for many years by meeting growth needs within the framework of existing programs and services. We carefully monitor labor usage and have established staffing budgets and targets that are achievable (Fig. 7.5-6).

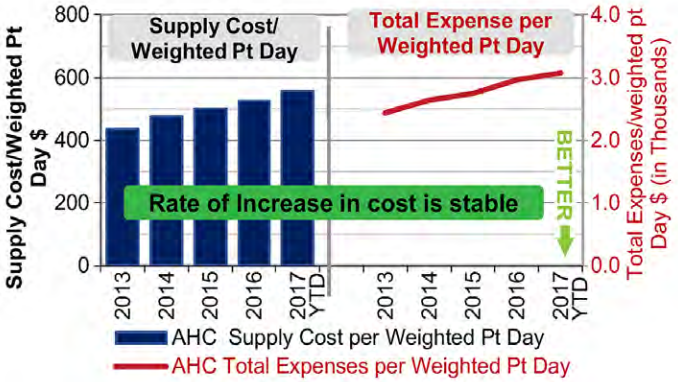
Fig. 7.5-7 Salaries as % of Net Op Revenue, Ave. Compensation



We maintain competitive salary and benefit structures as well as monitoring and managing premium labor spend. This has allowed us to exceed S&P 500 best practice for many years (Fig. 7.5-7).

Growth in supply costs is stable and has mirrored inflation. In addition, the introduction of new service lines (open heart, neurosurgery) has been managed efficiently to avoid spikes in supply costs (Fig. 7.5-8).

Fig. 7.5-8 Supply Cost, Total Expense per Weighted Pt. Day



Our marketshare of Windward IP discharges (Fig. 7.5-9), discharges for women's service lines (Fig. 7.5-10) and cardiac service lines (Fig. 7.5-11) all show as the sustained market leader with 3 times, 2 times, and 4 times the marketshare of the next leading competitor, respectively. In addition, our cardiovascular volume has increased by more than 5 times in three years (Fig. 7.5-12). This significant growth in a critical service line and sustained marketshare are important strengths of our system. We are grateful that our community trusts us with their care and strive to bring our compassionate, healing ministry to the forefront with one another, our patients and our community.

Fig. 7.5-9 Market Share of Windward IP Discharges (excluding Tripler & Kaiser)

Fig. 7.5-10 Market Share of Windward IP Discharges: Women's Service Lines (excluding Tripler & Kaiser)

Fig. 7.5-11 Market Share of Windward IP Discharges: Cardiac Service Lines (excluding Tripler & Kaiser)

Fig. 7.5-12 Cardiovascular Volume