



2017 QUALITY REPORT

Our Mission

Living God's love by inspiring health,
E ola mau ke Aloha o ke Akua i ke olakino,

wholeness,
i ka pono iho,

and hope.
a me ka mana'olana.

Our Vision

We will transform the health experience of
our communities by improving health, enhancing
interactions, and making care more accessible.

Our Values

Integrity | Compassion | Respect | Excellence

This document is a report on Castle Medical Center's
performance and activities during the year 2016.

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Introduction



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Travis Clegg

Castle Medical Center and its administration are most proud to present to our community this publication, the eleventh edition of our annual *Quality Report*.

Readers of this report will note that this year, 2017, Castle Medical Center's parent organization, Adventist Health, reached an important milestone by unifying all hospitals and 260 clinics in its system under one mission, one vision and one core set of values.

Our new mission statement, "Living God's love by inspiring health, wholeness and hope," reflects the essential tenets of our work. It broadens our focus from solely caring for the sick to helping our communities be healthier; have better, more affordable access to care; and live better lives. It also reflects our rich heritage of providing physical, mental and spiritual care.

Our values — integrity, compassion, respect, excellence — are the compass for how we make clinical and business decision while living our mission to serve others.

Improving the health of the Windward O'ahu community has been a primary focus of Castle since we opened our doors in 1963. Although our logo will be changing, our dedication to remaining your community hospital has not.

Each year, the data in this report sheds new light on healthcare at Castle Medical Center. In an ever-changing healthcare environment, we strive to provide more robust measures that accurately measure and track healthcare quality.

Castle Medical Center has a proven record of collaborating with the community to address complex healthcare issues. As we celebrate our successes, we must not become complacent; we must keep striving to retain the gains we've made and not lose ground. Castle remains committed to helping the community meet the need for information in a sustainable way, and we anticipate building even more meaningful measures that address health, patient experience of care which are key aims at Castle.

(Continuation on the next page)

The Medical Center

Looking ahead, we know the demand for accountability in healthcare will continue to increase the need for our measures for more useful information. Aligning the use of our measures, focusing on high-impact areas, and increasing the efficiency of data will be more important than ever.

We thank all of our stakeholders, including our associates, physicians and staff, for navigating these waters with us over the years, and for helping us look around the bend to the actionable measures that will sustain health care improvements in the future.



Located in Kailua, Hawai‘i, Castle Medical Center serves all of O‘ahu and is the primary health care facility for the Windward side of the island. Castle is a full-service medical center offering a wide range of inpatient and outpatient services. With 160 beds, more than 1,000 associates, 140 volunteers, and 330 medical providers on staff, Castle has substantially expanded its services since first opening its doors in 1963. The hospital is owned by Adventist Health, a Seventh-day Adventist organization.

Castle Medical Center focuses on providing patient centered health services in a caring environment that extends well beyond hospital and clinic walls. Our many programs are developed to serve the health and medical needs of our communities.

In 2016, Castle’s services included:

- 24-hour emergency services
- Inpatient acute care
- Vera Zilber Birth Center
- Joint Care Center
- Inpatient behavioral health services
- Open heart surgery
- Interventional cardiology services
- The Hawai‘i Center for Metabolic and Bariatric Surgery
- Multi-specialty surgical services
- Neurological services
- Harry and Jeanette Weinberg Outpatient Center
- Chemotherapy Clinic
- Castle Primary Care clinics in Kailua and Lā‘ie
- Outpatient services
- Imaging services, laboratory, and pharmacy in Kāne‘ohe
- Wellness and Lifestyle Medicine Center.

Awards and Recognition

Castle Earns “A” Grade for Patient Safety

New Leapfrog Hospital Safety Grades, which assign A, B, C, D and F letter grades to hospitals nationwide and provide the most complete picture of patient safety in the U.S., were announced by The Leapfrog Group, a national patient safety watchdog. Castle Medical Center was one of 844 hospitals to receive an “A”, ranking among the safest hospitals in the United States. This is the second year in a row that the medical center has received this grade from the Leapfrog Group.

“Protecting patients from harm is the most important charge for any hospital,” said Leah Binder, president and CEO of The Leapfrog Group. “We recognize and appreciate ‘A’ hospitals’ vigilance and continued dedication to keeping their patients safe.”

Developed under the guidance of an Expert Panel, the Leapfrog Hospital Safety Grade uses thirty measures of publicly available hospital safety data to assign A, B, C, D and F grades to more than 2,600 U.S. hospitals twice per year. It is calculated by top patient safety experts, peer-reviewed, fully transparent and free to the public.

To see Castle Medical Center’s full grade, and to access consumer-friendly patient tips for staying safe in the hospital, visit www.hospitalsafetygrade.org or follow The Leapfrog Hospital Safety Grade on Twitter or Facebook. Consumers can also download the free Leapfrog Hospital Safety Grade mobile app for Apple and Android devices.



Awards and Recognition

Excellence in Value-Based Purchasing

As part of the Affordable Care Act, the United States Congress authorized Inpatient Hospital Value-Based Purchasing (VBP) for over 3,500 hospitals across the nation. In VBP, payments for inpatient acute care services to participating hospitals are based not only on the quantity of services they provide, but on the quality of care as well. VBP is now used to help determine Medicare payments to hospitals by the Centers for Medicare and Medicaid Services (CMS) and is part of CMS's long-standing efforts to provide

financial incentives for hospitals to improve the quality of their care.

In the VBP calculation performed by CMS based on fiscal year 2016, Castle was shown to be in the top 2.5% of hospitals nationwide for the quality of inpatient care it provided. While no official award is given for such exemplary performance, Castle is very pleased to have been recognized in such a way by CMS for the quality of our care.



Awards and Recognition

CMC honored with three Women's Choice Awards

The Women's Choice Award®, America's trusted referral source for the best in healthcare announced that it has awarded Castle Medical Center as one of the 100 Best Hospitals for Patient Experience, Patient Safety, and Obstetrics. These evidence-based designations are the only awards that identify the country's best healthcare institutions based on robust criteria that consider female patient satisfaction, clinical excellence, and what women say they want from a hospital.

The award for Patient Experience means that Castle Medical Center is a top performer on HCAHPS survey questions that research and experience show are more important to women than men.

The award for Patient Safety means that Castle Medical Center has exceptional performance in limiting a wide range of hospital-associated infections and complications from surgery and medical treatment.

The award for Obstetrics means that Castle Medical Center offers exceptional obstetric services, which ranked above the national average for patient safety, thereby supporting a woman's decision when choosing the best for her maternity needs.



The Women's Choice Awards are evidence-based quality designations that drive consumer appreciation through education, empowerment, and validation. Additionally, they recognize that Castle delivers a recommendation-worthy customer experience.

Awards and Recognition

CMC Awarded nine PRC National Excellence in Healthcare Awards

Professional Research Consultants (PRC) is a national marketing research organization whose mission is to help health care organizations achieve excellence through surveys of physicians and employees.

Based on results from the organization's Medical Staff Survey performed in early 2017, PRC has recognized Castle Medical Center with 14 individual National Excellence in Healthcare Awards in the area of medical staff perception.

Castle received ten 5-Star Awards for scoring in the top 10 percent of hospitals whose medical staff was surveyed, in the areas of:

- Involvement in hospital's mission
- Hospitalist services
- Emergency services
- Overall quality of care
- Administration
- Patient safety
- Nursing care
- As a place to practice medicine
- Pharmacy
- Intensivist

Further, Castle received four 4-Star Awards for scoring in the top 25 percent of hospitals surveyed in:

- Surgical services
- Laboratory services
- Cardiology
- Radiology services



Awards and Recognition



The Joint Commission Survey

More than 85% of the hospitals across the United States are surveyed once every three years by The Joint Commission, a national organization that accredits hospitals and other health care organizations.

Accreditation by The Joint Commission is recognized nationally as a symbol of quality and as evidence of a hospital's commitment to meeting high standards in health care.

As the surveyors from The Joint Commission conduct their survey of the medical center, they also provide education to our staff. Furthermore, Castle uses their

recommendations as guidelines for improvement in the provision of health care. The survey, then, is not only about our receiving an accreditation, but is something from which our patients benefit.

Thanks to our associates and physicians, Castle Medical Center received the commission's Gold Seal of Approval™ with only two requirements for improvement, resulting in the most successful Joint Commission survey in Castle's history. Even our surveyors stated that they had never surveyed an organization with so few findings.

Awards and Recognition



This workplace has been recognized by the American Heart Association for meeting criteria for employee wellness.

American Heart Association's Fit Friendly Gold Award Worksite

Castle Medical Center has again received the American Heart Association's Fit Friendly Worksite Gold Award. The AHA award recognizes employers who go above and beyond in progressive leadership and concern for the health of their staff. Castle's LivingWell program is a major initiative demonstrating the way the medical center cares for the health of its associates.

Awards and Recognition



CMC first Blue Zone employer in Hawaii

Castle Medical Center was recognized in 2016 as the first Blue Zones Certified Worksite in the state of Hawai'i. The Blue Zones Project is a community-wide well-being improvement initiative to help make healthy choices easier in Hawaii. The Hawaii Medical Service Association (HMSA) brought the Blue Zones Project® to Hawaii to transform our state into an even better place to live, work, and play. Healthier choices can lead to big benefits for our community including lower health care costs, higher productivity, and ultimately, a better quality of life.

Castle's Blue Zones certification was based in part on:

- The medical center's vegetarian restaurant, The Bistro; CMC's healthy vending machines; and branding guidelines used in the Bistro to label "Blue Zones Project Inspired" items and promote the Blue Zones Project that help associates make better point-of-purchase decisions.
- CMC's robust employee well-being program, LivingWell, which offers onsite biometric screenings, weight management and nutrition coaching, tobacco cessation, onsite fitness classes and access to dietitians or personal trainers among other benefits.
- The medical center's ergonomic workstations in administrative and hospital settings.
- The medical center's innovative onsite garden that helps fresh fruits and vegetables for the Bistro.
- CMC's own 'Food, Beverage and Snack Guidelines' that encourage healthier foods and beverage selection at hospital meetings and special events.



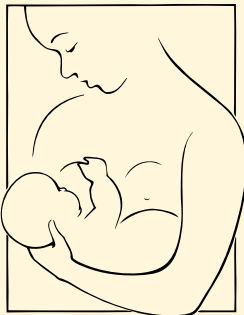
Brought to
Hawaii by



Awards and Recognition



CMC receives Baby Friendly Designation



Baby-Friendly USA, a global program sponsored by the World Health Organization and the United

States Children's Fund (UNICEF), designated Castle Medical Center's Birth Center

as a Baby-Friendly birth facility in February of 2016.

More than two decades of research have established that breast milk is perfectly suited to nourish infants and protect them from illness.

Breast-fed infants have lower rates of hospital admissions, ear infections, diarrhea, rashes, allergies,

and other medical problems than bottle-fed babies, says the U.S. Food and Drug Administration.

Baby-Friendly USA is the U.S. Authority for the implementation of the Baby Friendly Hospital Initiative, a global effort to encourage and recognize hospitals and birthing centers that offer an optimal level of care for breastfeeding mothers and their babies.

There are more than 19,000 designated Baby-Friendly hospitals and birth centers worldwide. Castle joins Kaiser Permanente Moanalua, and Kona Community and North Hawai'i Community Hospitals in receiving this designation. The "Baby-Friendly" designation is given after a rigorous on-site survey is completed.

Awards and Recognition



AHA Award for Resuscitation

For the second year in a row, Castle Medical Center has received the Get With The Guidelines®-Resuscitation Silver Award for implementing specific quality improvement measures outlined by the American Heart Association for the treatment of patients who suffer cardiac arrests in the hospital.

More than 200,000 adults and children have an in-hospital cardiac arrest each year, according to the American Heart Association. The Get With The Guidelines-Resuscitation program was developed with the goal to save lives of those who experience in-hospital cardiac arrests through consistently following the most up-to-date research-based guidelines for treatment. Guidelines include following protocols for patient safety, medical emergency team response, effective and timely resuscitation (CPR) and post-resuscitation care.

Castle Medical Center received the award for meeting specific measures in treating patients who suffer in-hospital cardiac arrests in the hospital. To receive this award a hospital must comply with the quality measures for one year.



Awards and Recognition



CMC Named Community Value Five-Star Hospital

Castle Medical Center was recently recognized as a top-ranked Community Value Provider by Cleverley + Associates (Columbus, OH). Cleverley + Associates, a leading healthcare financial consulting firm specializing in operational benchmarking and performance enhancement strategies, released the findings as part of its new publication: State of the Hospital Industry - 2016 Edition. The Community Value Index® was created to provide an assessment of

a hospital's performance in four areas: financial strength and reinvestment, cost of care, pricing, and quality. Fundamentally, the CVI suggests that a hospital provides value to the community when it is financially viable, is appropriately reinvesting back into the facility, maintains a low cost structure, has reasonable charges, and provides high quality care to patients."

Awards and Recognition



CMC Re-accredited as CEO Cancer Gold Standard Employer

Castle Medical Center recently received notification from the CEO Roundtable on Cancer that Castle Medical Center has been re-accredited as a CEO Cancer Gold Standard™ employer for 2016.

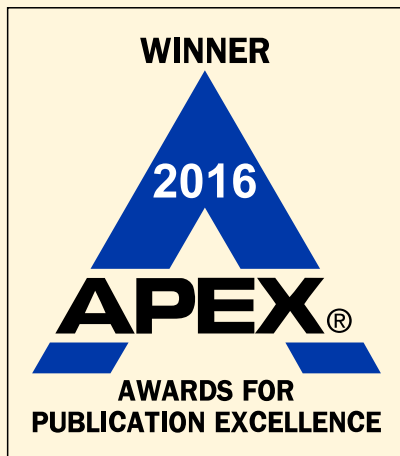
This is the sixth time Castle has received this award. Through the CEO Roundtable on Cancer's workplace wellness accreditation program The Gold Standard's mission focuses on three goals with regard to cancer:

- Risk reduction
- Early detection
- Quality care

By focusing on these three goals, the Gold Standard program can assist employers in implementing a culture of wellness in their workplaces, helping to promote the health and well-being of their employees and save lives.

The award honors CMC for meeting each requirement of this workplace wellness program, and for reaffirming its dedication to the health and wellbeing of its associates.

Awards and Recognition



CMC Publications win three APEX 2016 Awards of Excellence

Castle Medical Center has been awarded the APEX 2016 Award of Excellence in the following three categories:

- Magazines, Journals & Tabloids – Print/Windward Health
- Newsletters – Writing/Castle MD
- Annual Reports – 1-2 Person Produced/Quality Report 2015

APEX 2016, the 28th Annual Awards for Publication Excellence, is an international competition that

recognizes outstanding publications from newsletters and magazines to annual reports, brochures and websites.

According to APEX 2016 judges, “The awards were based on excellence in graphic design, quality of editorial content and the success of the entry in conveying the message and achieving overall communications effectiveness.”

Awards and Recognition

CMC Receives 15 Koa Anvil Awards



The Hawaii Chapter of the Public Relations Society of America (PRSA) recognized the top public relations campaigns and tactics at the 33rd Annual Koa Anvil Awards in July of 2016. Castle Medical Center's Marketing Department was honored in July with 15 awards at the 33rd Annual Koa Anvil Awards.

Established in 1983, the Koa Anvil Awards captures and celebrates the four rings of excellence on which the Koa Anvil competition is judged: research, planning, execution and evaluation. Castle Medical Center was recognized for the following Koa Hammer Awards:

2015 Annual Giving Report "Because You Care"

CATEGORY: Annual Reports, Non-Profit Organizations

CATEGORY: Direct Mail/Direct Response, Non-Profit Organizations

CATEGORY: Publications, Other

CATEGORY: Multimedia Communications/Annual Reports

Koa Hammer Award of Excellence

- "Quality Report 2015"
CATEGORY: Annual Reports, Non-Profit Organizations
- "In Sickness & In Health" Radio
CATEGORY: Audio Programs
- "In Sickness & In Health" Vignettes
CATEGORY: Creative Tactics
- "In Sickness & In Health" Postcards
CATEGORY: Direct Mail/Direct Response
- "In Sickness & In Health"
CATEGORY: Video News Releases
- "Surgical Weight Loss Commercial"
CATEGORY: External Video Programs
CATEGORY: Video News Releases
- "Nurses Week Video"
CATEGORY: External Video Programs
- "Castle MD"
CATEGORY: Magazines, Internal Audiences Primarily
- "2015 Pink Glove Dance Video Competition"
CATEGORY: Media Relations (Consumer Services/Healthcare Services)
- "Windward Health"
CATEGORY: Multimedia Communications/Newsletters



Mission

“My husband and I would like to thank the blessed angels, nurses, doctors, and cleaning staff for an enjoyable hospital experience. We have used Castle for over 30 years, but this visit was exceptional. The care in the ER from the doctors and nurses was heart felt. When we were admitted the whole staff on the second floor showed us Aloha and compassion, which is so important. They took the time one on one, and made sure we understood. The loving care touched our hearts. Thank you to all the angels who cared for us.”

— A thank you note from a patient and her husband

Mission

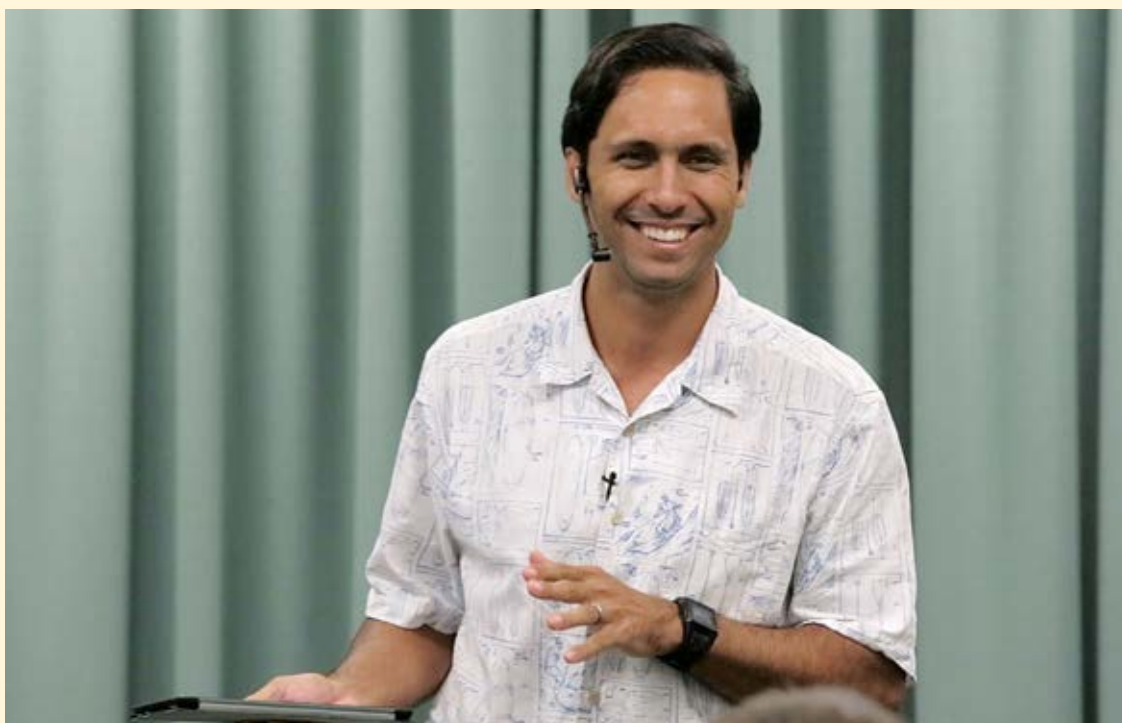
Mission Week: The Whole of Us - The Power to Inspire

Pastor Jesse Seibel, who has been with Hawai'i Conference of Seventh-day Adventists for the past 12 years, was the keynote speaker during Castle's Mission Week in 2016. Pastor Seibel currently pastors the Kailua Seventh-day Adventist church, but lists his occupation as a "follower of Jesus Christ whose goal is to be like Jesus." Throughout the week Pastor Seibel explained that our connection to Christ affects who we are as people and our ability to connect with and inspire others.

- Monday: Our spirituality isn't a component on its own, but is connected to everything and everyone in our lives.
- Tuesday: Connecting to others means dealing with others in love, as God did, even in painful and uncomfortable situations.

- Wednesday: We are used to being inspired on a superficial level. The word inspired comes from the Greek word "God-breathed." Inspiration is putting what is yours into others. Discipleship in everyday life means mentoring others. When we mentor others, they actually mentor us to be better.
- Thursday: We inspire others when we step outside of our comfort zone and have faith to live our calling, even if it makes us uncomfortable.

On Friday, Pastor Seibel visited staff on the nursing units to talk and pray with them.



Mission



National Speaker Colleen Sweeney's Empathy Seminar

In May of 2016, national speaker Colleen Sweeney, RN, BS, presented a seminar on empathy sponsored by Adventist Health. Nearly 100 associates attended the seminar that addressed topics that included:

- What patients fear most about hospitals
- What the organizations in the top 10% in the nation are doing differently to be the very best
- Working differently to serve patients better by understanding their perspective

Sweeney is founder of Sweeney Healthcare Enterprises and conceived and conducted the Empathy Project®, a three-year research study. She is a member of the National Speakers Association, and a Certified Facilitator with the Tom Peters

Company. She holds degrees in nursing and business, and a master's certificate in project management.

“Each patient that enters our facility has some level of fear or anxiety about their illness or about their care,” said Therese Courtenay, RN, director of Medical Surgical Services, who spearheads CMCs Empathy in Action Program. “Colleen has studied what patients fear and heightened our awareness of how we can better care for patients by being attuned to their fears. This ties in well to CMC’s Empathy in Action program and the journey we all on to understand how to connect and care for our community.”

Mission

I Love Kailua

As it has for many years, Castle Medical Center presented a mini-health fair during the Lanikai Outdoor Circle's 24th annual "I Love Kailua" Town Party in April of 2016.

In addition to receiving the popular free keiki bike helmets and drawing for two children's bicycles, the 400 people who visited Castle's Health and wellness Fair received valuable information on mammography, nutrition, asthma, COPD, lung cancer, cardiovascular health, and bariatric surgery. Visitors also had an opportunity to chat with Castle physicians.



Mission

Castle Medical Center participates in RIMPAC 2016

Castle Medical Center was one of 18 Hawai'i hospitals on four islands that participated in the Humanitarian Assistance and Disaster Relief (HA/DR), which is part of RIMPAC 2016. The Healthcare Association of Hawai'i Emergency Services, a division of the Healthcare Association of Hawaii, coordinated participation with the hospitals.

Simulated patient care at Castle Medical Center took place on July 14th. An ambulance bus brought simulated casualties with moulage (mock injuries molded from rubber or latex). Triage occurred and an expanded treatment area was set up to accommodate the surge of patients. Communication systems and managed several scenario injects were tested on July 15.



The purpose of the exercise is to test the state's Emergency Operations Plan and to identify opportunities to further enhance emergency response procedures that would be utilized in major emergencies and disasters in Hawaii. Casualty-actors included individuals who had sustained traumatic injuries or illness from infectious disease.

This marks only the second time in RIMPAC history that civilian medical response teams have participated in RIMPAC.

Mission

Boys and Girls Club – Recipe for Good Health

The partnership between Castle Medical Center (CMC) and the Kailua Boys and Girls Club completed a second year in 2016. As healthcare providers, CMC recognizes a responsibility to promote and support wellness beyond the walls of our organization, to reach out into the community. The focus of the association with the Boys and Girls Club is to help children develop healthy lifestyle habits at an early age, thus setting them on the path to a longer and healthier life.

CMC's Wellness and Lifestyle Medicine Department continues twice-monthly cooking classes at the clubhouse throughout this second year. Classes promote plant-based nutrition in accord with the tenets of our Seventh-Day Adventist heritage. We include basic nutrition, simple cooking /kitchen tasks, principles of food safety, cooperation, etiquette, and the value of gathering to share the food and socialize. Classes consist of club members ranging in age from 7 to 17 and the mixed age group setting provides a good opportunity for the older children to learn mentoring skills as they interact and assist the younger ones.

The teens from the summer program learned about healthcare career options as we partnered with the Club to provide tours, talks, and demonstrations in several key departments on campus as part of their career-themed summer session. Welcoming remarks by CEO Kathy Raethel, a complimentary vegan lunch in our Wellness Center and lifestyle health education sessions by wellness experts rounded out their day. We are happy to provide insight into employment opportunities within our organization and encourage young people to pursue future careers in service to their community.



Mission

Holiday Community Outreach



- In an annual event at Castle, hospital associates collected funds in their various departments and units totaling \$5,000.00, which provided 70 needy Windward O'ahu families with gift cards for Thanksgiving meals in 2016.
- For the fifth year, 20 Castle associates and administrators arrived in the early morning hours at the two homeless shelters run by the Honolulu-based Institute for Human Services to prepare Christmas Eve breakfast for some 300 residents. Food was donated by the hospital and included vegetarian chili, rice, and eggs, fruit, a croissant and Orange Juice. After breakfast, gifts totaling \$300.00 in value were distributed by Santa and Mrs. Claus to the children who were staying at the shelter. Gifts of toiletries donated by associates were also distributed.
- This past Christmas, Castle's Medical Staff and Castle Health Group, a consortium of physicians affiliated with the hospital, made contributions once again to Weinberg Village Waimānalo, a nearby independent non-profit facility that provides transitional housing and other services to families that are homeless or at risk. The physicians

donated 30 Christmas trees and 30 bags of tree ornaments, all very much appreciated. A total of \$3,368 was raised by the Medical Staff annual auction that is held in conjunction with the Christmas party. The proceeds were evenly divided between Therapeutic Horsemanship of Hawaii and the Windward Spouse Abuse Shelter.

- For more than twenty years now, Castle's Giving Tree Project has assembled collections of gifts during the Christmas season for Windward families who otherwise would have to go without them. Last year, 32 such families were treated to gifts, all donated by Castle associates and physicians. The total value of the gifts donated was over \$17,500.00



Mission

Inpatient Satisfaction with Spiritual Care

Castle Medical Center is a faith-based organization dedicated to meeting the spiritual needs of our patients and their families.

In addition to the initiatives described in the preceding pages, we focused in 2016 on the following:

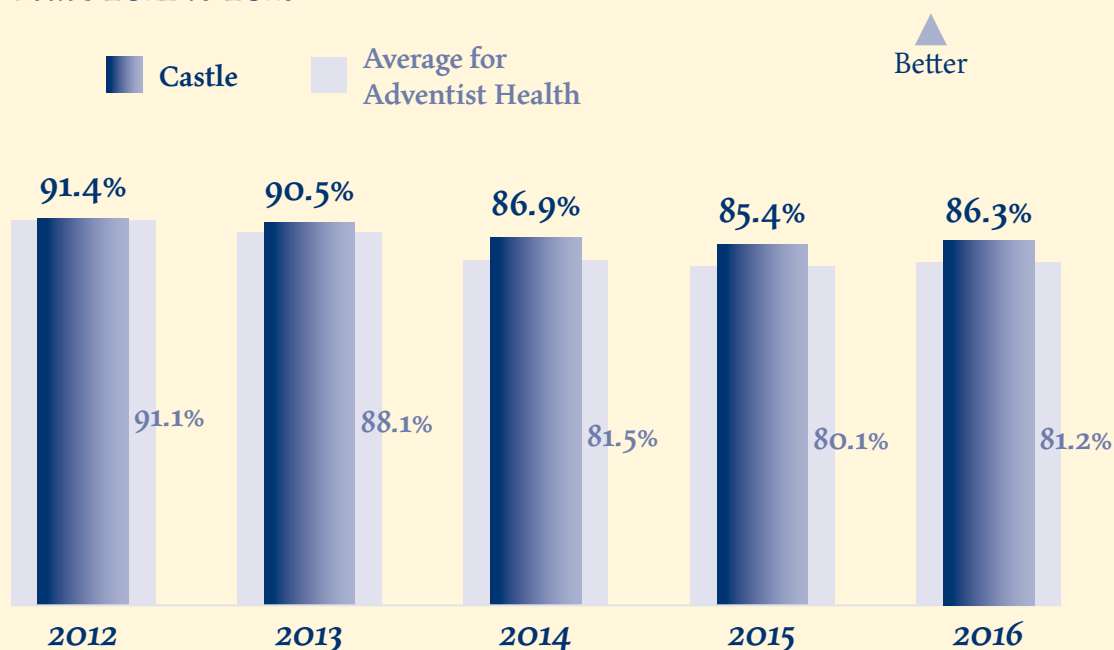
- Overhead prayers every morning at 8 a.m. and every evening at 8 p.m.
- Inspiration prayer cards on all patient meal trays
- Daily rounding of patients by Castle chaplains

- Encouraging associates to listen to the spiritual needs expressed by their patients and to pray with them or refer them to the chaplain when appropriate
- Bereavement and grief support by members of our Pastoral Care staff.

The chart below compares the level of satisfaction that Castle's patients have with their spiritual care to the average found at the other 20 hospitals within the Adventist Health system.

Satisfied with Attention to Unique Religious/Spiritual Needs

Years 2012 to 2016



Patient Satisfaction

“I would like to convey my appreciation to everyone who took care of me! From the time I came into the ER to going to my room upstairs, I’ve never felt so well taken care of. I was amazed at the smiles, cheerfulness, helpfulness, love and warmth of all my doctors, nurses, aides, the cleaning people, the pharmacists, and even the pastors who visited. Also my little friend who went out of her way and bought me a Starbucks coffee before she went home, and Pastor Raul who sent me home with a gift of scones — right on! You were all awesome.”

— A thank you note from a patient

Patient Satisfaction

Inpatient

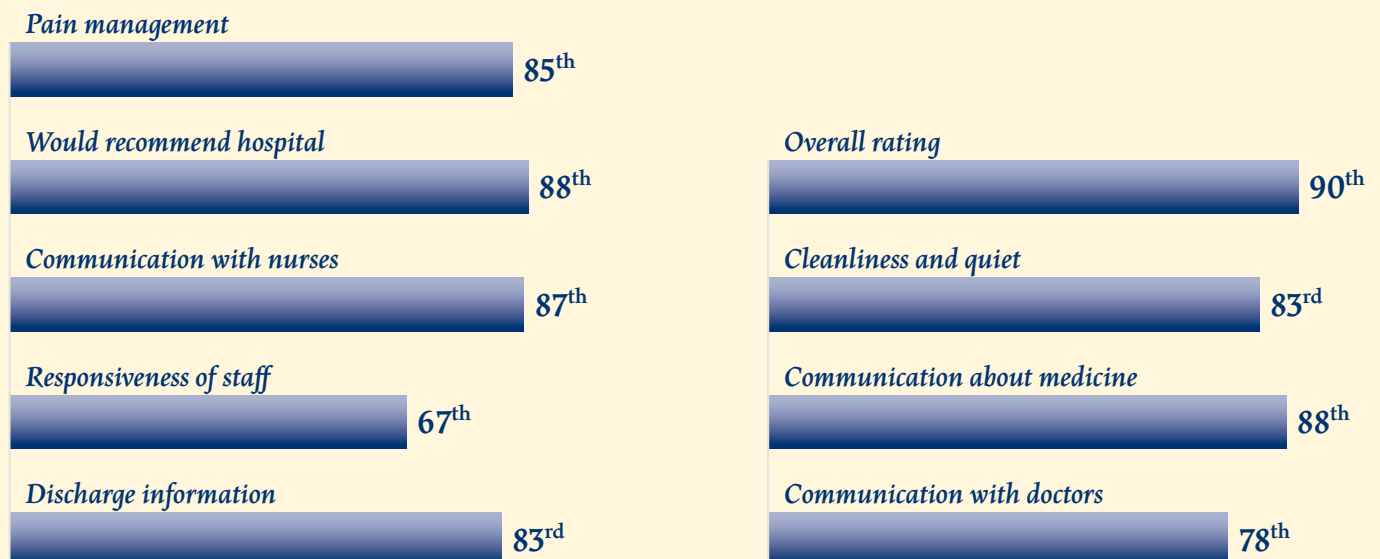
Castle Medical Center participates in the Hospital Consumer Assessment of Healthcare Providers and Systems survey, known as HCAHPS, which measures the patient's perspective on hospital care. This standardized tool allows objective and meaningful comparisons between hospitals in areas that are important to consumers.

The charts on this and the following three pages show Castle's patient satisfaction ratings from 2016.

As can be seen in the chart below, Castle scores in the top 20% of hospitals nationwide in most areas of inpatient satisfaction.

Inpatient Satisfaction National Percentile Ranking Year 2016

Better ►



Patient Satisfaction

Birth Center

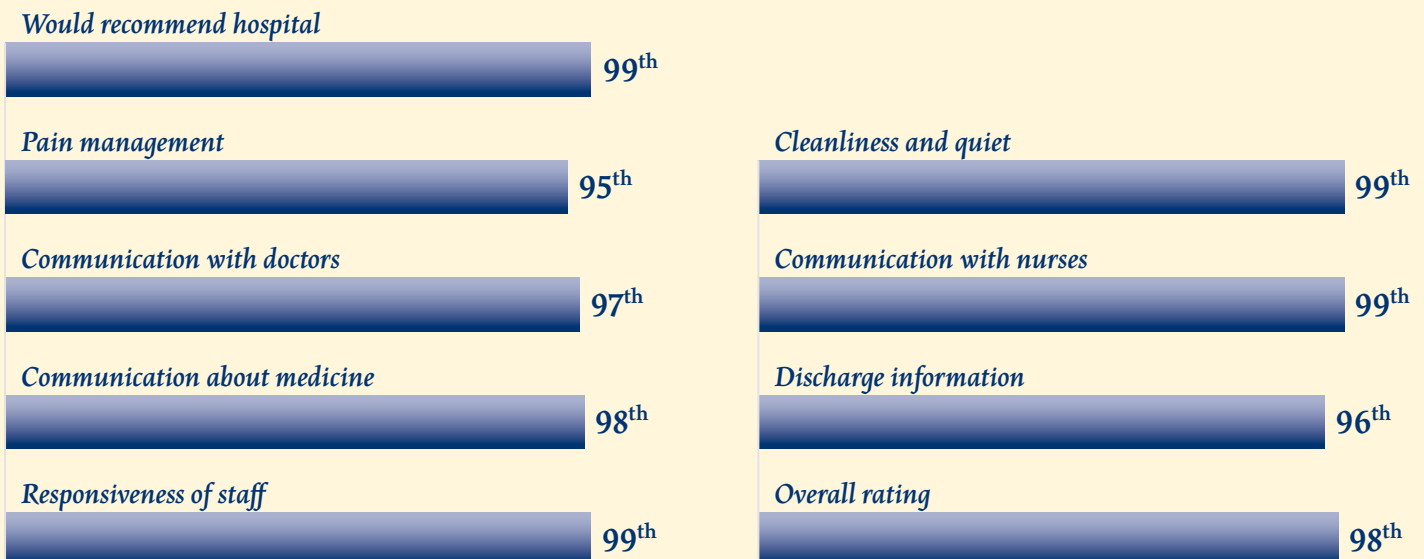
Satisfaction of patients with Castle Medical Center's Birth Center is nothing short of extraordinary.

We are very proud that the number of patients who said they would recommend our Birth Center to others has placed us in the top 1% of hospitals nationally.

Birth Center Patient Satisfaction National Percentile Ranking

Year 2016

Better ►



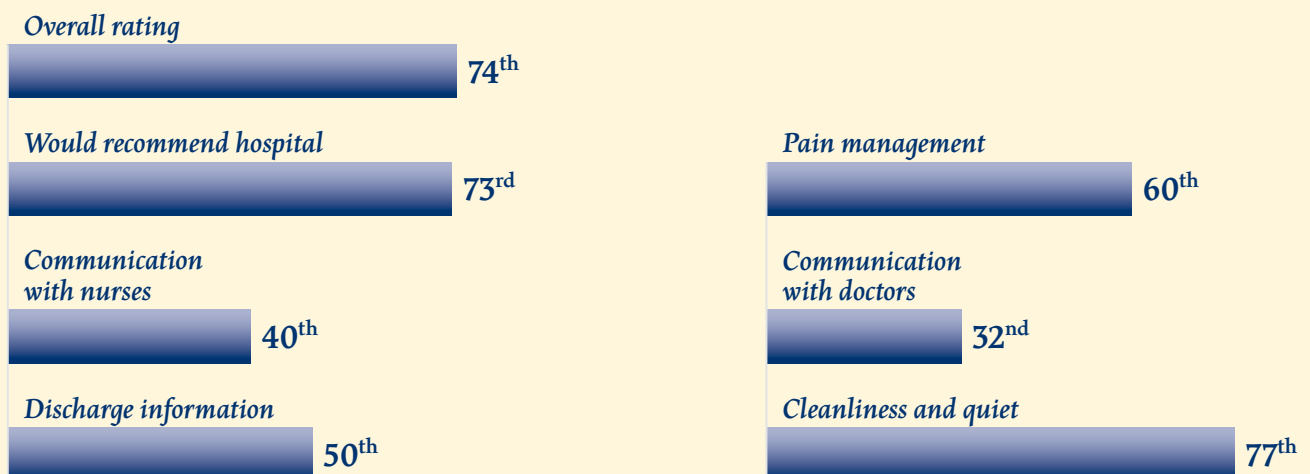
Patient Satisfaction

Emergency Department (ED)

Patients satisfaction with our Emergency Department has improved since completing a full-scale renovation project in 2016, with our overall rating nearly reaching top quartile performance. Efforts are in place to improve these scores further in 2017.

ED Patient Satisfaction National Percentile Ranking Year 2016

Better ►



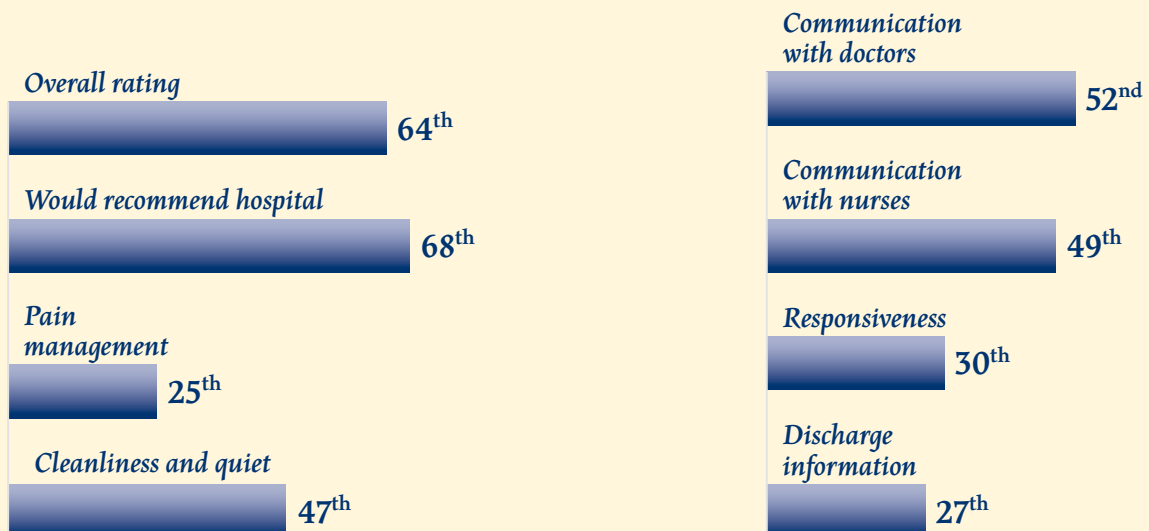
Patient Satisfaction

Outpatient Surgery

Increased surgical growth volumes have created challenges in the area of patient satisfaction with outpatient surgery. Castle is developing a master plan for facility growth that will address this issue.

In the meantime, surgical hours have been expanded into the evenings, and efficiencies have been implemented to reduce surgical suite downtimes to accommodate the increased volume and to enhance patient experience.

Outpatient Surgery Satisfaction National Percentile Ranking Year 2016



Patient Satisfaction

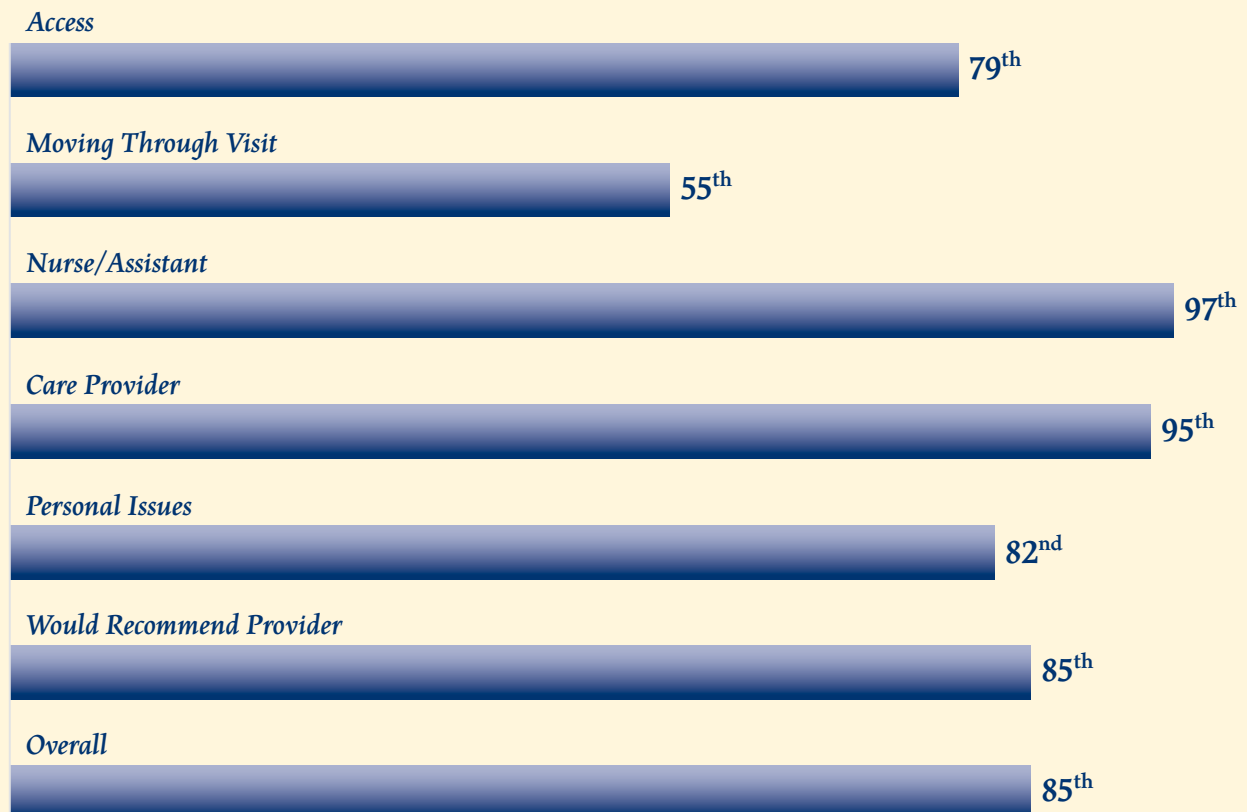
Castle's community based clinics participate in the Clinician & Group Survey known as CG CAHPS, which assesses patient's experiences with health care providers and staff in doctors' offices. This standardized tool allows objective and meaningful comparisons between physician clinics in the areas that are most important to consumers.

As can be seen in the chart below, Castle's community based clinics score in the top 25% of physician clinics nationwide in all but one area. Efforts to improve patient flow through their visit have increased this score to the 71st percentile in the 4th quarter of 2016.

Community-Based Clinics Percentile Ranking

Year 2016

Better ►





Physician Satisfaction

My first experience at Castle Medical Center was more than 25 years ago on November 29, 1991. At the time, I was an inexperienced Internal Medicine intern. Dr. Susan Chapman, the current CMC Chief of Staff, was kind and patient enough to guide me with the hands-on delivery of my first son, Kawaikapu (the first of five).

In 1995, I completed my Anesthesiology residency in Los Angeles and decided to move my young family back to Hilo on the Island of Hawaii. I have always preferred to practice at community medical centers. Everyone seems to know you on a first name basis and you can always count on others to kokua (lend a helping hand).

In 2000, I moved to O'ahu and first practiced at Castle Medical Center for three years as a member of an anesthesia group. My group's interests necessitated servicing several other hospitals besides Castle. A typical day routinely

consisted of rushing through traffic from one hospital to another and covering call nights at more than one facility at a time. I reluctantly endured this hectic practice schedule for several years. In 2007, however, I formed my own anesthesia group; GAAS LLC (Glenn Akiona's Anesthesia Services, LLC). My small group initially provided anesthesia services to another hospital in Liliha for four years. Unfortunately, economic constraints eventually led to two bankruptcies and the eventual closure of the Liliha hospital and its Ewa campus. I, along with almost a thousand other employees and practitioners were abruptly and with little notice, unemployed.

Fortunately, "when one door closes, another opens" (Alexander Graham Bell). A few months later, in 2012, I received a phone call from Dr. Alan Cheung (CMC Vice President of Medical Affairs). Castle Medical Center was expanding their orthopaedic services and seeking additional



Physician Satisfaction



anesthesia coverage. I gladly jumped at the opportunity to provide anesthesia services for those cases that were either scheduled after hours or on the weekends. Eventually, a contract to provide 'house' anesthesia services at Castle Medical Center became available and was awarded to GAAS LLC in November of 2012.

All physicians have sworn an oath to care for patients to the best of their abilities. We must also be mindful of the importance of the health of Castle Medical Center and kokua whenever we can.

In July of last year, Castle underwent a Joint Commission survey. During the prior inspection of 2013, the Anesthesia Department had a few deficiencies. I was determined not to let that happen again. When the Joint Commission surveyor arrived at the Perioperative Services Department, I made myself readily available to field any questions or to discuss any issues he may have had. I, along with the rest of the Castle Medical Center team (Erik Anderson, Quality Resources Director; Steve Bovey, Quality Resources Coordinator; Anne Massie, Infection Prevention Coordinator; Mike Hopper, Interim OR Manager; Heather Gibson, Physician Services Director; and Patty Aylward, PACU Nurse Manager) answered each and every question the Joint Commission inspector fired at us, in an astute and resolute manner; regarding patient safety issues, and our hospital policies and procedures. As you all know, Castle Medical Center passed the Joint Commission survey with flying colors and the Anesthesia Department had zero deficiencies. The Joint Commission inspector went so far as to say, "It was the best inspection" he had been involved in over twenty years.

However small my contribution may have been during the inspection, I take pride in knowing that working together, we can accomplish great goals at Castle Medical Center.

"Many hands make light work" (author unknown).

*Mahalo nui loa and God Bless,
— Glenn Patrick Kawaikapu Akiona, M.D., J.D.*

Physician Satisfaction

Castle's medical staff provided feedback on the hospital's clinical service areas, administration, and overall quality by participating in the Physician Engagement Survey. This survey is administered by Professional Research Corporation (PRC), which compares our results with over 350 other hospitals nationally that also participate in the survey.

This year's results were excellent. We were able to use the results from the previous year's survey to design and implement substantial improvements in the following areas:

- **Administration:** Administration met regularly on a 1:1 basis with individual physicians to receive input and feedback.
- **Cardiology:** An additional team was added to the Cardiac Cath Lab so both cardiac labs are available

Monday through Friday. Additional radiation protection equipment (lead shields and lead caps) and new equipment (ultrasound probe and radial devices) were also purchased for Cath Lab physicians.

- **Nursing Care:** Multi-disciplinary rounding was hardwired so that everyone involved in the patient's care meets together once a day to discuss the patient's care plan.

Castle is proud that 13 service areas were classified as top performing areas, with rankings at or above the 75th percentile. 3 other areas were classified as middle performing areas, with rankings between the 25th and 75th percentile. No areas were classified as low performing areas.



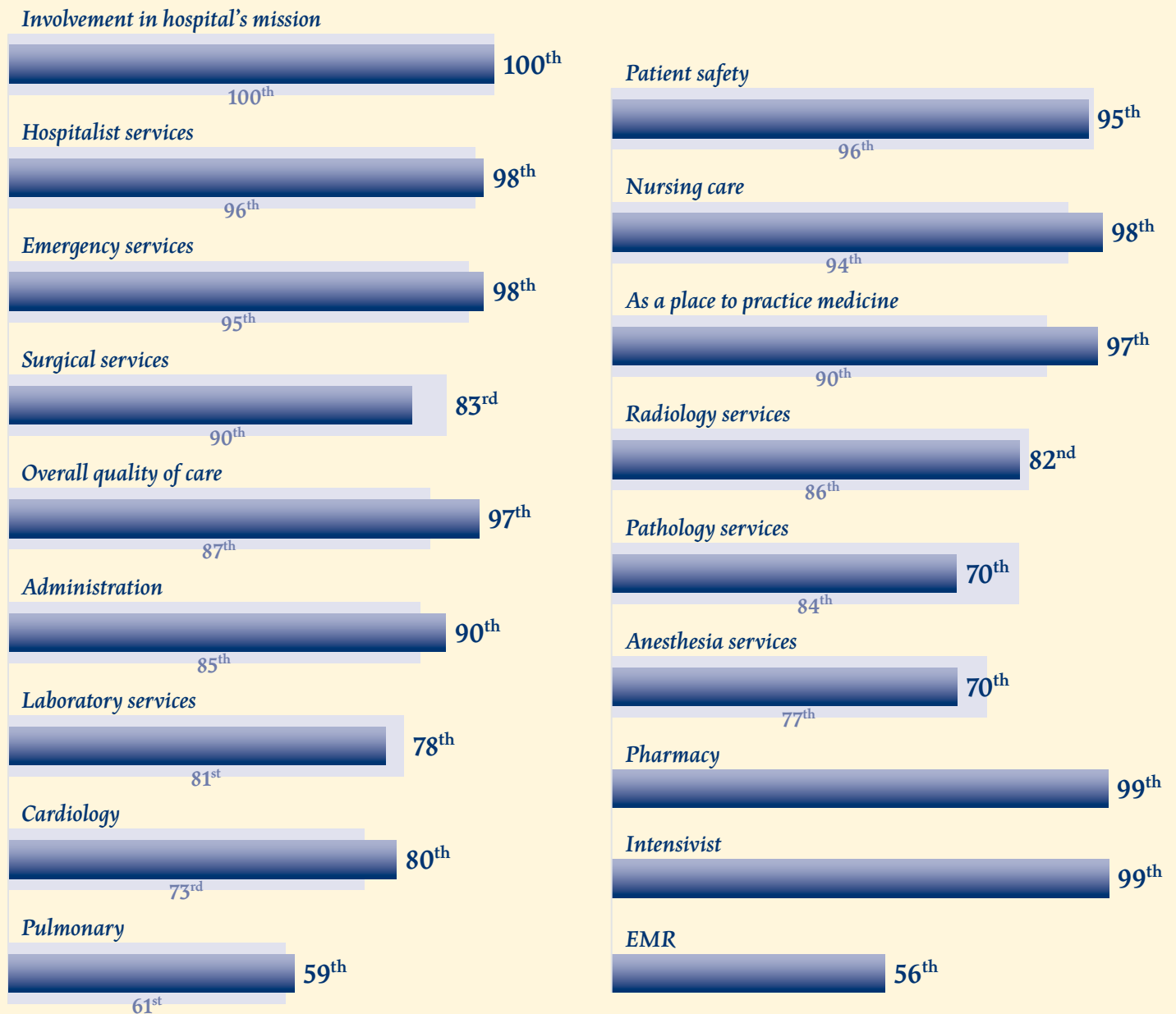
Physician Satisfaction

Physician Satisfaction PRC Percentile Ranking

2016 and 2015 Surveys

2016 2015

Better ►



Associate Engagement

I am truly blessed to have spent more than half of my life at Castle. I was hired as a part-time PBX operator and a registrar. At the time, I thought the hospital was going to be a stepping stone to a career after graduating college. What I didn't realize was that I was already at the place where I would plant my roots. After graduation I was offered a great position at a large company but when the time came to submit my resignation to Castle I just couldn't do it. Today, as I look back on the twenty-seven years that I have spent at Castle, I am grateful for my decision.

I remember long ago working as an ER secretary. This is where I had my first interactions with an amazing group of physicians. Every single one of them helped to mold who I am today. Through their interactions with patients they taught me compassion, honesty and confidence. I learned teamwork and how a simple smile or compliment could change someone's day. I knew at that time that I wanted to always work with physicians.



Associate Engagement

From the ER I moved to a coordinator position for the next ten years but I never lost sight of wanting to be back working directly with physicians. Four years ago a position opened with the Medical Staff. I was again blessed by the additional training provided by Castle to allow me to qualify for this position.

I love what I do. There's nothing more to it. I just love my job. I feel this burst of love in my chest when I think about the opportunities that I have had at Castle. So many people helped me along my journey. I see some of these people who helped me to grow professionally and personally who are nearing retirement, and my heart is so full of gratitude toward them. Castle is my family. How could it not be?

— Heather Gibson, CPCS, Physician Services Director



Associate Engagement

Each year Castle associates provide feedback using a survey developed by Gallup, Inc., to measure associate engagement. This survey is used by numerous health care and social service institutions across the United States including Adventist Health, with a total of 1.3 million persons participating.

The chart on the facing page shows Castle's national percentile rankings of our associate engagement

scores in twelve different areas. These rankings are compared to the average of all hospitals in the Adventist Health system.

We are pleased that since we began using the Gallup survey, Castle Medical Center has been the top performer in Adventist Health. The hospital has also distinguished itself by having the highest level of associate participation in the survey.

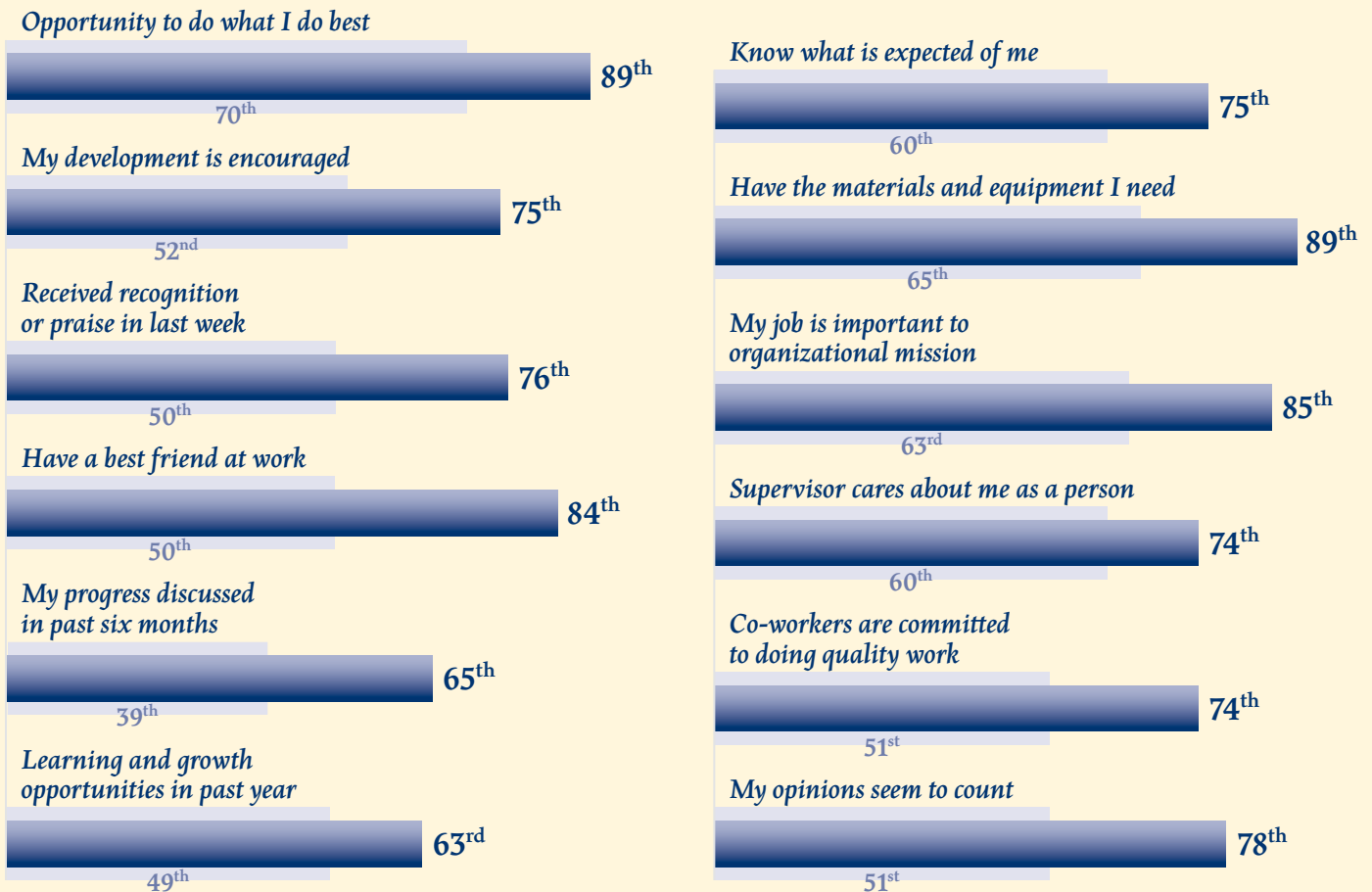


Associate Engagement

Associate Engagement Gallup Percentile Ranking 2016 Survey

Better ►

■ Castle ■ Average for Adventist Health



Inpatient Care

“I would like to convey my appreciation to Castle Medical Center for the excellent care my young adult daughter received while having her appendectomy surgery. From the moment we entered your hospital doors to her CAT scan and diagnosis, we were met with caring staff who were committed to making my daughter’s care thorough and compassionate with the highest medical care. Everyone we interacted with was

friendly and truly helpful. The staff at Castle is truly professional with attention to detail and a desire to make sure their patients receive excellent care. We never had to even ask for anything as your staff continually checked on my daughter to make sure she was comfortable in her recovery. It was especially helpful that they monitor her for pain and promptly provided pain relief.”

— A thank you note from a patient’s mother



Outpatient Care

“I wish I had found Adventist Healthcare center of Laie a long time ago—I was finally able to get rid of an incompetent MD! Now also my records will all be in the same place as I get my mammogram at Castle hospital.”

“Dr. McCarthy is one of the best if not the best doctor I’ve had in my life. Very caring and thorough.”

“I recommend Dr. Angela McCarthy and her staff to everyone! They’re that amazing! AND I love Dr. Keller and his staff as well. He is a wonderful doctor. He is the only one who has helped me with my chronic condition.”

— Notes regarding our Outpatient Care clinics



Inpatient Care

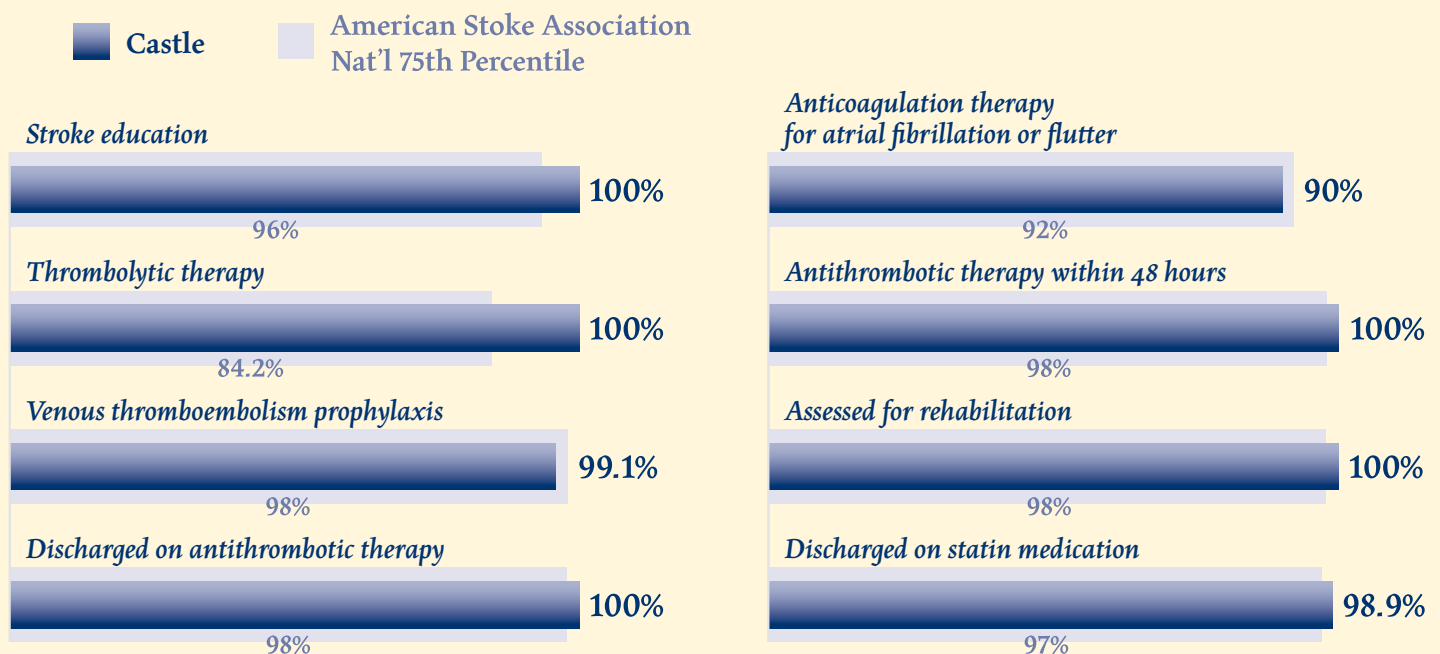
Stroke

Castle has maintained its designation as an official “Get With The Guidelines®” (GWTG) hospital for stroke since 2006, after implementing the secondary prevention guidelines issued by the American Heart Association and the American Stroke Association. Research has established these guidelines for the optimal treatment of patients experiencing stroke.

We are pleased to note that in 2016, we achieved 100% compliance with most of the GWTG guidelines for the treatment of stroke. The hospital continues to focus its efforts on clinical feedback and collaboration with physicians to make further improvements.

Stroke Guideline Compliance

Year 2016



Inpatient Care

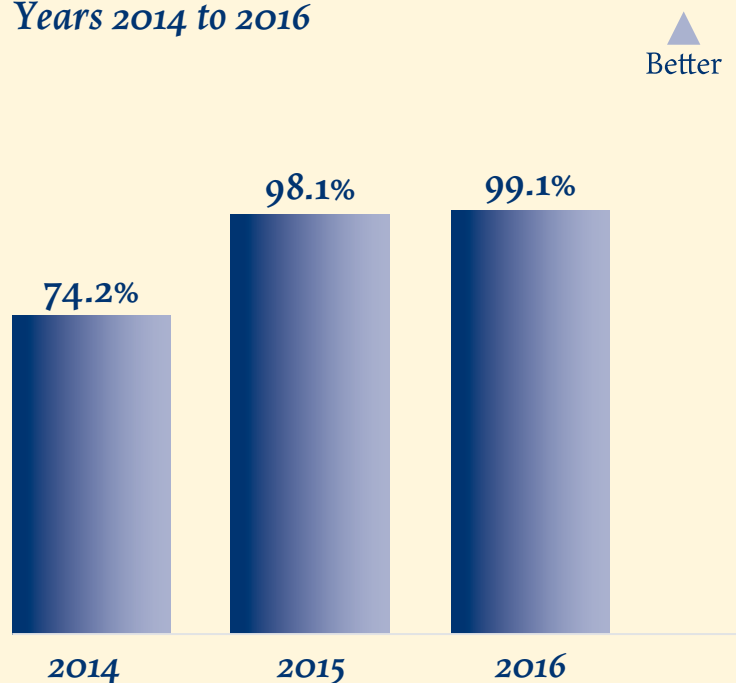
Venous Thromboembolism (VTE)

Venous thromboembolism is a disease that includes deep vein thrombosis (DVT) and pulmonary embolism (PE). DVT is a condition that happens when a blood clot forms in a deep vein, usually in the leg. PE then happens if a clot breaks off and travels through the bloodstream and into the lungs.

VTE is the leading cause of preventable hospital deaths. Research has established best-practice guidelines that, when followed, produce the best clinical outcomes for hospital-acquired but potentially preventable VTE. Castle has dedicated resources to consistently implement these life-saving guidelines.

VTE Prophylaxis Guideline Compliance

Years 2014 to 2016



Inpatient Care

Staff Vaccinated Against Influenza

Influenza, also known as the flu, is a contagious respiratory illness caused by the influenza viruses. Serious outcomes of influenza infection can include hospitalization or death. Some persons, such as older adults and those with certain health conditions, are at higher risk for serious flu complications, and many patients at an acute care hospital would normally be part of this higher-risk group.

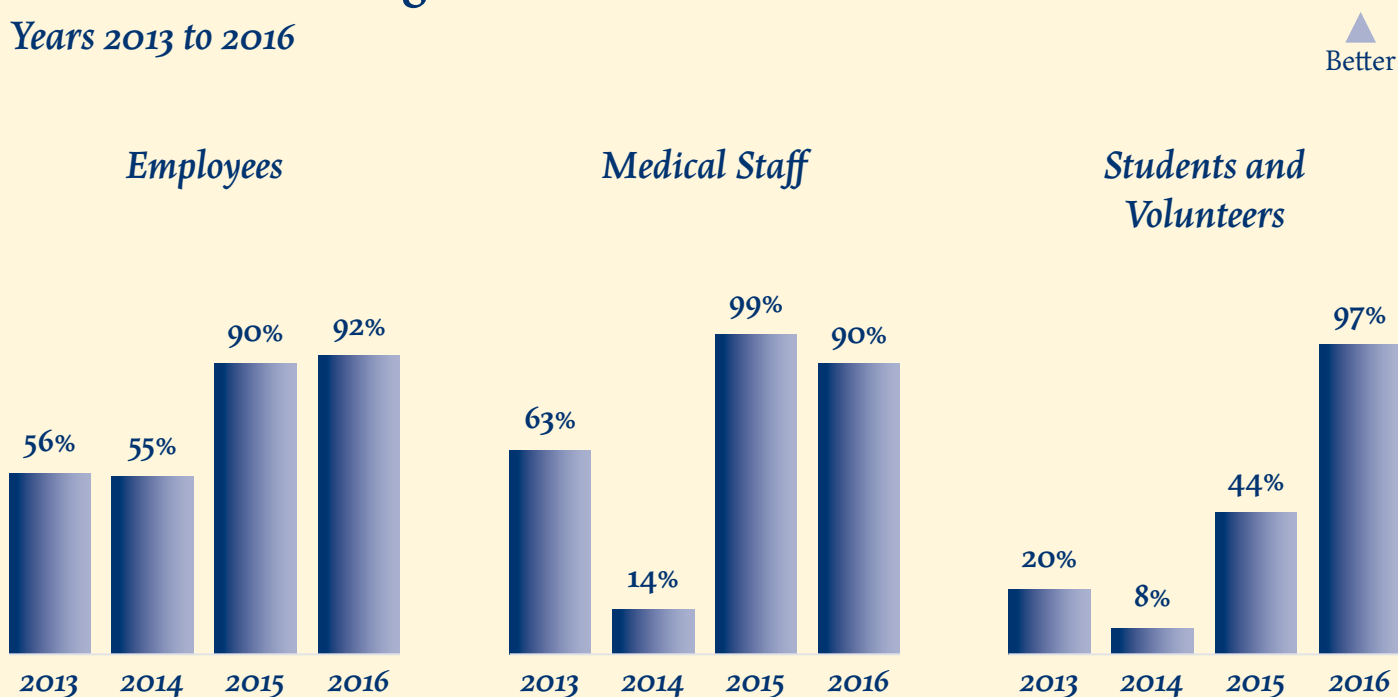
Receiving an influenza vaccination each year is the best way to keep from becoming infected and then spreading the flu to others. The U.S. Department of

Health and Human Services has set as 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.

Staff Vaccinated Against Influenza

Years 2013 to 2016



Inpatient Care

Surgical Site Infections

Surgical site infections (SSIs) are the most common health care–associated infections in the United States. SSIs occur in approximately 1.9 of every hundred patients undergoing a surgical procedure. SSIs can result in substantial morbidity, prolonged hospitalizations, and even death.

The charts below show rates of SSIs at Castle in two classes of surgical procedures. Class I procedures are those with no complicating factors and where the respiratory, digestive, genital, and urinary tracts

are not entered; in Class II procedures, at least one of these areas of the body *is* entered.

Castle has implemented evidence-based practices to reduce the number of SSIs, including bathing patients with chlorhexidine prior to surgery, surgical personnel performing a surgical scrub of hands, up to the elbows, with an antiseptic agent, administering appropriate pre-operative antibiotics, and providing separate sterile instruments to close complex surgical incisions.

Surgical Site Infections per 100 Procedures

Years 2013 to 2016

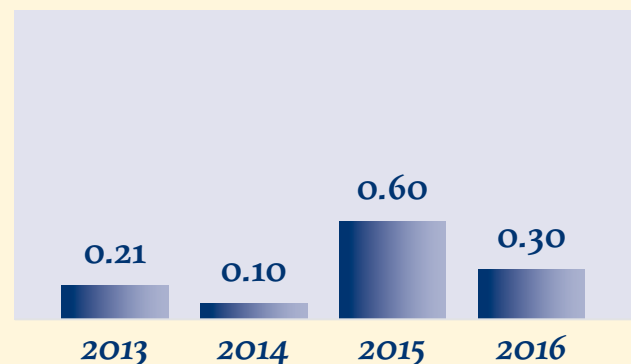
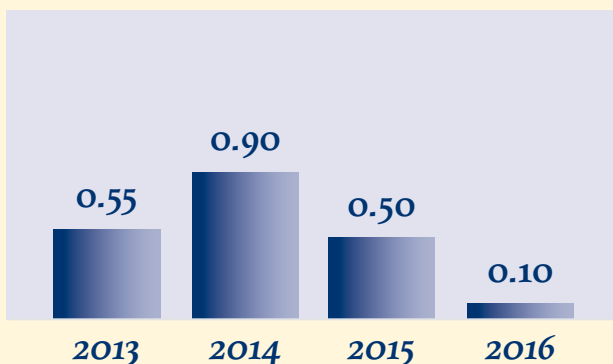
Better
▼

Class I

Class II

National Average = 1.9

National Average = 1.9



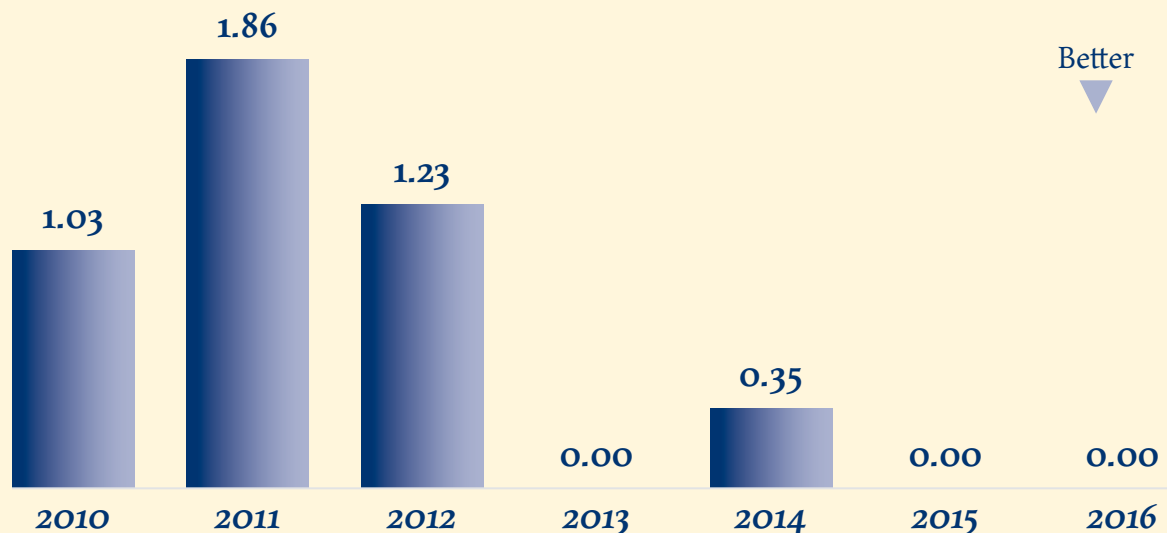
Inpatient Care

Catheter-Associated Urinary Tract Infections

Catheter-associated urinary tract infections (CAUTIs) cause over 35% of all hospital-acquired infections in the United States. CAUTIs can lead to subsequent bacteremia, extended illness, higher hospital costs, longer lengths of stay (LOS), and even patient death.

Over the last three years, Castle has outperformed most hospitals in the United States in this measure. We are particularly pleased that during the past two years, the hospital experienced no CAUTIs at all.

Catheter-Associated Urinary Tract Infections per 1,000 Catheter Days *Years 2010 to 2016*



Inpatient Care

Central Line–Associated Bloodstream Infections

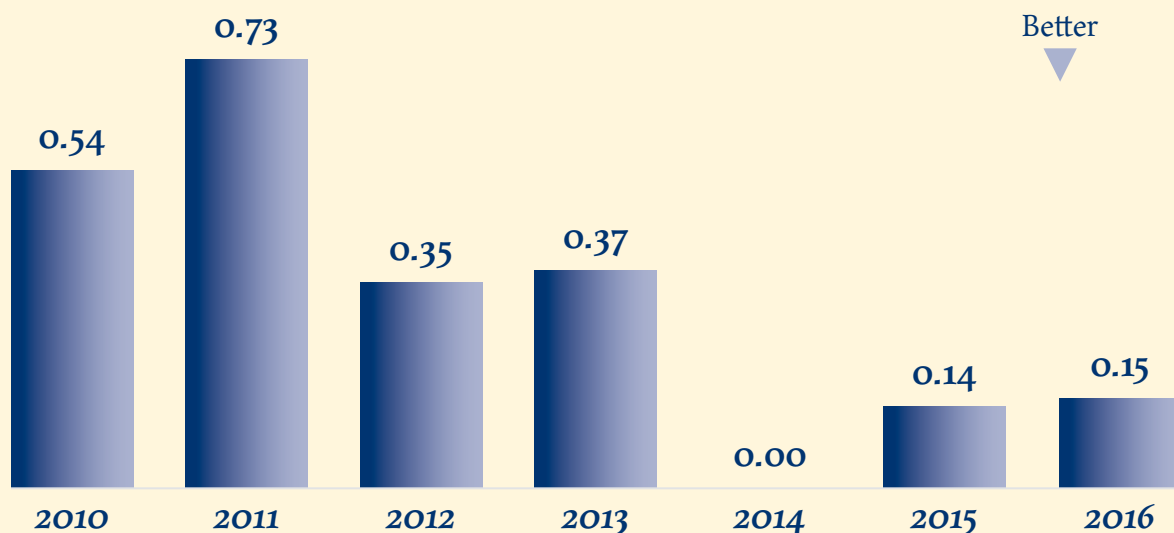
Central line–associated bloodstream infections (CLABSIs) can cause severe illness, extended lengths of stay (LOS), and loss of function, and can even be life-threatening.

Castle’s goal is to eliminate these infections by implementing evidence-based practices to reduce bacteria that could enter the central line catheter.

As with catheter-associated urinary tract infections, Castle has performed better in this area in recent years than most other hospitals in the nation.

Central Line–Associated Bloodstream Infections per 1,000 Line Days

Years 2010 to 2016



Inpatient Care

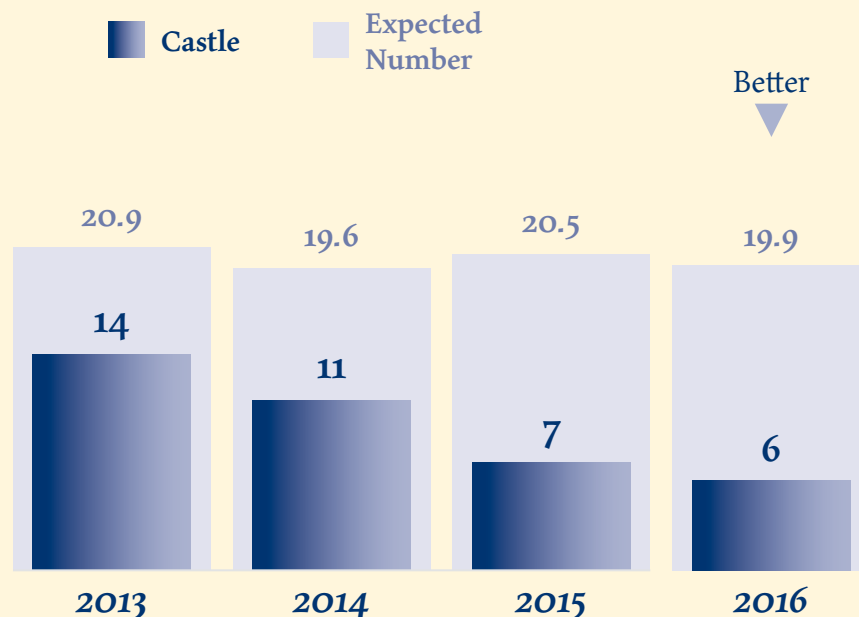
Clostridium Difficile Infections

Clostridium difficile infections (CDIs) can cause severe complications for hospital patients that may compromise their ability to recover from illness. In health care settings, CDIs are linked to the use of antibiotics, which sometimes eliminate natural bacteria that help keep *Clostridium difficile* in check, and to environmental contamination by its spores.

In order to reduce the incidence of CDIs, Castle uses evidence-based practices and has begun participation in a statewide hospital antimicrobial stewardship collaborative. (Please turn to page 66 to read more about this initiative.)

Over the last three years, Castle has decreased the number of hospital-onset CDIs so that it is now well below the number expected by the Centers for Disease Control and Prevention (CDC).

Clostridium Difficile Infections Years 2013 to 2016



Inpatient Care

MRSA Bacteremia

Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia is a bloodstream infection caused by staph bacteria that have developed resistance to many antibiotics. This resistance makes MRSA infections difficult and expensive to treat, while extending the patient's length of stay and increasing the risk of death.

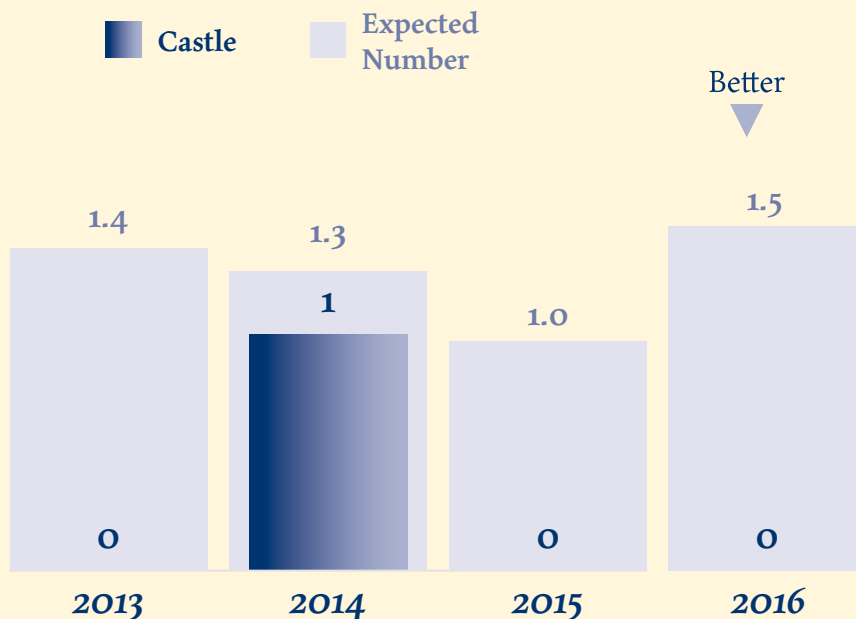
Castle prevents MRSA bacteremia through multiple approaches, including admission screening of all

patients, isolation precautions, monitoring of hand hygiene compliance, environmental cleaning with MRSA-active disinfectants, daily bathing of high risk patients with chlorhexidine, and electronic alerts to ensure isolation is initiated upon patient readmission.

During the last three years, the incidence of MRSA bacteremia at Castle has remained well below the number expected by the Centers for Disease Control and Prevention (CDC).

MRSA Bacteremia

Years 2013 to 2016



Inpatient Care

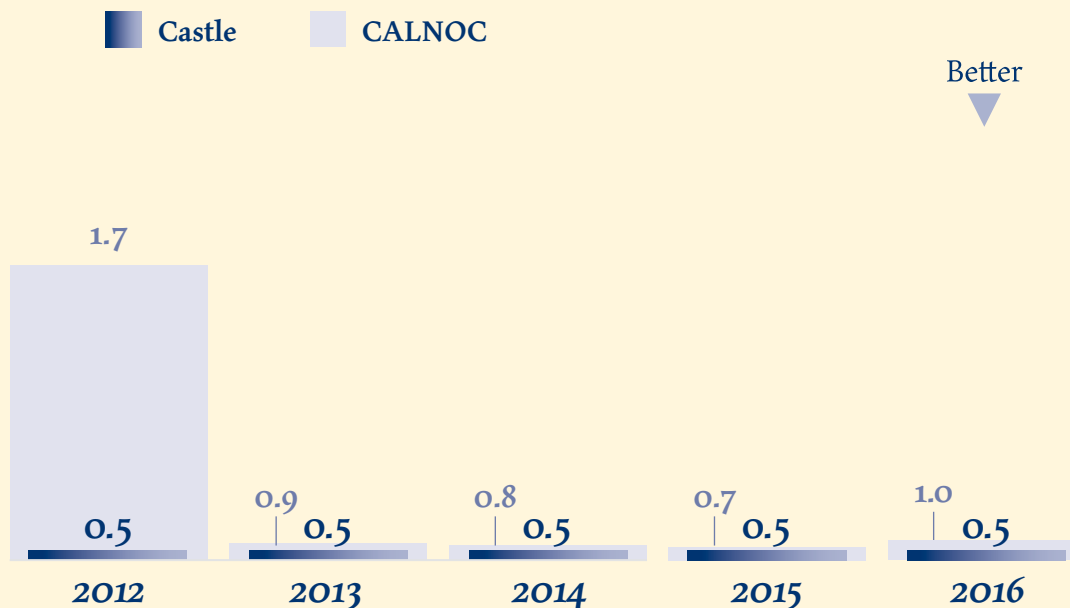
Hospital-Acquired Pressure Ulcers

Pressure ulcers are areas of damaged skin caused by a variety of environmental conditions. Pressure ulcers can lead to patient discomfort, increased length of hospitalization, and other more serious complications.

Strategies to prevent pressure ulcers include keeping the patient's skin clean and dry, changing position frequently, and using pillows and other products that relieve pressure.

We are pleased the Castle's rate of hospital-acquired pressure ulcers is well below the national average reported by the Collaborative Alliance for Nursing Outcomes (CALNOC).

Hospital-Acquired Pressure Ulcers per 1,000 Patient Days *Years 2012 to 2016*



Inpatient Care

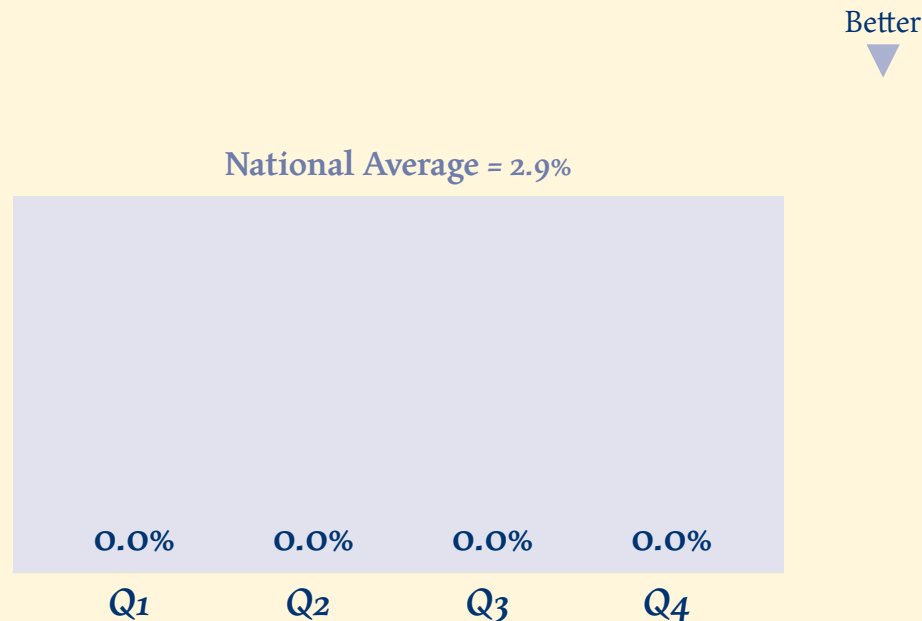
Early-Term Elective Deliveries

An elective delivery is a delivery done for a non-medical reason, such as the desire of the parents to schedule the baby's birth at a particular time. The American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) have a standard that requires 39 weeks of gestation to be completed before an elective delivery, either vaginal or operative. Compared with newborns delivered at 39 weeks of gestation, early-term 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.

The number of elective deliveries that a hospital performs earlier than 39 weeks has recently become a measure of quality emphasized by The Joint Commission and the Centers for Medicare and Medicaid Services (CMS). Castle's Birth Center has developed procedural controls to prevent such deliveries, and during 2016, the hospital did not perform a single one.

Elective Deliveries Performed Before 39 Weeks *1st to 4th Quarter 2016*



Inpatient Care

Patient Fall Rate in the Medical and Surgical Units

Based on the average number of patient falls reported by the California Nursing Outcomes Coalition, and in accordance with our parent corporation, Adventist Health, Castle Medical Center set a stringent target for 2016 of no more than 2.0 falls per 1,000 patient days. The hospital has consistently met this fall prevention target over the last five years.

We attribute this success to ongoing measures recommended by Castle's Fall Task Force, which is made up of team members from a variety of disciplines, including nursing, pharmacy, imaging, physical therapy, and quality.

While we successfully met our target for 2016, we believe that even a single patient fall is one too many. We continually and aggressively seek ways to prevent falls and any associated injuries entirely.

Patient Falls per 1,000 Patient Days

Years 2008 to 2016



Inpatient Care

Thirty-Day Readmission Rates

The readmissions program, created under the Affordable Care Act, was initially established to determine how often patients treated for acute myocardial infarction (AMI), heart failure (HF), and community-acquired pneumonia (CAP) had to return to the hospital within thirty days of discharge.

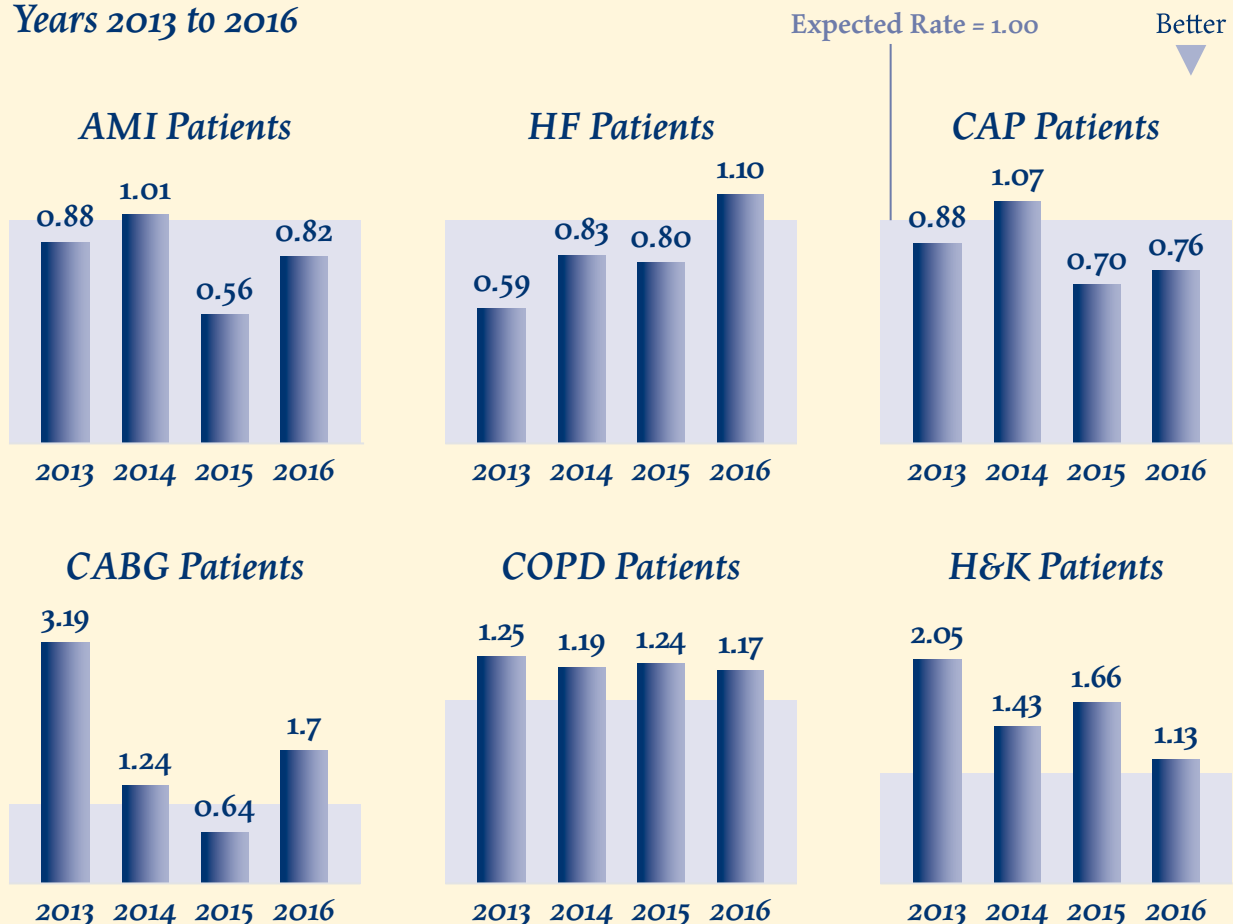
The rates on the chart below are risk-adjusted based on the patient's age, gender, past medical history,

and other diseases or conditions. The expected risk-adjusted rate is 1.00.

Castle has implemented processes to help prevent readmissions, some of which include daily rounding with the physician and primary nurse to plan for discharge, medication reconciliation, and collaboration with those who are assisting with transition of care.

Thirty-Day Readmission Rates

Years 2013 to 2016



Inpatient Care

Acute Length of Stay

For several years, Castle Medical Center has focused efforts on streamlining care processes so that patients can be discharged from the hospital and be returned to the healing environment of their own homes as soon as it is appropriate for them.

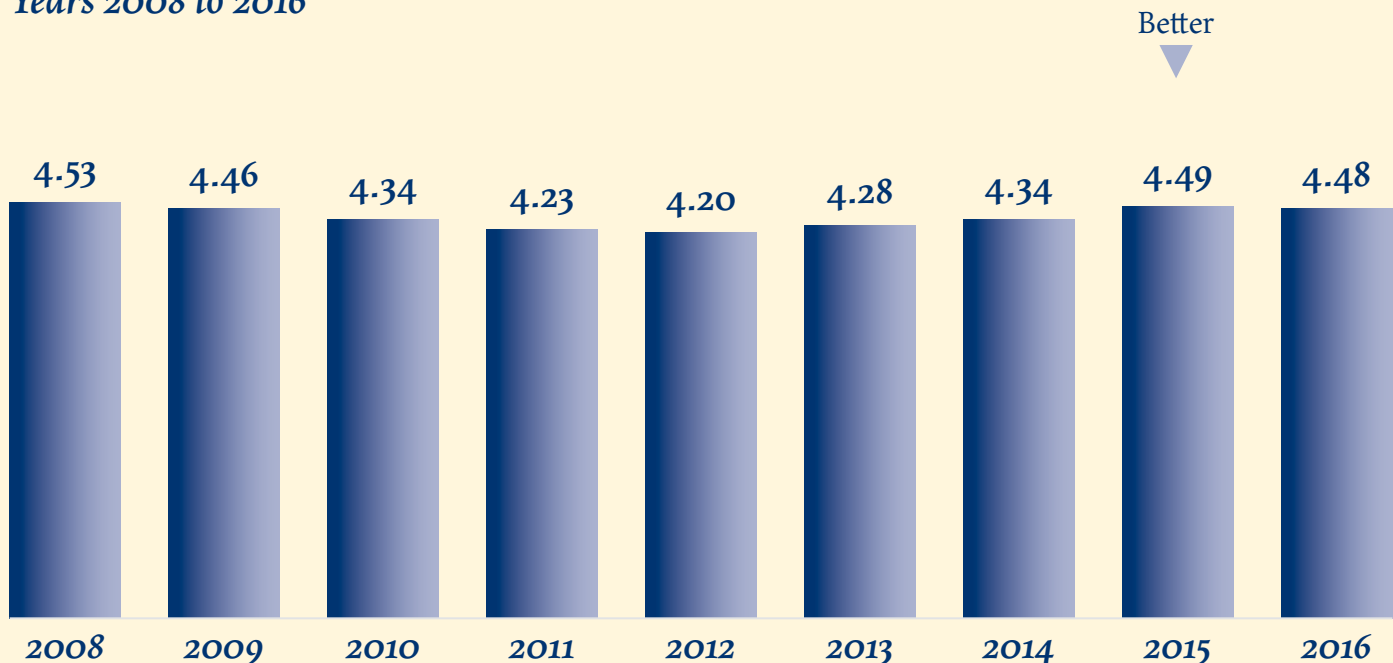
Our biggest challenge in this area continues to be finding proper placements for our patients who are economically and/or socially challenged, may not

have health insurance that covers external placements, and need long-term therapy.

Efforts have been made to strengthen relationships with community-based facilities through Windward Community Partners, a coalition of health care organizations, in order to expedite long-term care placements for those patients who require them.

Average Acute Length of Stay

Years 2008 to 2016



Inpatient Care

Risk-Adjusted Mortality Rate

The risk-adjusted mortality rate is a rate of death that is adjusted for predicted risk based on a patient's diagnosis. The expected rate is 1.00.

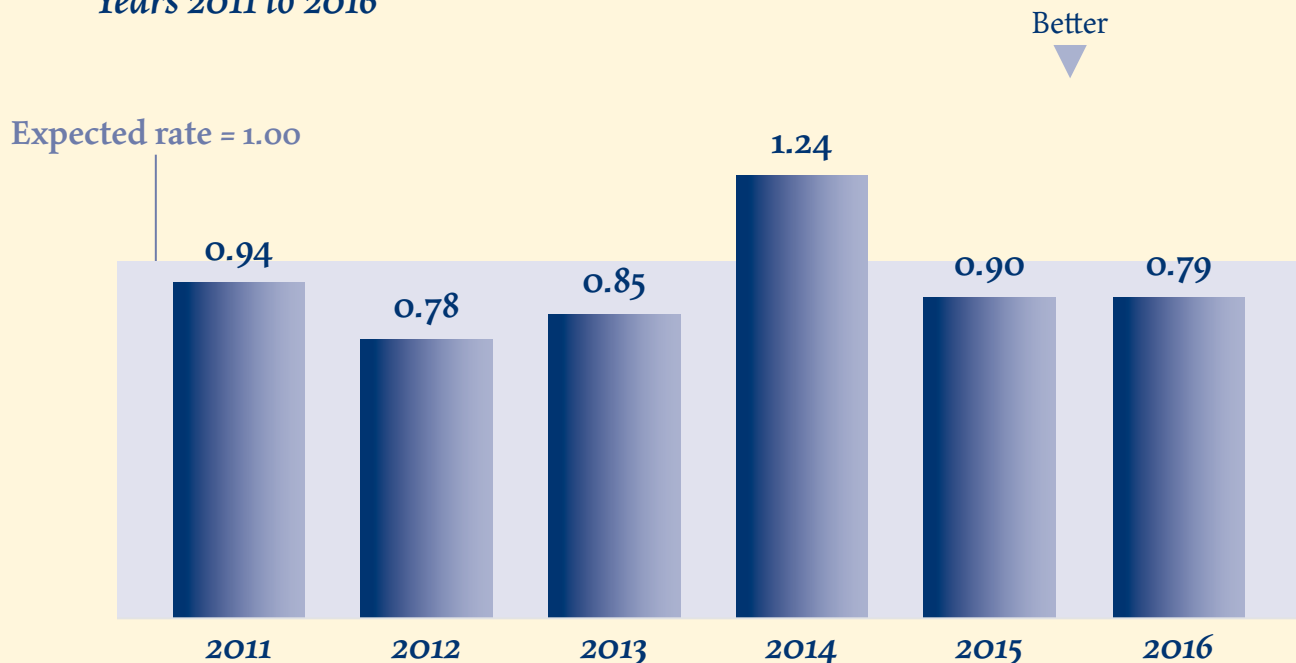
Below is Castle's risk-adjusted mortality rate for patients with diagnoses of total hip or knee arthroplasty, acute myocardial infarction,

chronic obstructive pulmonary disease (COPD), coronary artery bypass graft, heart failure, pneumonia or stroke.

While our risk-adjusted mortality rate is below the expected value of 1.00, it is our goal to reach a top-performer target rate of 0.78.

Risk-Adjusted Mortality Rate

Years 2011 to 2016



Emergency Care



Dear Friends, I wanted to share with you about the excellent care my fiancé received in your Emergency Room. We came in with a true medical emergency and each person individually and collectively worked in unison to have him back in the ER bay and treated immediately by the nurses. Each nurse was professional, very efficient, and compassionate for my fiancé's suffering and resolved his immediate emergency with tremendous skill. The ER doctor then came in and compassionately and thoroughly performed an evaluation. Only in one's own personal crises do we get a unique chance to share in the gifted expertise and compassion that Castle employees display in a daily fashion to patients and family who come to them. Thank you again.

— A thank you note from one of our community physicians

Emergency Care

Reroute Hours

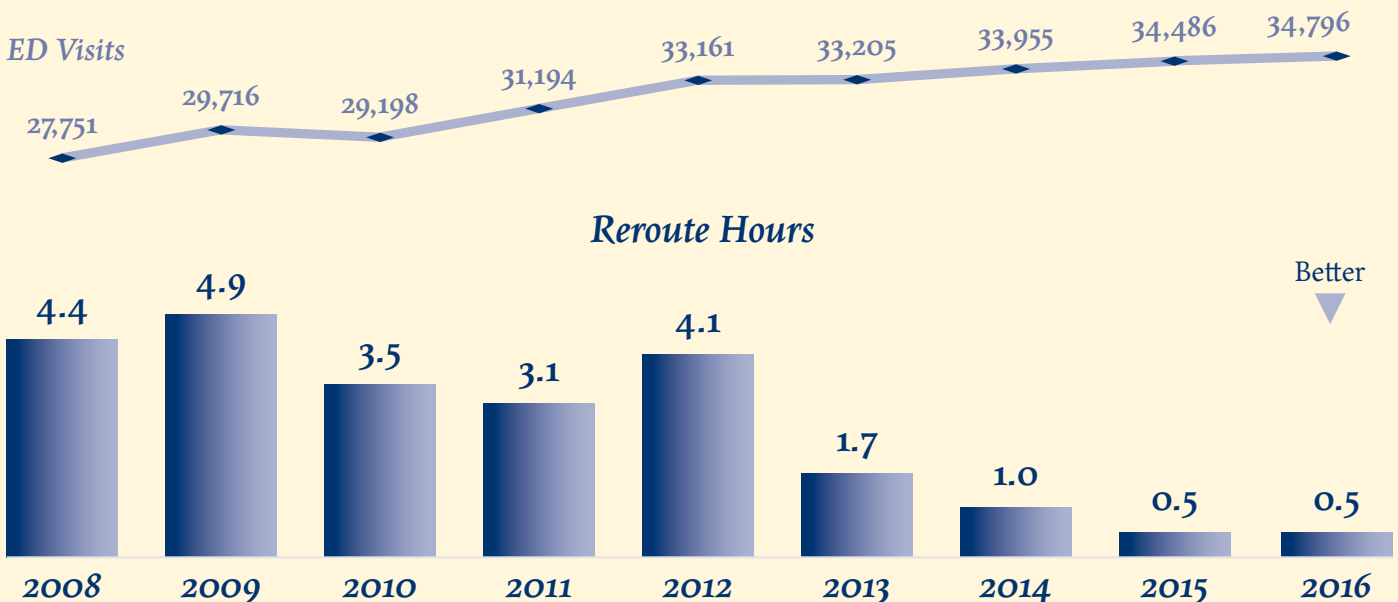
Reroute hours are the hours of an emergency department's operation during which ambulance patients are unable to be admitted because of high patient volumes and consequently need to be rerouted to other hospitals. Castle monitors its reroute hours on a monthly basis to ensure that the Windward O'ahu community has unrestricted access to our

Emergency Department (ED). Reducing the number of reroute hours becomes more difficult with greater patient volume.

Remarkably, Castle's ED was able to reduce reroute hours even further in 2015, despite the increased number of patient visits.

Reroute Hours per 1,000 ED Visits

Years 2008 to 2016



Emergency Care

Patients Left Without Being Seen

The most recent publicly available analysis shows that about 2.0% of emergency patients in the United States leave an emergency facility without ever being seen, frequently due to long wait times. Even though Castle's patient volume has grown over the years, only 0.2% of our patients in 2016 left the Emergency Department (ED) without being seen.

Castle attributes our success to the following efforts:

- Moving ED patients from intake to treatment as quickly as possible
- Getting a physician rapidly to each patient's bedside
- Ensuring efficiencies that reduce the time patients must spend in the ED.

ED Patients Left Without Being Seen

Years 2008 to 2016



Emergency Care

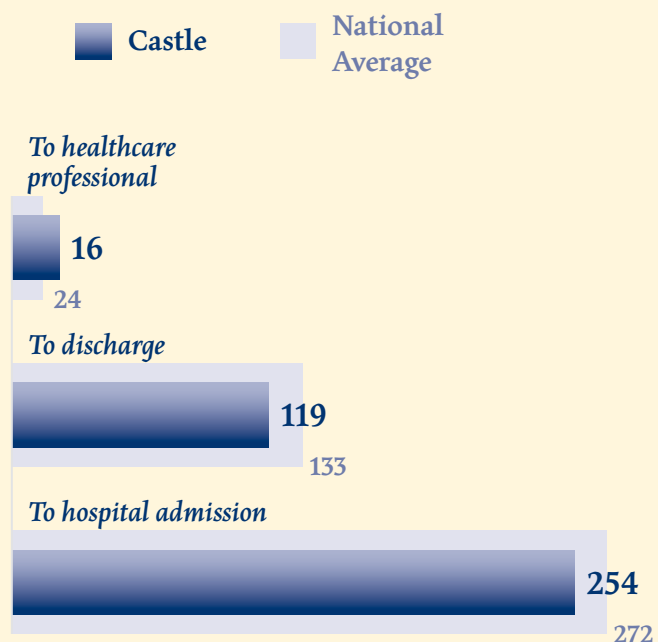
Wait Times

A major part of a patient's experience at any ED is how long the patient has to wait for care. The chart on this page shows our ED wait times, from the moment a patient enters the door to the times the patient sees a doctor, is discharged, or is admitted to the hospital.

In 2016, patients coming to Castle's ED had shorter wait times in all three categories compared to the national averages.

ED Wait Times Minutes after Entering Year 2016

◀ Better



Castle Health Group



Castle Health Group (CHG) is a partnership between Castle Medical Center and more than one hundred area physicians.

Originally founded in 1996 as a group of physicians associated primarily for the purpose of contracting for managed care with health insurance carriers, in 2012, Castle Health Group became what is known as a Clinically Integrated Network. This is a specific type of collaboration between a hospital, its ancillary services, and local physicians that implements programs for the prevention and treatment of medical conditions in the community. Clinically Integrated Networks have been established nationwide to better achieve some of the goals of the Affordable Care Act, including the aims of improving patient satisfaction, greater quality outcomes, and contained cost.

In 2007, the major associations of primary care physicians in the United States developed and endorsed a model for the delivery of health care called the Patient-Centered Medical Home (PCMH). The principles of the PCMH model stipulate that health care ought to be comprehensive, patient-centered, coordinated, accessible, and committed to quality and safety.

Castle Health Group has partnered with HMSA, the largest health insurer in Hawai'i, to fully implement the PCMH model for patients who are covered by most HMSA plans. The group is also beginning to include specialists, thereby moving towards what is known as a Patient-Centered Medical Neighborhood.

CHG has become a top performer in the state in its adherence to the PCMH principles and strives to perform in the top decile nationally in all metrics.

Castle Health Group

As a Clinically Integrated Network, Castle Health Group (CHG) implements various programs both to prevent and to treat medical conditions in the community.

As shown in the chart below, CHG's performance in the implementation of many of these programs is in

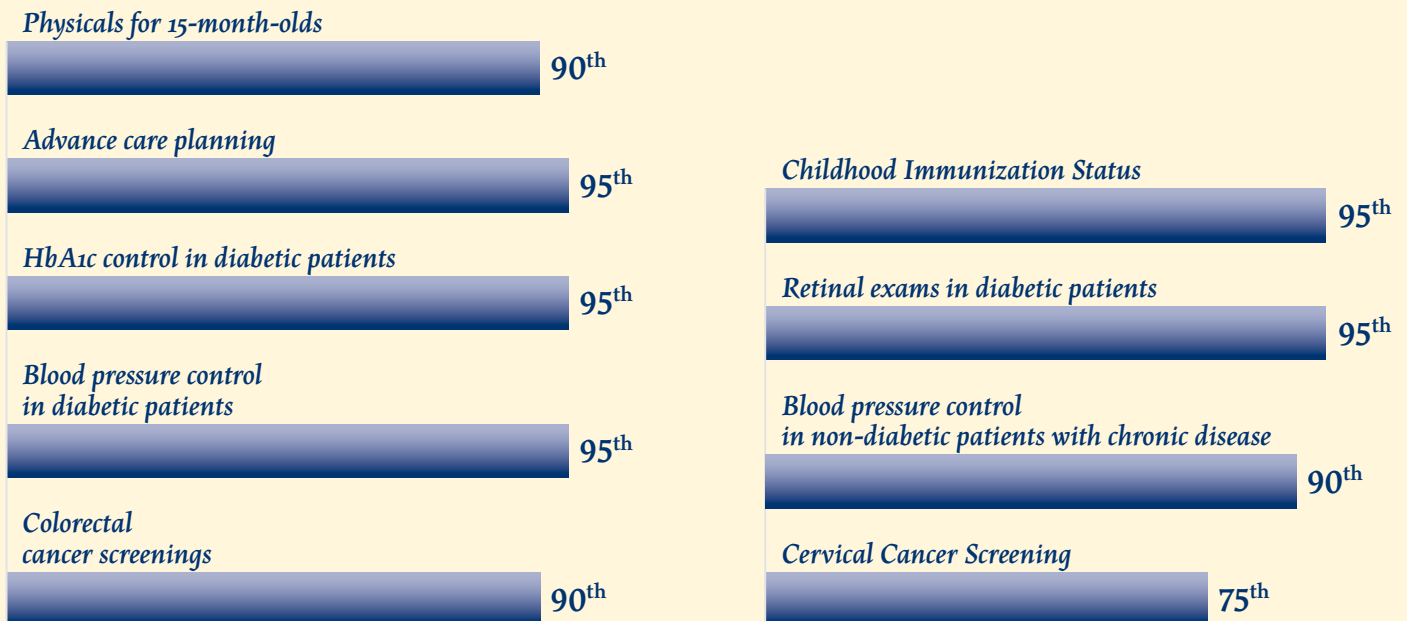
the top decile in the nation, as calculated by the National Committee for Quality Assurance (NCQA), a national non-profit organization dedicated to improving health care quality.

CHG is working on improving compliance with Cervical Cancer Screening.

Castle Health Group Performance National Percentile Ranking

Jan 2016 to Dec 2016

Better ►



Advancements and Innovations



Groundbreaking held for Renovation project at Castle Professional Center

In June of 2016, Castle Medical Center held a groundbreaking ceremony to mark the beginning of renovations at the Castle Professional Center in Kaneohe. Since 1987 the building has served as a one-stop facility for a variety of professional services including physicians and dentists. Completion of this project is scheduled for fall of 2017.

Holding traditional 'O'O sticks used in ancient Hawai'i to turn ground is from left: Paul Silen, VP Commercial Division, Hawaiian Dredging Construction Company; May Anderson, VP Project



& Development Services, JLL; Kathy Raethel, President & CEO, and Laura Westphal, VP Patient Care Services, Castle Medical Center; and Alden Kasiewicz, Principal, Scott Edwards Architecture.

Advancements and Innovations

OKUPU Program



Castle Medical Center has launched a new program to help new associates integrate into Castle’s ‘Ohana during their first year of employment called the ‘Ōkupu Program. In Hawai‘i, the word ‘Ōkupu means to grow like a seed. Just as a seed grows into a plant and produces flowers or fruit, so do we want our new associates to learn, grow, and become a productive member of our Castle ‘Ohana.

The ‘Ōkupu Program begins on the first day of employment. The department leader meets their new associate in person to escort them to orientation, and later in the day will have lunch with them. Leaders also conduct 30 and 90-day check-ins, and round on new associates each month.

Coworkers also volunteer to become official Buddies to new associates. Buddies help to orient new associates to the department, facilitate training, provide a campus tour, and take them to lunch—on the hospital of course!

After two months on the job, Human Resources coordinates a reunion lunch with each new hire orientation group to allow them to reconnect with each other. This lunch also allows HR and administrators to see

how well the ‘Ōkupu Program is working for each new associate and to make interventions if needed.

The remaining months 10 months include encouraging notes form leadership, a check-in survey at 6 months, a 15-minute massage at 7 months, a stainless steel vacuum water bottle gift at 8 months, and a reunion to close out the year.

The intentional interactions by leaders, HR, and coworker Buddies throughout the first 12 months of employment has created a welcoming environment for new associates, and reduced our first year turnover rate to the lowest in many years.

Advancements and Innovations



Castle Medical Center Purchases Hawaii Loa Campus

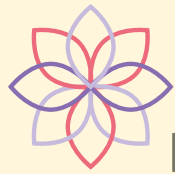
Castle Medical Center announced in December of 2016 that it had completed its purchase of the Hawai'i Pacific University's (HPU) Hawaii Loa campus for future CMC expansion. Over the past 50 years Castle has grown to the point that it has reached its full capacity at its current 8-acre location, and needed to find additional land to continue to effectively meet the healthcare needs of our community. The purchase of this 132-acre parcel of land will certainly help us fulfill our mission to meet that need. Under the terms of the agreement, HPU will lease the property back for at least three years while Castle develops its long range plans for growth and expansion.

Dr. Geoffrey Bannister, HPU president, expressed satisfaction of Castle's purchase stating that he was pleased to have identified a buyer that will continue to use the property to meet the needs of the community,

while allowing HPU to develop its own campus master plan.

The property that originally housed Hawaii Loa College was donated to the school in the 1960s by Harold K.L. Castle, owner of Kaneohe Ranch. The Harold K. L. Castle Foundation expressed support of the sale as well since it was Harold Castle's wish that this parcel of land be used to benefit the windward community. "Castle Medical Center and HPU have been wonderful partners in our community for many years," says Terrence George, President and CEO of the Harold K.L. Castle Foundation. "This announcement of an expanded facility means that we can continue to count on Castle Medical Center to provide vital healthcare services to our Windward community for many years to come," George added.

Advancements and Innovations



IN:NOVATION STATION

Castle Receives \$29,000 Innovation Grant

This year, the Adventist Health Innovation Council awarded \$348,000 in funds to 11 proposals submitted for Innovation Seed Money grants. Castle Medical Center won a grant for \$29,000 for a proposal submitted by Nicole Kerr, director of Wellness & Lifestyle Medicine, titled “Stress Less with Moving Machines.” (Watch an explanatory video at <https://www.youtube.com/watch?v=GZmQEs89jzQ>)

The grant money will be used to purchase several treadmill, stationary and recumbent bike workstations

that will promote movement, productivity, and reduce stress. The dangers of sitting too long are well documented, but these devices counteract these dangers by increasing movement while sitting at a desk or working on a computer.

The seed money initiative was introduced in 2011 and encourages new ideas for processes, products, services and systems to benefit Adventist Health facilities and patients.



CANCER CENTER OF HAWAII

New Partnership

In late 2016, Castle Medical Center signed on to be a 25% partner of the Cancer Center of Hawaii along with three other partners. This partnership includes: Castle Medical Center, Hawaii Pacific Health, St. Frances

and Pacific Radiation Oncology, Inc. This partnership will allow much needed access of cancer care and treatment to the Windward side of Oahu.

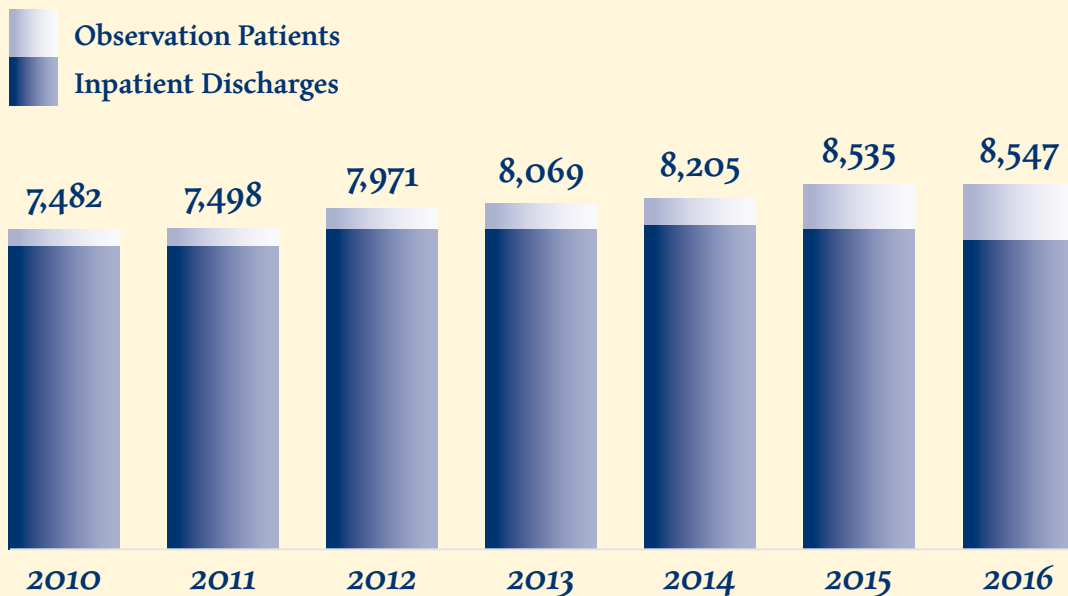
Volumes

Inpatient Volume

In 2016, Castle Medical Center had the highest number of inpatient discharges in our history. Inpatient volume continues to grow each year.

Inpatient Volume

Years 2010 to 2016



Volumes

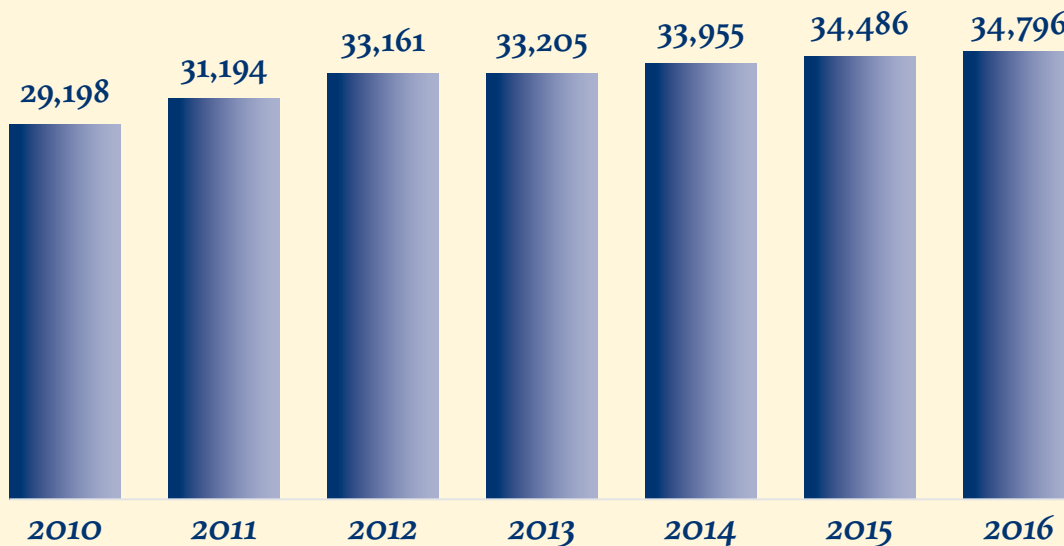
Emergency Department Visits

Despite finishing a full-scale renovation, the Emergency Department at Castle had its busiest year ever in 2016.

This project included the facility's expansion from eighteen to twenty-five beds in order to accommodate the increasing need for its services.

Emergency Department Visits

Years 2010 to 2016



Volumes

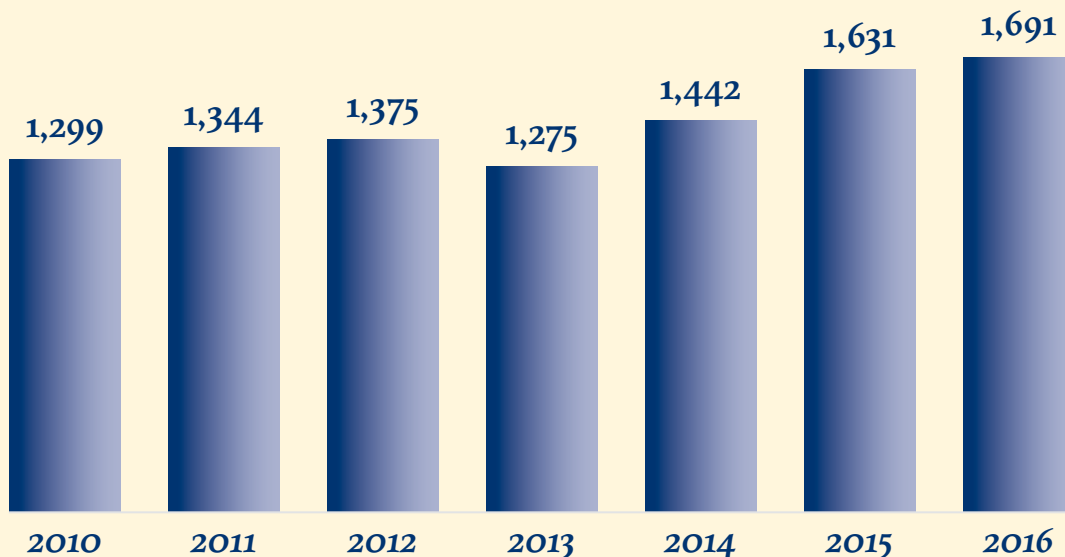
Behavioral Health Discharges

Last year, Castle's Behavioral Health unit had the highest number of patient discharges in the medical center's history, as volumes continue to grow nearly every year.

The small dip in volumes seen in 2013 was an effect of the extensive renovations made to the Behavioral Health unit that year. These renovations resulted in a safer and more modern unit to provide essential behavioral health services to our community.

Behavioral Health Discharges

Years 2010 to 2016



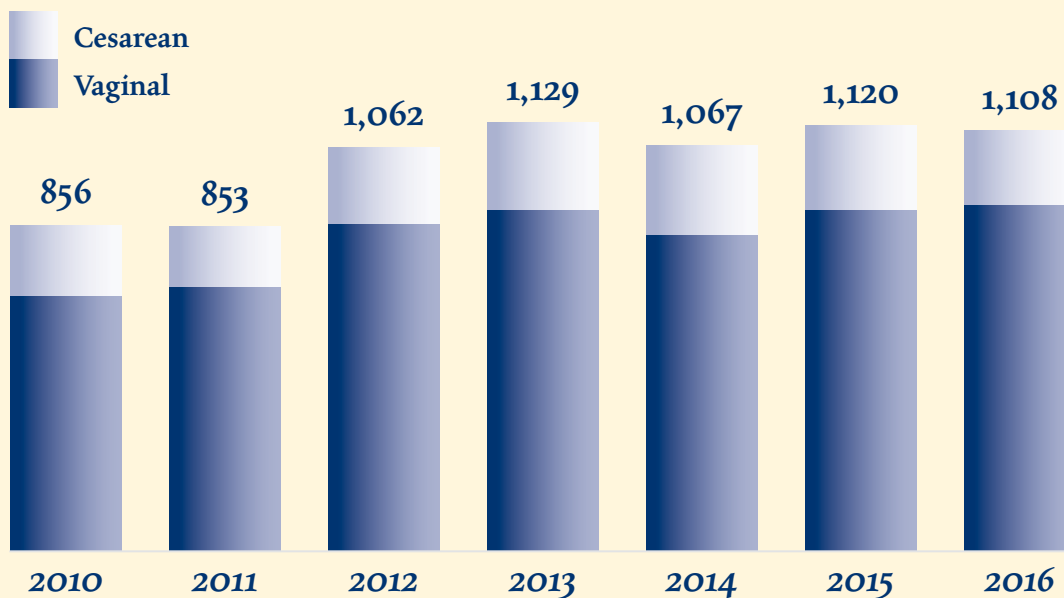
Volumes

Births

Castle's Vera Zilber Birth Center had yet another highly active year in 2016. Patients come from all parts of the island of O'ahu to take advantage of the quality birthing options provided by our beautiful facility.

Births

Years 2010 to 2016



Volumes

Outpatient Visits

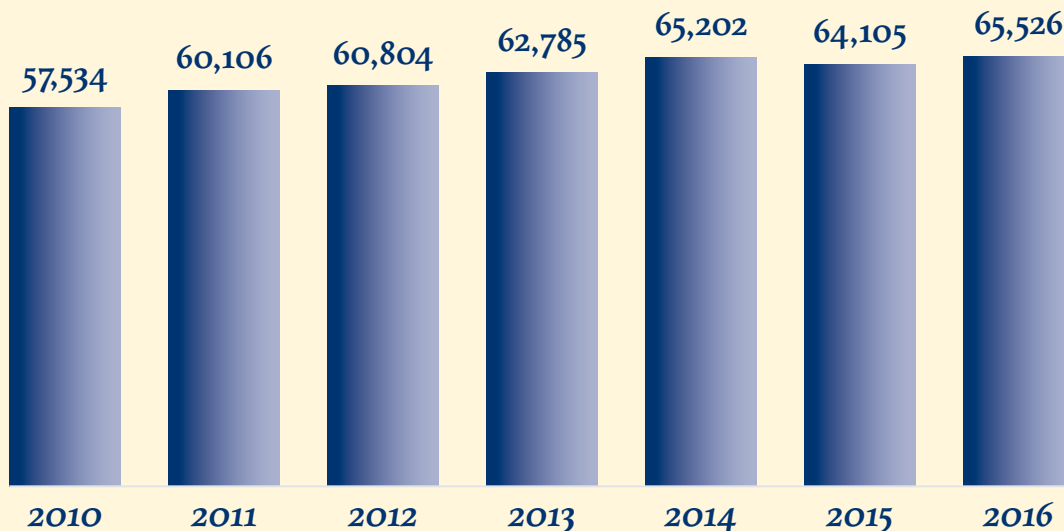
The chart below shows the number of outpatient visits to the Outpatient Clinic, Outpatient Surgery, Respiratory Care, Cardiovascular Services, the Cardiac Cath Lab, Imaging, Angiography, Neurophysiology, the Laboratory, Rehabilitation Services, and the Wellness and Lifestyle Medicine Center.

Also included in the 2016 total are patient visits to the two primary care clinics Castle began operating in the second half of the year in Lā'ie and Kailua.

With the addition of these two clinics, we expect to see more growth in the outpatient services we provide during the coming year.

Outpatient Visits (excluding Emergency)

Years 2010 to 2016



Volumes

Wellness and Lifestyle Medicine Center

During 2016, Castle's Wellness and Lifestyle Medicine Center provided inspiration and tools to help participants build a healthy body, mind, and spirit through an array of programs.

- More than 1507 people from our community participated in the center's health and wellness outreach programs at 63 events. Twenty of these events included children and/or adolescents.
- 661 people received tobacco treatment services in the hospital and over 751 people participated in our Behavioral Health Service inpatient group classes on healthy lifestyle and tobacco prevention education.
- Through a Hawaii Community Foundation Grant, we also provided outpatient tobacco treatment counseling to 151 participants who were primarily low-income, low-education, or unemployed (important, vulnerable groups who have higher tobacco use prevalence and may face additional barriers to quitting tobacco). If appropriate, these people were provided with grant-funded tobacco treatment medications.
- In 2016, we saw 1058 diabetic patients in our diabetes program, which is accredited by the American Association of Diabetes Educators. We provide small group classes twice a week and quarterly grocery shopping tours.
- Our Aloha Kidney Class, taught by nephrologist Ramona Wong, M.D., serves those individuals who have stage 3, 4, or 5 chronic kidney disease but who are not on dialysis. 161 such patients completed this six-class series, which was offered four times.



This translates to 6440 person hours of Kidney Disease Education.

- Eight different types of group fitness classes (4 days a week) were offered throughout the year, with 7163 people participating.
- Ten Wellness Cuisine Cooking classes were held, with 391 people participating.
- Six different community support groups met regularly, with more than 575 people attending altogether.
- The Wellness Center receives referrals for children and adolescents diagnosed with obesity or diabetes.
- In our second year partnering with the Boys and Girls Club of Kailua CMC provided bi-monthly cooking classes for middle-schoolers. We provided 18 classes serving 252 children and 18 adults (Class size is limited to 14 children.)
- Castle continues to offer massages provided by licensed massage therapists to our associates and the community. Over 1,115 individuals took advantage of this popular service in 2016.

Staffing

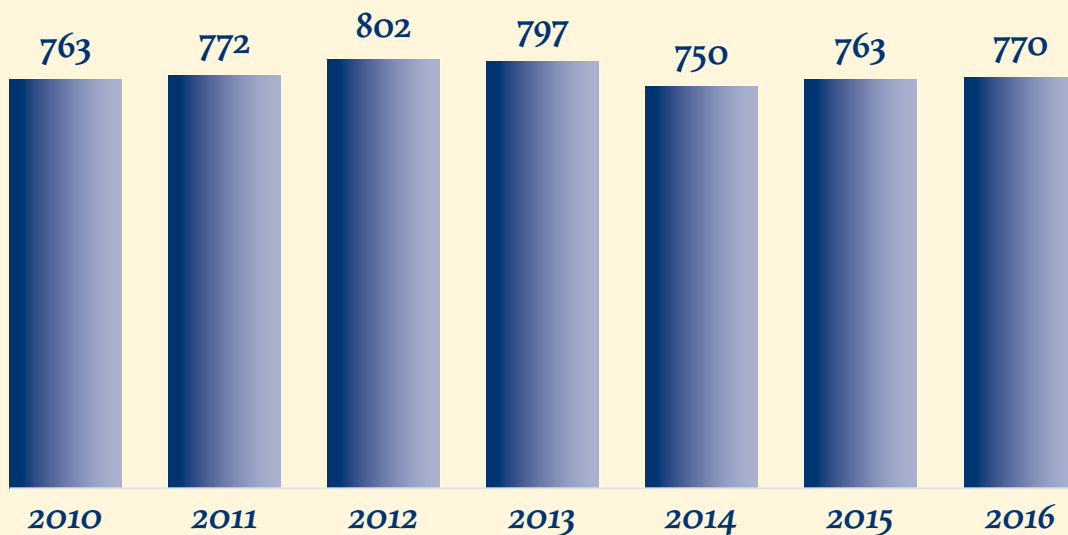
Total Hospital Full-Time Equivalents (FTEs)

Over the years, the number of Castle's FTEs has generally grown along with patient volume.

The apparent reduction in our FTEs seen in 2014 can be entirely attributed to the transfer of Castle's home care division to our corporate parent, Adventist Health.

Total Full-Time Equivalents (FTEs)

Years 2010 to 2016



Staffing

Agency Use

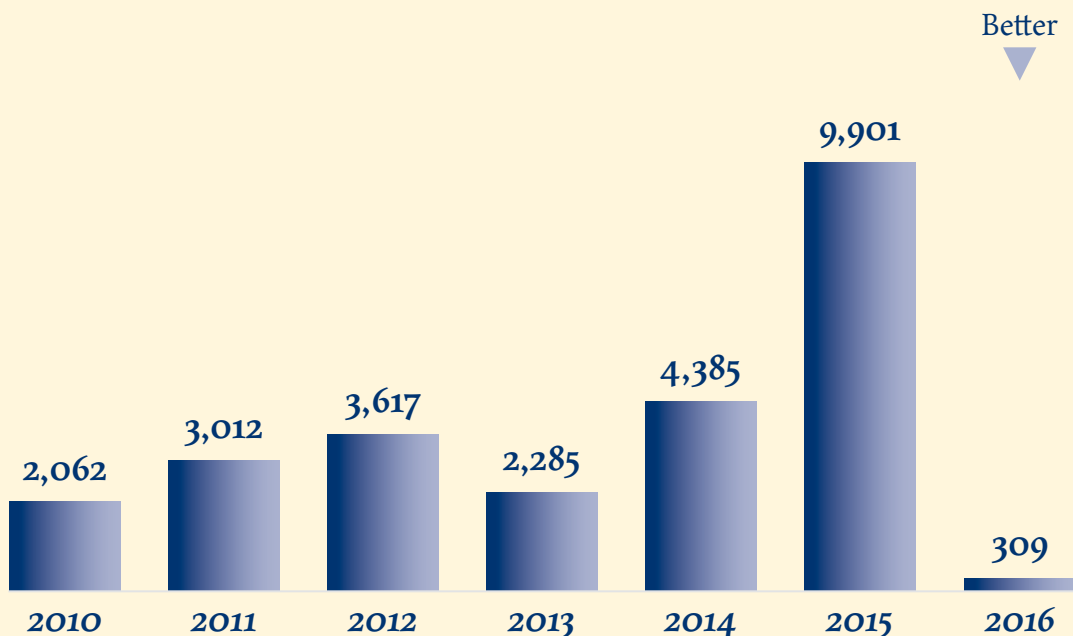
For several years, Castle Medical Center has focused on reducing reliance on agency staffing in order to lower costs and improve quality.

In 2015, the use of agency staffing rose considerably due to increased patient volume and to vacancies in the area of critical care, where the recruitment of

personnel can be challenging. However, we continue efforts to minimize agency use, as we believe the very best care for our patients is provided by our own associates.

In 2016, we were able to reverse this trend.

Agency Hours *Years 2010 to 2016*



Quality Improvement Goals for 2016 and Their Results

Goal

Results

Improve patient satisfaction with:

- Inpatient care
- Outpatient surgery
- The Emergency Department

Improvements have been made, but efforts continue to reach the 90th percentile in all three areas.

Achieve certification as a primary stroke center

In progress, but not yet achieved.

Reduce risk-adjusted mortality rate

Mortality rates have declined, but efforts continue to improve documentation to more accurately reflect expected mortality rates.

Increase the percentage of students and volunteers who are vaccinated against influenza

Successfully improved vaccination rates for students and volunteers from 44% to 97%.

Further improve physician satisfaction with Cardiology

Successfully improved from the 73rd percentile to the 80th percentile.

Reduce Agency Use

Successfully reduced agency use by 97%.

Continue to improve associate engagement scores

Our composite ranking for associate engagement rose from the 65th percentile to the 77th percentile.

Quality Improvement Goals for 2017

Improve patient satisfaction with:

- Inpatient care
- Outpatient surgery
- The Emergency Department

Improve physician satisfaction with:

- Pathology services
- Anesthesia services

Achieve certification as a primary stroke center

Reduce readmission rates



640 'Ulukahiki Street, Kailua HI 96734

Castle Medical Center is a member of Adventist Health, a network of hospitals and health care organizations operating in California, Hawai'i, Oregon, and Washington.

Please visit us on the Web at castlemed.org.