



Castle Medical Center



*Exceptional Medicine
by Exceptional People*

2016
QUALITY REPORT

Our Mission

Mālama ana i kō kākou kaiaulu.

Caring for our community.

Ka'ana i ke aloha o ke Akua.

Sharing God's love.

Our Vision

Castle Medical Center will be a recognized leader providing quality care, wellness, and fiscal strength in a spiritual setting.

Our Values

- The compassionate, healing ministry of Jesus
- Human dignity and individuality
- Excellence in clinical and service quality
- Responsible resource management in serving our communities
- The health care heritage of the Seventh-day Adventist Church
- Each other as members of a caring family

This document is a report on Castle Medical Center's performance and activities during the year 2015.



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Introduction



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The administration and entire staff of Castle Medical Center are most proud to present to our community this publication, the tenth edition of our annual *Quality Report*.

Since the very first edition of this report was published in 2007, the medical center has made countless refinements to our processes, implemented numerous technological innovations, and expanded the health care it provides into many new areas. All of these changes have been made with one aim in mind: to serve the Windward O‘ahu community even better, with ever higher quality health care delivered across a broader range of medical services.

In parallel to the changes made at Castle over the last nine years, the *Quality Report* has blossomed into a publication that is much larger and more exhaustive in its coverage. Many new quality measures have been added to the report that weren't even in common use nine years ago. At the same time, we are pleased to note that the number of awards our hospital receives

has more than doubled since 2007, and with the addition of the “Mission” section of the report, we endeavor to keep our community informed of Castle’s many activities that go beyond what our patients might experience simply by visiting the medical center.

Despite all the changes we have made, though, the goals of this publication remain the same. As part of our commitment to transparency and honesty about the quality of care we provide, we intend for the *Quality Report* to be a tool that will be used by our own staff for continued improvement, and we hope that by publicizing our improvements and accomplishments, we can facilitate enhanced learning at other health care institutions as well.

At Castle, we see our patients, their families, and our associates as our ‘ohana. Through the constant quest for improved clinical quality, we wish to demonstrate to our ‘ohana the spirit of aloha that helps make our shared island home so undeniably special.

The Medical Center



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, 150 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 2015, 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



The Hawai'i Award of Excellence

Castle Medical Center was recognized with the 'Oihana Maika'i award in March of 2015. This is the highest level of the Hawai'i Award of Excellence (HAE), given by the Hawai'i Section of the American Society for Quality. The state-level HAE is awarded using the same criteria and methodology as the well-known Malcolm Baldrige National Quality Awards, which are presented by the President of the United States each year to organizations that are judged to be outstanding in seven areas: leadership,

strategic planning, customer service, knowledge management, human resources, process management, and results.

By winning the 'Oihana Maika'i award, Castle qualified to apply for the Malcolm Baldrige National Quality Award. We actually submitted an application for this award in May and, by doing so, became the first organization in the state to have ever applied for the award at the national level. The results of our application are described on the following page.

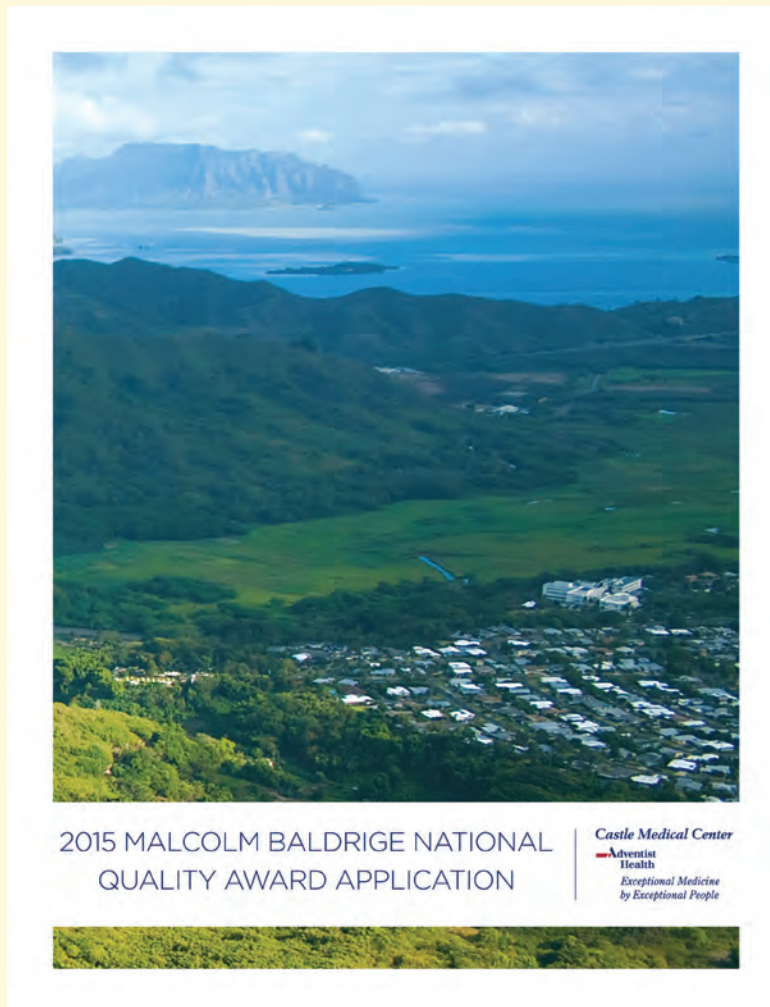
Awards and Recognition

Malcolm Baldrige Examiner Site Visit

In May of 2015, Castle Medical Center submitted an application for the Malcolm Baldrige National Quality Award. In August, the award program announced that Castle had been chosen to be one of just eight health care organizations in the nation to receive a site visit by the program's examiners. Each year, the only Baldrige applicants that merit a site visit are those that, in their award application, clearly demonstrate well-defined processes and superior results. This is much more difficult to do than might be imagined, and it is quite unusual for a first-time applicant such as Castle to be selected for a site visit.

It was the examiners' job during their visit to verify that everything we described in our award application was accurate and that everyone who works at Castle is knowledgeable about our processes. Not only did the examiners discover that this was the case, they encountered an undeniable passion for providing care to our community using our processes.

Though the examiners were not allowed to provide us with any feedback while they were still on site, it was quite clear from their demeanor how impressed they were with our people, processes, and results.



In November, the Malcolm Baldrige Quality Award recipients for 2015 were announced. Though Castle was not one of the awardees, we were most honored to have received a site visit. A tremendous benefit of having received this visit—indeed, one of the chief reasons we applied for the award in the first place—is the detailed feedback report the Baldrige Award examiners compiled for us after having made their visit.

We know of no other award process that provides such an important learning opportunity. Castle will continue to use the Baldrige criteria to help us improve our processes and achieve even greater results for our community, and we fully intend to re-apply for the award in the future, using what we have learned this past year.

Awards and Recognition

The Joint Commission Recognizes Castle as a *Top Performer*

For the fourth year in a row, Castle Medical Center was named in 2015 one of the nation's *Top Performers on Key Quality Measures*® by The Joint Commission, the leading accreditor of health care organizations in the United States. Castle was recognized by The Joint Commission for exemplary performance in using evidence-based clinical processes that are shown to improve patient care for heart attack, heart failure, pneumonia, surgical care, and perinatal care. To be named a *Top Performer*, Castle had to achieve a cumulative performance of 95% or above across all reported accountability measures. In earning this distinction, Castle is one of only 1,043 hospitals in the United States.

In addition to being included in The Joint Commission's annual report, *Improving America's Hospitals*, Castle Medical Center is recognized on The Joint Commission's "Quality Check" Web site, www.qualitycheck.org.



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 2014, Castle was shown to be in the top 2.5% of hospitals nationwide for the quality of inpatient care it provided. Then, for fiscal year 2015, Castle's performance rose to where it was measured to be in the top 1.5% of the nation's hospitals.

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



5-Star Rating from CMS

In 2015, the Centers for Medicare and Medicaid Services (CMS) updated its database of hospital star ratings, and awarded Castle Medical Center a 5-star rating. This rating was based on the reporting period from October 2013 to the end of September 2014.

More than 3,500 hospitals nationwide participated in the ratings program. Of these, Castle was one of

just 548 hospitals that earned five stars. The rankings are based on answers to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys.

Quality ratings by the CMS are particularly important to hospitals, as they are tied to value-based reimbursement levels set by Medicare.

HEALTHSTRONG TOP HOSPITAL

iVantage Health Analytics

2015 Healthstrong™ Hospital

Castle Medical Center was named in 2015 as one of the nation's Healthstrong™ Hospitals by iVantage Health Analytics. iVantage is a leading advisory and business analytic services company applying Accelerated Healthcare Transformation™ and the VantagePoints™ platform to drive sustained, evidence-based results. The study and announcement of the 2015 Healthstrong™ Hospitals, including Castle, highlights top-performing hospitals as determined through the Hospital Strength INDEX™. The annual INDEX study is the industry's most

comprehensive rating system of hospitals, and the results recognize the top-performing hospitals, measuring them across sixty-two different performance metrics, including quality, outcomes, patient perspective, affordability, and efficiency.

iVantage seeks to help hospitals meet the demands of the new health care by providing a high level of transparency into internal and external metrics, with the ultimate goal of providing higher quality health care at a lower cost.

Awards and Recognition

Three Women's Choice Awards®

For Patient Experience: Once again in 2015, Castle Medical Center was named as one of America's 100 Best Hospitals for Patient Experience by WomenCertified, Inc., home of the Women's Choice Award®. This distinction is the only award that identifies the nation's best health care institutions measured against the needs and preferences of women in particular.

Qualification for the award is based on a score derived by the Centers for Medicare and Medicaid Services (CMS) for each hospital in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey database. The score looks at the HCAHPS survey questions that research and experience show are more important to women than to men. Weight is applied to each of those questions to adjust for relative importance and arrive at a numerical score.

For Obstetrics: Castle Medical Center also received the 2015 Women's Choice Award® as one of America's Best Hospitals for Obstetrics. Hospitals that qualify for this highly selective designation provide the highest level of obstetric services based on their exceptional scores for patient recommendation as provided by data reported in the HCAHPS surveys, as well as by an analysis that weighs criteria identified as the most important to women for patient satisfaction, including a low rate of early elective deliveries.

For Emergency Care: As a recipient of the Women's Choice Award® as one of America's Best Hospitals for Emergency Care, Castle Medical Center ranks in the top 9% nationally for emergency care out of the 3,600 emergency rooms that report data to CMS. Hospitals earning the Emergency Care Award consistently rank among the top 25% of hospitals reporting.



2014 & 2015
WOMEN'S CHOICE AWARD®
AMERICA'S 100 BEST HOSPITALS
FOR PATIENT EXPERIENCE



2015
WOMEN'S CHOICE AWARD®
AMERICA'S BEST HOSPITALS
OBSTETRICS



2015
WOMEN'S CHOICE AWARD®
AMERICA'S BEST HOSPITALS
EMERGENCY CARE

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

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 2015, PRC has recognized Castle Medical Center with nine individual National Excellence in Healthcare Awards in the area of medical staff perception.

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

- Nursing care
- Patient safety
- As a place to practice medicine
- Overall quality of care
- Emergency services
- Overall physician engagement
- Hospitalist services.

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

- Surgical services
- Administration.



Awards and Recognition



Excellence in Physician Engagement

Castle was recognized last year with the Excellence in Patient Care award by Studer Group®. Castle received the award at Studer Group®'s thirteenth annual "What's Right in Health Care®" conference held last year in Chicago. These awards are given to select organizations coached by Studer Group®, based on their performance in various categories. To be eligible for an award, an organization must demonstrate outstanding performance in a particular category.

Castle Medical Center was selected based on top-decile performance for physician engagement in recent years.

Studer Group® is an outcomes firm that works with over 850 American health care organizations, teaching them how to achieve, sustain, and accelerate exceptional clinical and operational outcomes. Castle has been working with Studer Group® since 2010.

Awards and Recognition



CEO Cancer Gold Standard™ Reaccreditation

Castle Medical Center is a CEO Cancer Gold Standard™ employer for 2015. This is the fifth time Castle has received this accreditation, which recognizes the hospital's extraordinary commitment to the health of its associates and their families. The CEO Roundtable on Cancer, a non-profit organization of cancer-fighting CEOs, created this accreditation in collaboration with the National Cancer Institute, many of its designated cancer centers, and leading health non-profit organizations and professionals.

As part of Castle Medical Center's commitment to the health of our associates as well as our community, Castle offers free tobacco treatment services for all associates and their eligible and covered dependents through the Wellness and Lifestyle Medicine Center,

which is staffed by certified tobacco treatment specialists. In addition, Castle maintains and sustains a culture that supports healthy food choices and physical activity.

The CEO Cancer Gold Standard™ calls for companies to evaluate their health benefits and corporate culture and take extensive, concrete actions in five key areas of health and wellness to fight cancer in the workplace. To earn accreditation, a company must establish programs to reduce cancer risk by discouraging tobacco use, encouraging physical activity, promoting a healthy diet and nutrition, detecting cancer at its earliest stages when outcomes may be more favorable, and providing access to quality care, including participation in cancer clinical trials.

Awards and Recognition



AHA Award for CPR Quality Improvement

In June of last year, the American Heart Association (AHA) presented Castle Medical Center with the 2015 “Get With the Guidelines®” (GWTG)–Resuscitation Participation Achievement Award. This award recognizes Castle for having achieved 85% compliance with all GWTG–Resuscitation Achievement Measures for twelve consecutive months to improve quality of patient care and outcomes. Castle is the first hospital in the state of Hawai‘i to participate in the AHA quality improvement program for cardiopulmonary resuscitation (CPR).

The GWTG–Resuscitation program has its roots in the AHA’s National Registry of Cardiopulmonary Resuscitation (NRCPR), which was started in 1999 to collect resuscitation data from hospitals nationwide and create evidence-based guidelines for inpatient CPR. In 2010, this endeavor was incorporated into the overall GWTG program and was enhanced to provide additional resources, tools, and benefits to health care institutions.

Awards and Recognition

PRSA Awards for Marketing

The Hawai'i Chapter of the Public Relations Society of America (PRSA) recognized the top public relations campaigns and tactics of 2014 at the 32nd annual Koa Awards dinner held at The Modern Honolulu hotel in Waikiki. Castle Medical Center's Marketing Department was honored by PRSA with a total of eighteen awards, including two for the 2014 edition of this publication, the *Quality Report*. Each year, PRSA chapters on the Mainland judge entries for the Hawai'i chapter.

In each category, PRSA presents a single Koa Award, and then up to two other entries may be given an Award of Excellence.

Castle received six Koa Awards for:

- Web Sites, External:
Castle Medical Center Web site
- Audio Programs: **In Sickness & In Health (radio)**
- External Video Programs:
In Sickness & In Health (vignettes)
- Magazines, Internal: *Castle MD*
- Media Relations, Healthcare Products:
2014 Pink Glove Dance competition video
- Media Relations, Healthcare Services:
2014 Pink Glove Dance competition video.

Castle received twelve Awards of Excellence for:

- Annual Reports, Non-Profit: *Quality Report 2014*
- Publications, Other: *Quality Report 2014*
- Newsletters, External: *Windward Health*
- Integrated Communications, Non-Profit:
In Sickness & In Health integrated programs
- Public Service, Non-Profit:
In Sickness & In Health (radio)
- Direct Mail/Response:
In Sickness & In Health (postcards/seminars)
- Creative Tactics: **In Sickness & In Health (radio)**
- Public Service, Non-Profit: **Public Service-TV**
- Internal Video Programs:
Papua New Guinea Mission documentary
- Direct Mail/Response: *Giving Matters*
- Internal Communications, Non-Profit: *Ulupono*
- Newsletters, Internal: *Ulupono*.



Mission

Recently I was faced with having to have surgery for breast cancer. From the moment I started with the pre-operative testing and registration at Castle, I was treated with love, compassion, understanding, patience, and aloha.

Then the day of surgery came, and the girl at registration remembered me. When I went to the pre-operative area, I was lovingly greeted at the door and escorted in. The pre-op nurse was gentle, friendly, and compassionate. Then suddenly a whole slew of OR people came through the doors to greet me and give me aloha. I felt like a celebrity! Every one of them gave me a hug and reassurance that they were going to take care of me. One nurse who was an old friend stayed to get caught up briefly on our lives and then prayed with me. I knew in that instant that I had made the right choice to have my surgery at Castle.

I get choked up with emotion when I think about being treated with such compassion and love. My recovery has been outstanding, and I am thankful to report that the pathology came back as benign—no malignancy. Thank you, God!

The icing on the cake for this experience is when I received a card in the mail signed by my nurses and surgeon! Once again, I am choked up.

— A thank-you note received from a patient

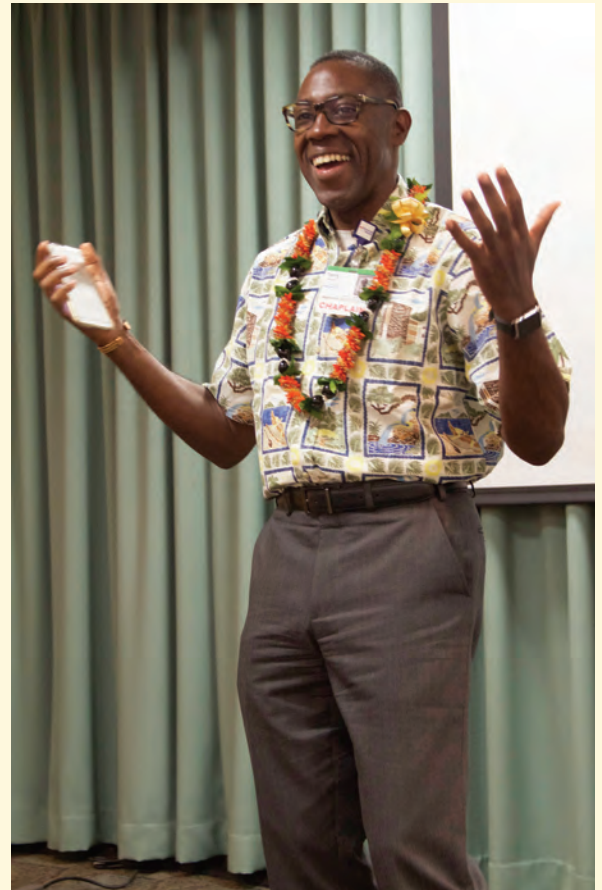
Mission

“Aim High: The Power of Your Story”

Chaplain Terry Johnsson, executive director of Mission Integration at Adventist Medical Center, Portland, was the keynote speaker during Castle’s Mission Week in 2015. Labeled “retarded” as a child because of severe dyslexia, Dr. Terry Johnsson shared his amazing personal story of how he overcame the challenges in his life through the help of a praying mother, a faith-filled grandmother, a caring Christian teacher, and the grace of God. A master storyteller, Johnsson shared his journey from a small town in Oregon to serving three presidents in the military honor guard at the White House, earning multiple college degrees, and being named among the “top 20 pastors” in the nation’s capital. Along the way, he triumphed over profound dyslexia, career misplacement by the Air Force, and college counselors who tried to discourage his dreams.

Earlier this year, Johnsson left his position as senior chaplain and operations manager for WGTS FM, the second-largest Christian radio station in the nation, to join Adventist Health in Portland, Oregon. In riveting brown-bag lunch sessions collectively titled, “Aim High: The Power of Your Story,” Johnsson’s message of hope to Castle staff was, “God really uses ordinary people. He does have a plan for all of our lives. His plans are bigger than our lives.”

During Mission Week, Johnsson was interviewed on television by KHON2 for a segment of its “Living808” series, on the radio with Chaplain Dave Rasmussen for the Trinity Broadcasting Network in Hawai‘i, and for Castle Medical Center’s “In Sickness & In Health” community outreach radio program on KHNR-AM 690 and KGU-AM 760, hosted by Director of Marketing and Communications Jasmin Rodriguez.



Mission

Partnership with REPAC

Castle Medical Center continued its partnership with Reach out Pacific (REPAC), a Hawai'i non-profit organization dedicated to improving health care services and education in Micronesia. In 2015, Castle donated infant warmers, anesthesia machines, trauma lights, hospital beds, medical carts and supplies, and other equipment to the organization for delivery to health care facilities in Saipan.

Since its establishment in 2005, REPAC has helped numerous Micronesian



organizations obtain more than \$1.2 million worth of much-needed supplies, such as hospital beds and sheets, medical equipment, wheelchairs, treatment tables, furniture, computers, books, and toys.

REPAC's main means of providing aid to Micronesian organizations is to match the wish lists of the organizations in need to the lists of surplus supplies that are made available to REPAC from sponsoring institutions on the Mainland and in Hawai'i, such as Castle.

Mission



Medical Mission to Cambodia

Last year, Castle Medical Center helped sponsor one of our nurses, Oliver De Ausen of the Emergency Department and Cardiovascular Services, to take part in a medical mission trip to Cambodia.

Along with eight other clinicians from various nations, Oliver spent two weeks providing free medical and dental services to seven areas in central Cambodia on a trip organized through Asian Medical Relief Services. The team included three physicians, three nurses, two dentists, and a pharmacist.

In the seven different areas they visited, the small team saw 1,745 people and averaged 245 patients a day, providing medical care and educating patients on hygiene, hydration, sun protection, and therapies for back pain.

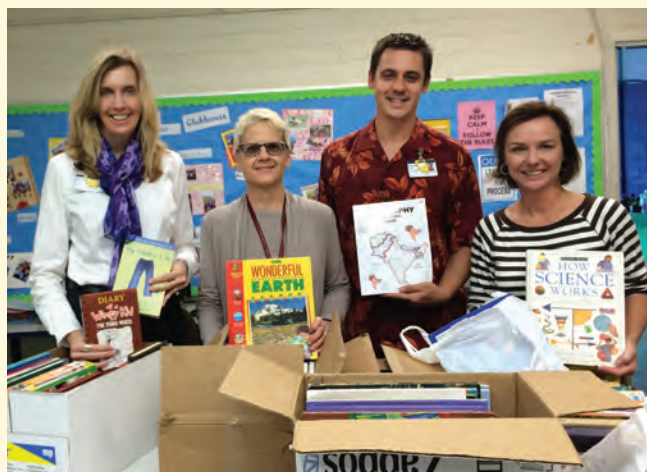
Mission

Giving to the Boys & Girls Club in Kailua

Castle's Wellness and Lifestyle Medicine Center began a new partnership with the Boys & Girls Club in Kailua last year. At the clubhouse on the Kailua Intermediate School campus, Wellness Center staff takes a hands-on approach to help club members gain some confidence and skills in simple food preparation, while they learn to make healthier choices. The around-the-world curriculum ("Food is Elementary") developed by author Antonia Demas, Ph.D., serves as a template. Teaching about different regions of the world and the foods that are consumed there can help to make foods more interesting and more accepted.

The Wellness Center hopes to provide participants with the knowledge and desire to share mealtimes with family and friends and to make easy preparation of delicious and healthful food an everyday occurrence.

This past year also saw Castle begin an annual book drive through which members of the hospital staff donate children's books, both used and new, to become part of the library at the clubhouse. Many dozens of books were donated in 2015.



Mission

Holiday Community Outreach

- In an annual event at Castle, hospital associates collected funds in their various departments and units totaling \$4,300, which provided eighty-six needy Windward O'ahu families with gift cards for Thanksgiving meals in 2015.
- For the fourth year, twenty-one 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 breakfast for some 350 residents. Food was donated by the hospital, and Zippy's generously donated vegetarian chili, rice, and eggs. After breakfast, gifts totaling \$1,000 in value and donated by Castle's leadership 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 thirty Christmas trees, thirty tree stands, and thirty bags of tree ornaments, all very much appreciated.



- 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, twenty-nine such families were treated to gifts, and several more families received canned and non-perishable food, all donated by Castle associates and physicians. The total value of the gifts donated was over \$13,500.

Mission

“I Love Kailua”

As it has for many years, Castle Medical Center presented a mini-health fair during the Lani-Kailua Outdoor Circle’s 23rd annual “I Love Kailua” Town Party in April.

In addition to receiving the popular free keiki bike helmets, the nearly four hundred people who visited Castle’s Health and Wellness Fair at the event 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

Breast Cancer Awareness Month and American Heart Month

Castle Medical Center celebrated Breast Cancer Awareness Month this past October by decorating the forty-foot-tall Cook pine tree in front of the hospital with an enormous pink ribbon and lighting it from top to bottom with hundreds of pink lights.



Further outreach for the month included Castle's "Think Pink!" events, held at Macy's department stores in Kāne'ohe and Kailua. At these events, shoppers learned about breast cancer, its detection, and its treatment and talked to experienced mammography technologists. The hospital also produced a television vignette featuring cancer survivors, a television segment with our director of Imaging discussing the value of early breast cancer screening and detection, and a video that was



submitted as an entry in the national Pink Glove Dance video contest, which is sponsored annually by Medline Industries to benefit breast cancer research.

In February, and for the second time, Castle recognized American Heart Month by lighting the hospital's Cook pine tree with red lights. The hospital also produced a television segment on heart health with one of Castle's cardiologists and our director of Cardiovascular Services.

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 2015 on the following:

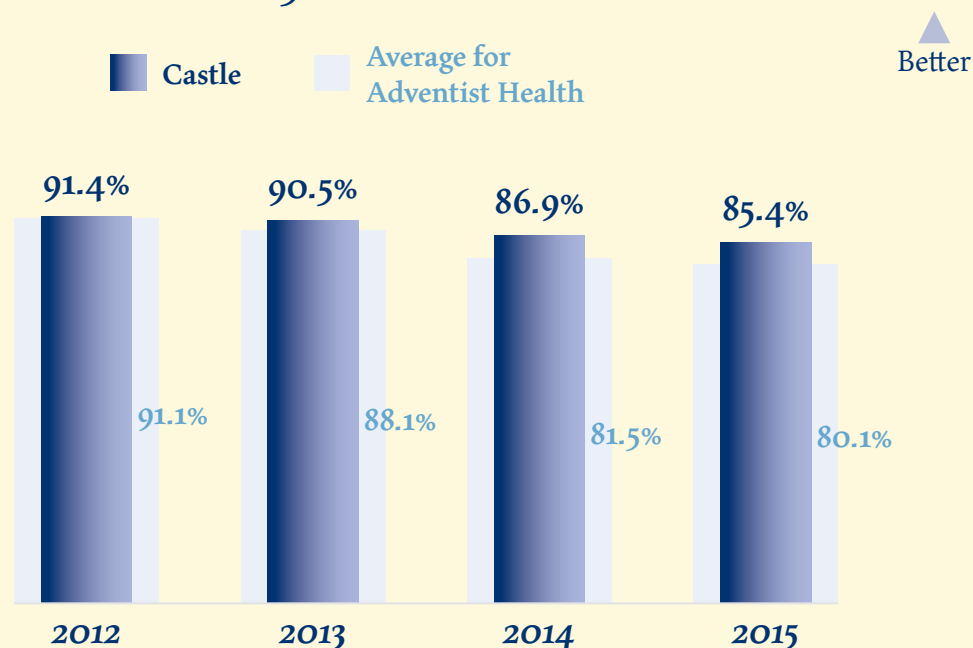
- Overhead prayers every morning at 8 a.m. and every evening at 8 p.m.
- Inspiration prayer cards on all patient meal trays
- Daily rounding of patients by Castle chaplains

- 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 nineteen hospitals within the Adventist Health system.

Satisfied with Attention to Unique Religious/Spiritual Needs

Years 2012 to 2015



Patient Satisfaction

In the past few days, I have been asked to participate in a national survey concerning my stay as a patient in your hospital. I have been waiting for this chance!

Staying in a hospital is never pleasant, generally because you are not well. Staying in a hospital during a vacation increases the displeasure inordinately. That being said, your hospital shines brighter and brighter. From the first morning upon waking, to the last day's discharge, I could not have been treated with more interest, kindness, and skill. Every one of my nurses, including those in charge of the care unit, came to my bedside and introduced themselves. They made it clear to me that if I needed something or someone, it would be provided.

Two doctors were constantly nearby, and one spoke to my doctor on the Mainland. They made it apparent that they were doing everything to get me discharged as quickly as possible so that I could resume my vacation.

One other thing sticks out in my mind as an example of the care given by your staff. There was a woman who quietly cleaned my room during my stay. Imagine my surprise when, after my being discharged and sitting on a bench near the parking lot, she came and sat down next to me and told me that she hoped for my complete recovery and good luck in my life. It was unreal.

— A thank-you card received from a Mainland resident who was a patient at Castle while on vacation in Hawai'i

Patient Satisfaction

Inpatient

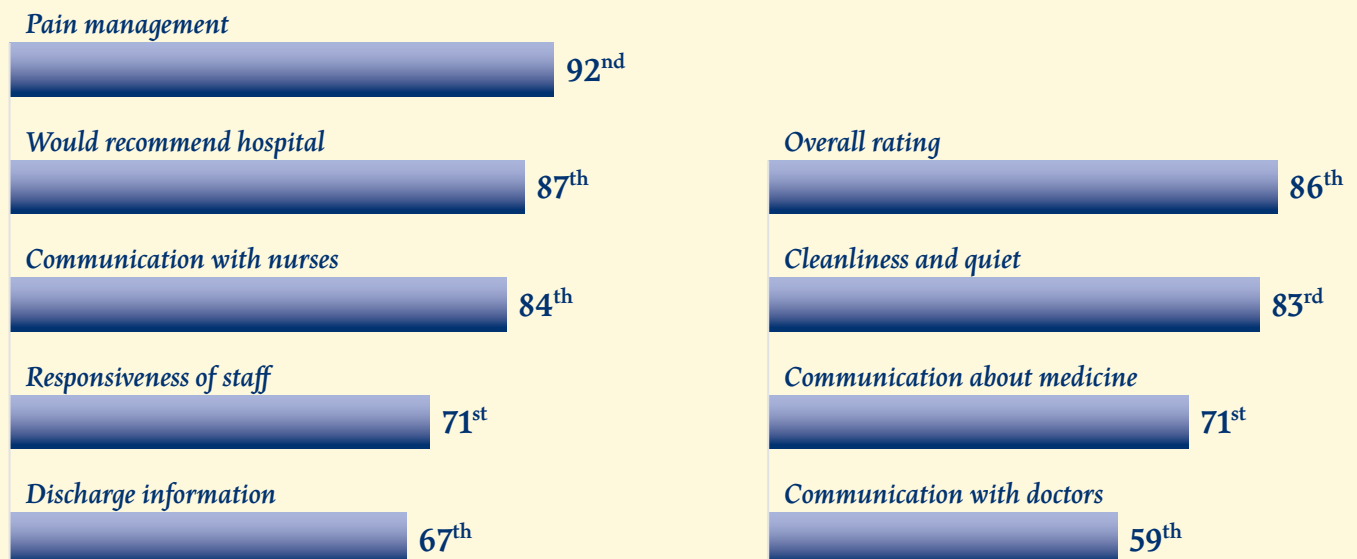
Castle Medical Center participates in the Hospital Consumer Assessment of Healthcare Providers and Systems survey, known as HCAHPS, which measures the patient's perspective on hospital care. This standardized tool allows objective and meaningful comparisons between hospitals in areas that are important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

The charts on this and the following three pages show Castle's patient satisfaction ratings from 2015.

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 2015*

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 2015

Better ►



Patient Satisfaction

Emergency Department (ED)

Our patients' overall rating of Castle's Emergency Department has consistently put it among the best in the nation.

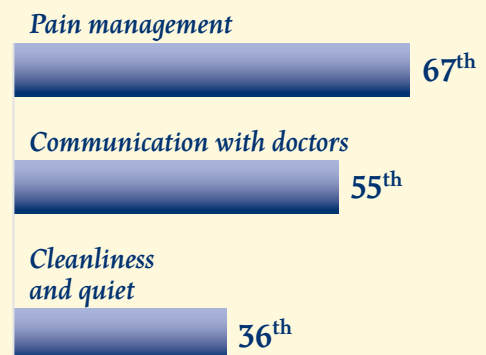
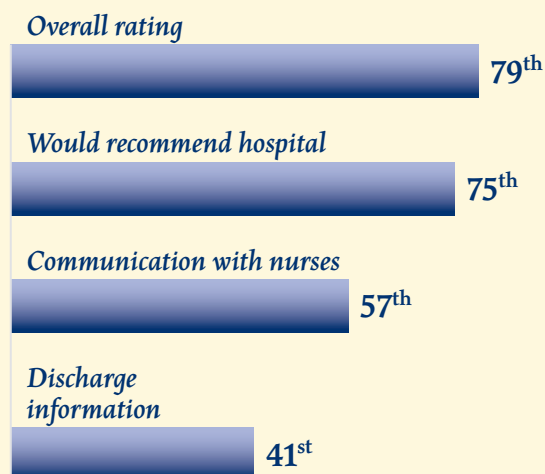
Throughout 2015, Castle's ED has been undergoing a full-scale renovation in order to provide more space and a more pleasant experience for the increasing number of patients needing our services. (Please turn to page 60 to read more about this major project.)

Despite the noise, temporary barriers, and reduced number of beds experienced during the renovation, our patients continued to rank our ED overall in the top quartile of hospitals nationwide.

We believe that in 2016, with the expansion and modernization of the department complete, our scores will improve even further.

ED Patient Satisfaction National Percentile Ranking *Year 2015*

Better ►



Patient Satisfaction

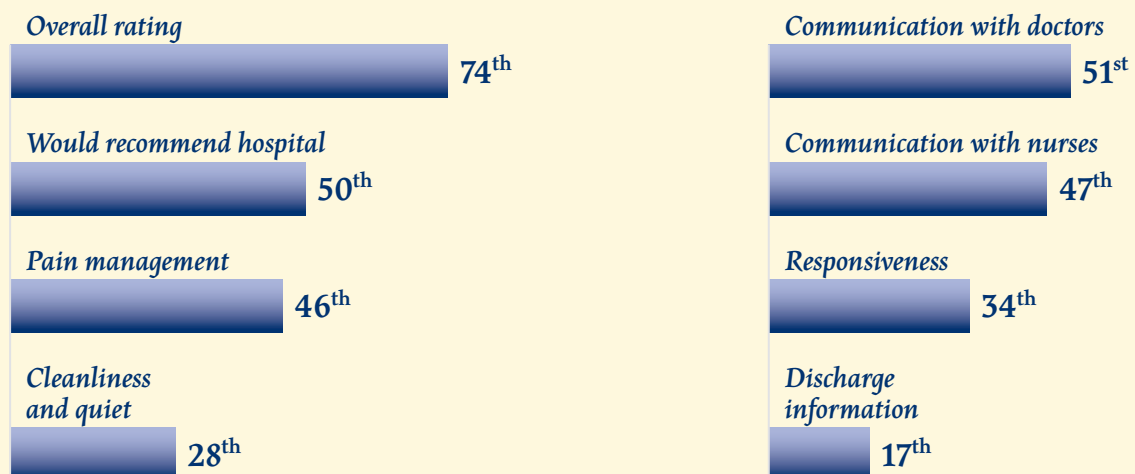
Outpatient Surgery

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 2015

Better ►



Physician Satisfaction

Hawai'i has always been one of those states that I wanted to have an opportunity to practice in at some time during my career as a pulmonologist. But being the "new kid on the block" can be challenging for anyone, and it gets worse with each advancing decade. Uprooting from the comfort of my lifelong academic medical career at Loma Linda University, and being separated from so many of my family members who still live in Southern California, made moving to Castle Medical Center an even more daunting decision.

All my apprehensions and fears dissipated into thin air, however, from the very first moment I started working here at Castle early last year. I can still remember the kind

gesture that a random tall gentleman walking down the main hallway gave to me on my first day. I looked lost and he appeared busy, but he was willing to drop whatever he was doing and actively sought eye contact with me to help me out. When I asked him for directions to the Medical Staff office, I did not get the usual "turn right, then turn left, and then left again" response I might have expected. Instead, I got a personal escort all the way to the very individual I was supposed to meet up with. I never forgot that act of professionalism and kindness. (By the way, that gentleman turned out to be my next-door neighbor in Kailua and the director of Human Resources at Castle.)



Physician Satisfaction

I am truly blessed to be part of a very competent team of physicians and surgeons who are just phenomenal. They offered a helping hand so that I could learn the medical system quickly. Many of them offered me multiple tips on how to survive on the Windward side, and in addition, they provided detailed suggestions about all the wonderful places to go on my days off. I am in full swing now, working with an exceptional team that is very mission-driven and works cohesively to give the best, most compassionate, and highest quality care to every patient. I am fired up to see so many fascinating patients and their caring, kind, and supportive family members. I am empowered by a very supportive

administration to perform modern and innovative medicine on this part of the island every day.

This medical center has truly given me the feeling of being accepted as part of the 'ohana from day one. Coming to Castle has given me the opportunity to work in a fantastic, nurturing, modern, and medically healing environment, where great medicine is being practiced by an exceptional group of people, all with a Christian spirit.

From the very bottom of my heart, "Mahalo nui loa," and "Aloha."

— Takkin Lo, M.D., pulmonologist practicing at Castle since April of 2015



Physician Satisfaction

Castle's medical staff provided feedback on the hospital's clinical service areas, administration, and overall quality by participating in the Physician Loyalty 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.

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

- **Pathology:** A representative of the pathology lab now meets with physicians on the hospital floors to provide direct services and education on the electronic medical record (EMR), lab orders, and results. Phone access to the lab was simplified.
- **Pulmonology:** Hours of hospital coverage by a pulmonologist were lengthened, and consultations

between pulmonologists, hospitalists, and other key physicians were made easier.

- **Radiology:** Communication with physicians on orders and results was improved, with surgical department collaboration. Education on coding and processes was provided to physicians and their office staff, both in person and in hospital publications.
- **Medical Records:** EMR specialists worked with physicians one-on-one to improve their workflow in the EMR. Work hours for EMR specialists were extended, and physicians became involved with corporate teams to improve the EMR.

Castle is proud that the hospital ranked at the 100th percentile nationally for involvement in the hospital's mission and in the top 10% in six of the fifteen measures shown on the chart on the facing page.

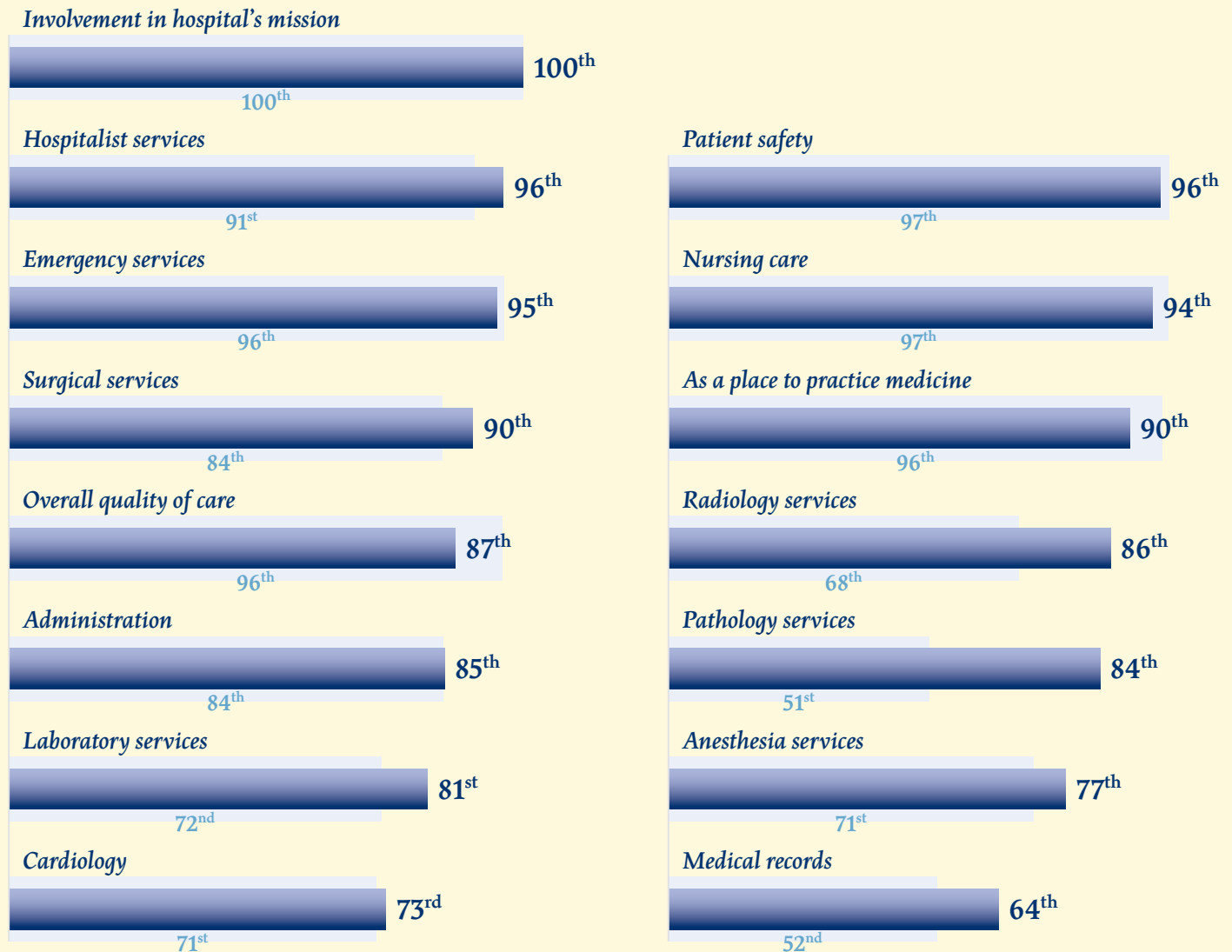


Physician Satisfaction

Physician Satisfaction PRC Percentile Ranking 2015 and 2014 Surveys

2015 2014

Better ►



Associate Engagement

My wife was born and raised in Hawai'i, and I was born in Ponape (now called Pohnpei) of the Federated States of Micronesia. For all intents and purposes, I was raised in Hawai'i, as my parents returned to my mother's birthplace of O'ahu after serving in the Peace Corps in Micronesia for many years. Both my wife and I attended college on the Mainland. I say this because no matter where I have lived, home has always felt as if it was in Hawai'i.

Before working at Castle Medical Center, my wife and I lived in the San Francisco Bay Area, where I worked in a large hospital and my wife worked for a biotech company. During those years, we would always say to each other that Hawai'i was just a flight away and that the Bay Area was

our home away from home. Following the birth of our second daughter, we were both left with the same feeling of longing for our extended family. It was at that time that we made the decision to return to Hawai'i, our forever home.

Over the continuum of my student and professional life, I have had the opportunity to learn and work at a number of hospitals here on O'ahu as well as on the Mainland. Whether it was volunteering at a small community hospital while attending college in Santa Barbara or working for a large hospital on O'ahu, what I always sought was a feeling of belonging. I wanted to work in a place where I felt like I truly fit. During school, I had had the fortune of enrolling in a clerkship, during which I spent time at Castle.



Associate Engagement

I had felt a strong sense of welcoming whenever I came onto Castle's campus, and that memory stayed with me for years. Returning to Hawai'i, I set my sights on Castle and decided that it was where I was going to work. From day one of my employment here, the overwhelming feeling I have felt was one of being part of a family.

Upon first working at Castle, I began as a telemetry floor nurse on the Laulima unit. Over the years and through the support of my mentors, I have spread my wings and taken on the additional responsibilities of charge nurse, and now manager of the unit. When originally asked to consider this position, I expressed that were it not for the staff of Laulima

and the supportive environment of Castle, I would not have had an interest in the role. As manager of Laulima today, I am blessed to work with a fantastic group of nurses, CNAs, unit secretaries, monitor techs, and support staff from departments throughout the hospital. I collaborate with an incredible case management team, truly caring and sharp physicians, and a visionary leadership team.

The Castle Medical Center family supports one another and wants members to succeed in their role. As was done for me, I would like to do for others.

I know that today, I have found my forever home.

— Boyd Judd, nurse manager of the Laulima unit



Associate Engagement

In 2014, Castle Medical Center's corporate parent, Adventist Health, began using a survey developed by Gallup, Inc., to measure associate engagement in all of its member hospitals. This survey is used by numerous health care and social service institutions across the United States, with a total of 1.3 million persons participating.

On the survey for 2015, Castle's composite score was 4.28 on a scale of 1 to 5. This score placed the hospital in the 65th percentile of all organizations and in the 78th percentile of all hospitals that used the survey.

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.



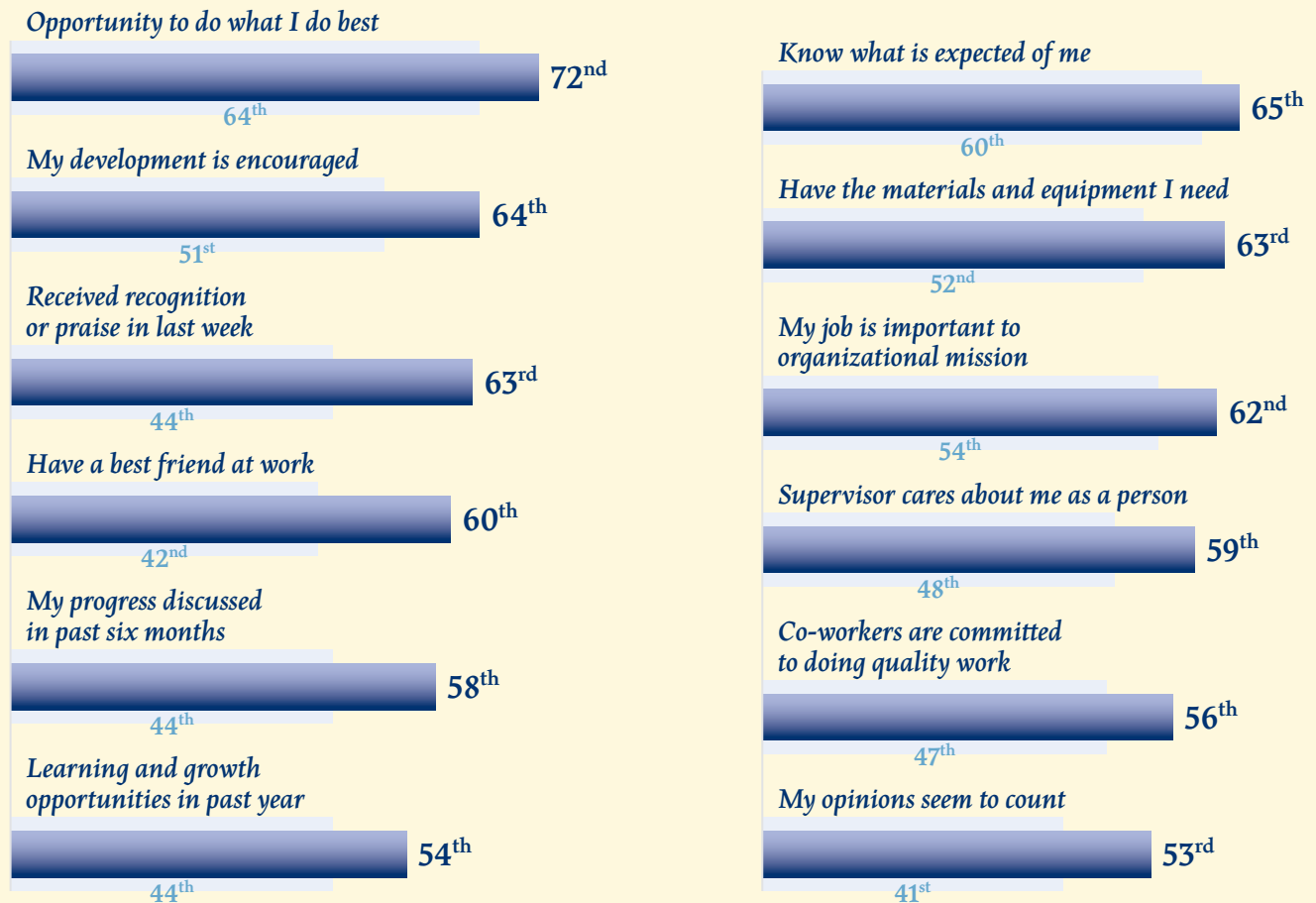
Associate Engagement

Associate Engagement Gallup Percentile Ranking

2015 Survey

■ Castle ■ Average for Adventist Health

Better ▶



Inpatient Care

This note is to commend you and your staff for the quality of care I witnessed firsthand at Castle Medical Center. My mother was admitted to your telemetry unit after having suffered a stroke, and I was on site every day during her weeklong stay. A few months earlier, my work colleague had attended a presentation regarding your hospital's Malcolm Baldrige Quality journey. [Please see pages 4 and 5 to read more about this.] Her report was very favorable, and I wondered what this quality effort looked like at the line level. Here is what I found during my mom's stay:

- **Call Light Response:** *I triggered the call light on a couple of occasions that week. Because of the room's proximity to the nurses' station, I was able to observe the response. The unit clerk answered each call,*

asking, "May I help you?" Following that, either a CNA or RN would be in the room within five minutes.

- **Whiteboard in Room:** *This simple mechanism was updated daily with the latest development in Mom's condition. While a report should be sufficient, this mechanism assures correct procedure at the point of contact with the patient.*
- **Color-Coded Scrubs:** *It was clear at a glance who played what role among the many staff on hand at any given time. For me, it helped determine the content of my communication to whichever staff presented themselves at the time. It also helped to determine what to expect from each staff person who interfaced with Mom.*

Inpatient Care

- **Training:** *One very impressive quality I observed was that if anything was happening that needed attention in a room, no matter who passed by, they would step in to assist. In one instance as I was returning to Mom's room, I heard her chair alarm go off. A nurse was walking by and without hesitation stepped in to place Mom gently back in her chair, as she was a fall risk. This was not her nurse. I saw this with a CNA as well. Excellent care.*
- **Outstanding Individuals:** *I need to highlight some of your superstars. The occupational therapist was tough, yet compassionate. She was not shy about stretching Mom's capabilities, yet did so in a way that conveyed caring. The speech therapist was another compassionate professional who made Mom feel at ease while stretching her boundaries.*

She made Mom laugh, even though she was made to push the limits of her physical ability. Her neurologist could teach a class on bedside manner, except that what he has may not be teachable.

He was on duty when Mom came to the ER. Her eyes showed the fear and frustration she was feeling. Yet when the neurologist came face to face with her in the middle of the ER frenzy, I saw instant calm come over her features. He was her neuro-consult the first few days of her stay, and each time he came into her room, the same calm came over her face.

The lesson for our organization is how Castle Medical Center has implemented quality mechanisms to ensure patient safety and raise the quality of care. Please convey our gratitude to your staff.

— A letter sent to Castle from the son of a patient



Inpatient Care

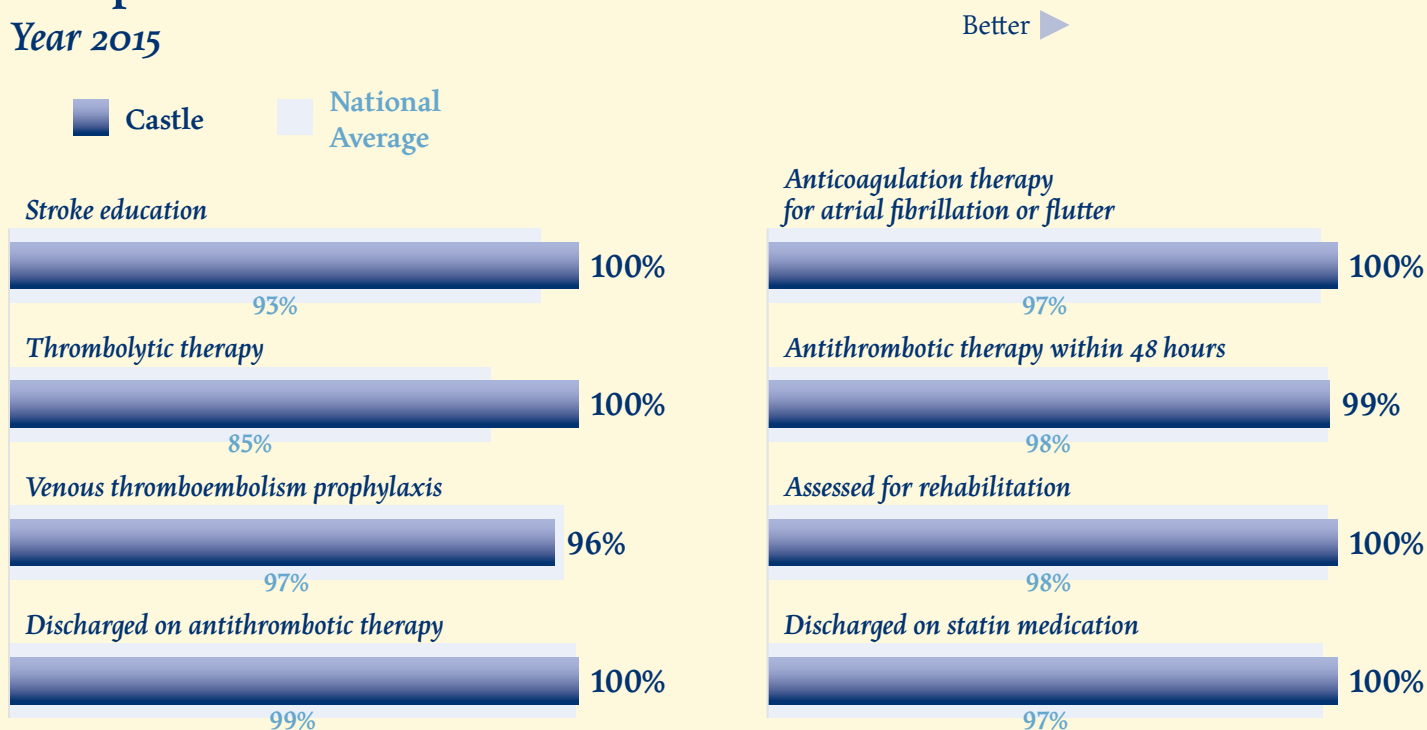
Stroke

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 2015, 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 2015



Inpatient Care

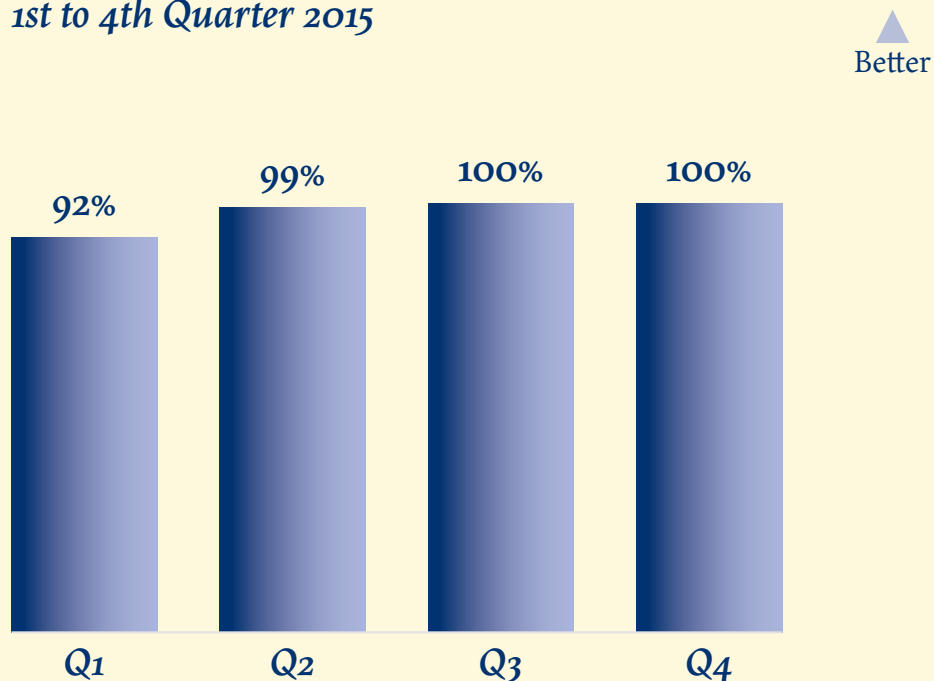
Venous Thromboembolism (VTE)

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

1st to 4th Quarter 2015



Inpatient Care

Staff Vaccinated Against Influenza

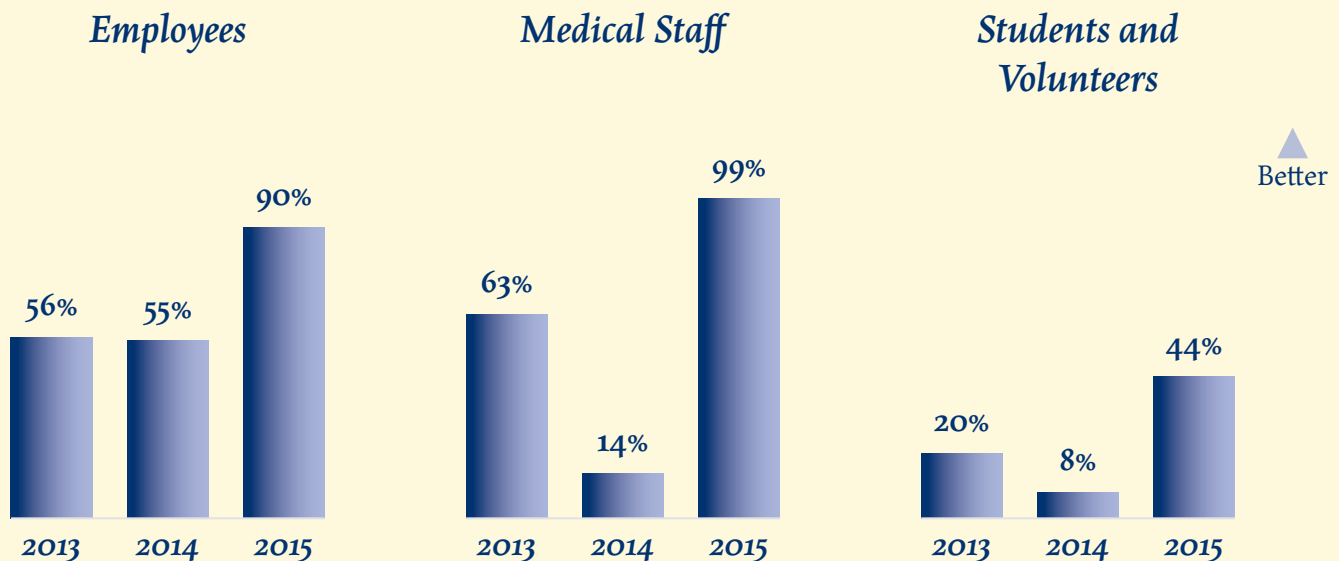
Influenza, also known as the flu, is a contagious respiratory illness caused by influenza viruses. Serious outcomes of influenza infection can include hospitalization or death. Some persons, such as older adults and those with certain health conditions, are at higher risk for serious flu complications, 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 an influenza vaccination coverage of 90% of a facility’s work force.

Over the last three 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 2015*



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

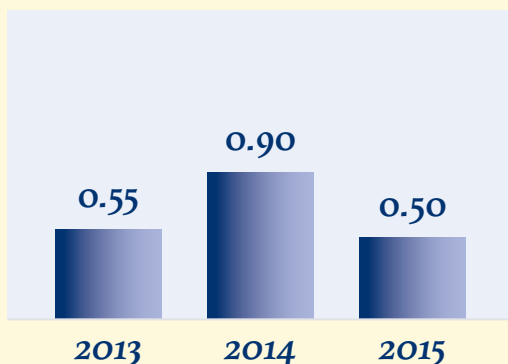
are not entered; in Class II procedures, at least one of these areas of the body *is* entered.

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 2015*

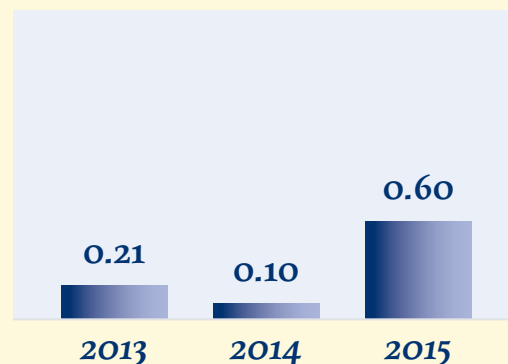
Class I

National Average = 1.9



Class II

National Average = 1.9



Better



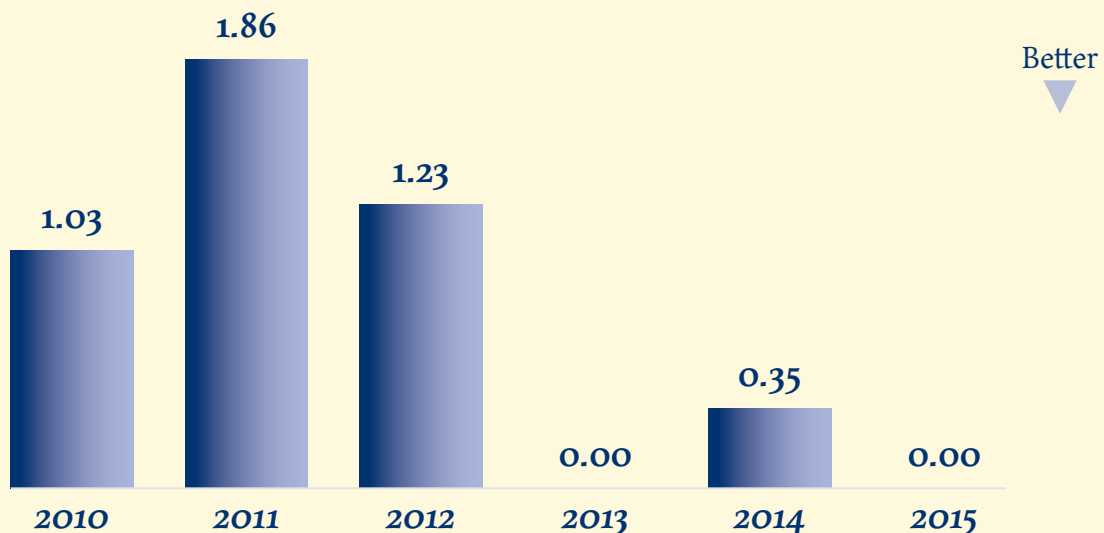
Inpatient Care

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 year, the hospital experienced no CAUTIs at all.

Catheter-Associated Urinary Tract Infections per 1,000 Catheter Days *Years 2010 to 2015*



Inpatient Care

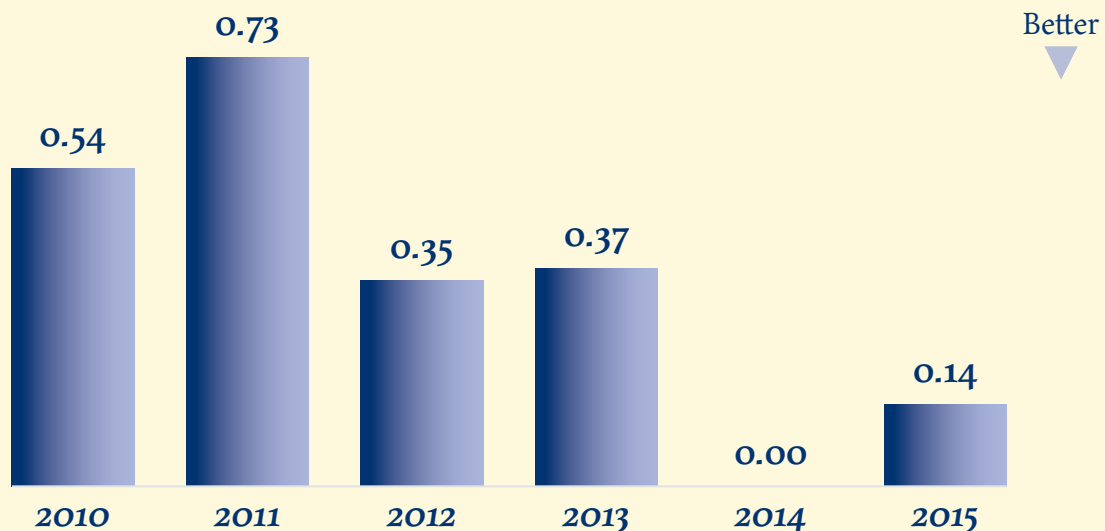
Central Line–Associated Bloodstream Infections

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 2015



Inpatient Care

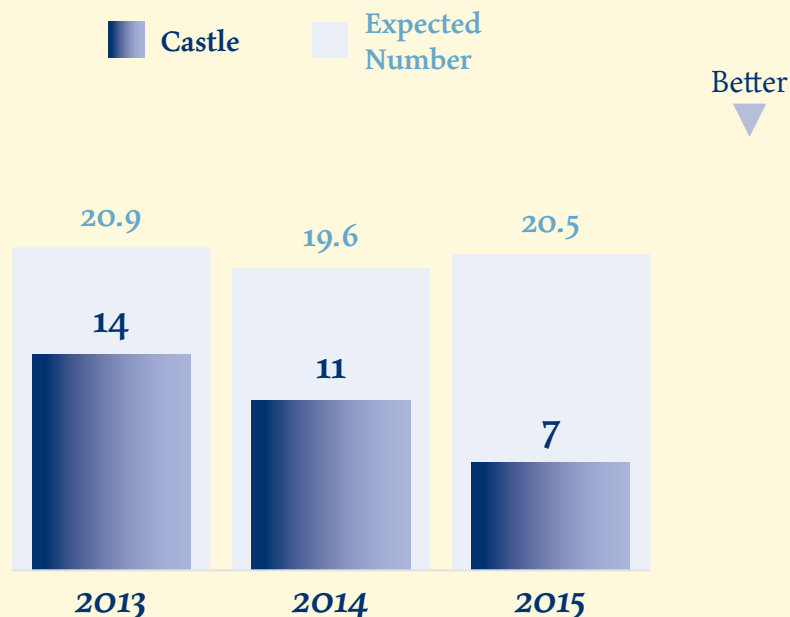
Clostridium Difficile Infections

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 2015



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.

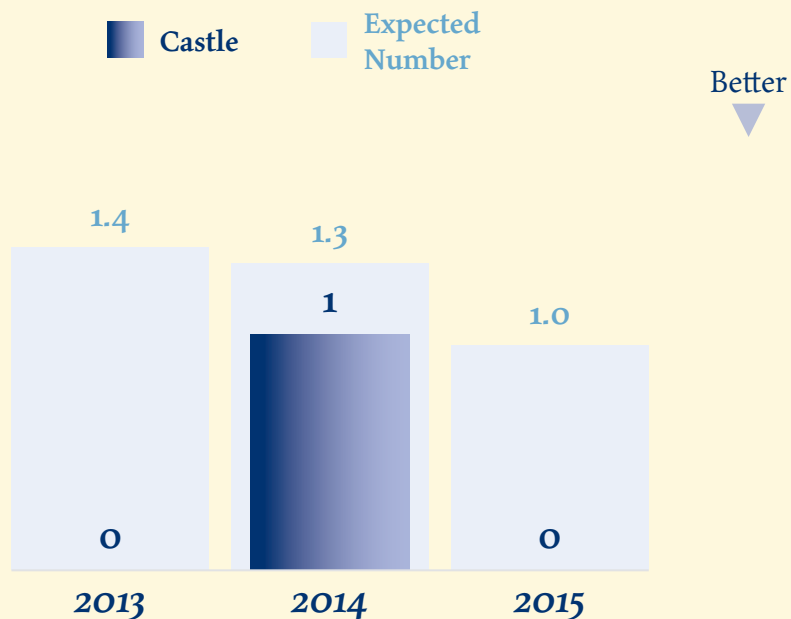
Castle prevents MRSA bacteremia through multiple approaches, including admission screening of all

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 2015



Inpatient Care

Hospital-Acquired Pressure Ulcers

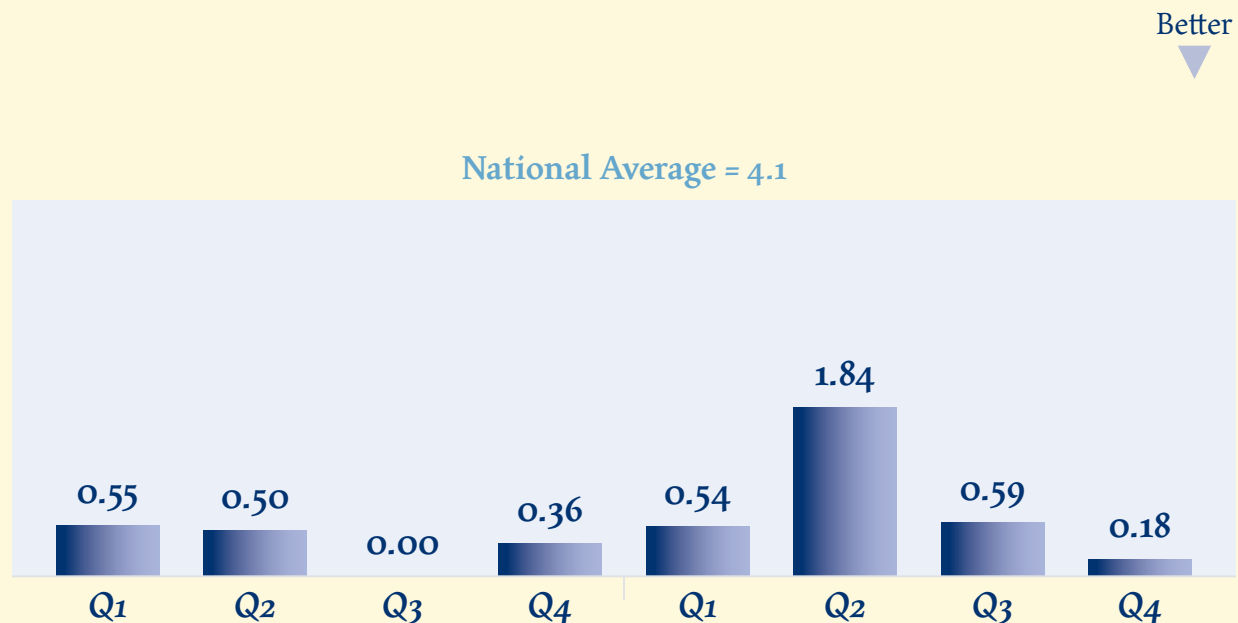
Pressure ulcers are areas of damaged skin caused by a variety of environmental conditions. Pressure ulcers can lead to patient discomfort, increased length of hospitalization, and other more serious complications.

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 that Castle's rate of hospital-acquired pressure ulcers is well below the national average of 4.1 per 1,000 patient days.

Hospital-Acquired Pressure Ulcers per 1,000 Patient Days

1st Quarter 2014 to 4th Quarter 2015



Inpatient Care

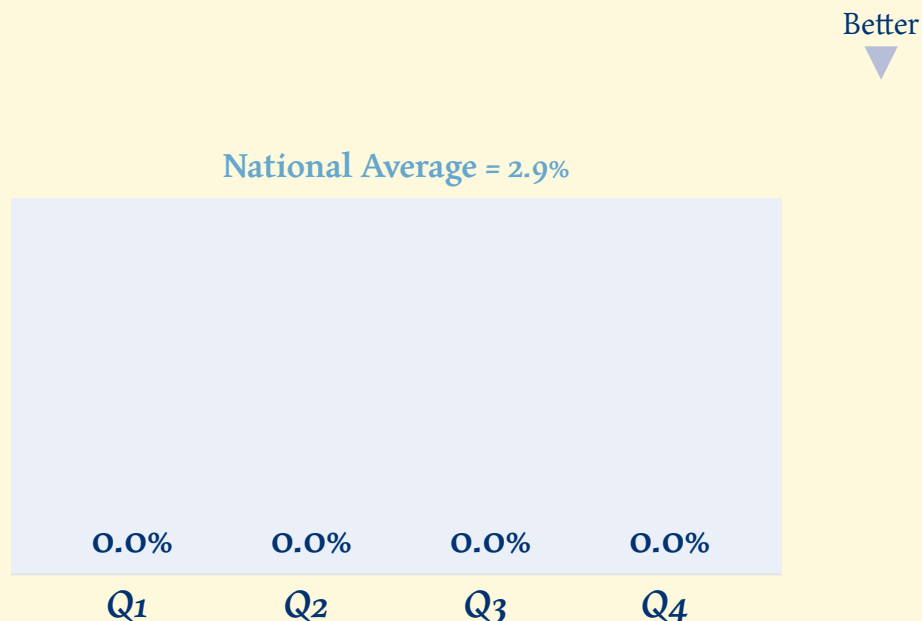
Early-Term Elective Deliveries

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 2015, the hospital did not perform a single one.

Elective Deliveries Performed Before 39 Weeks *1st to 4th Quarter 2015*



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 2015 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 2015, 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 2015



Inpatient Care

Thirty-Day Readmission Rates

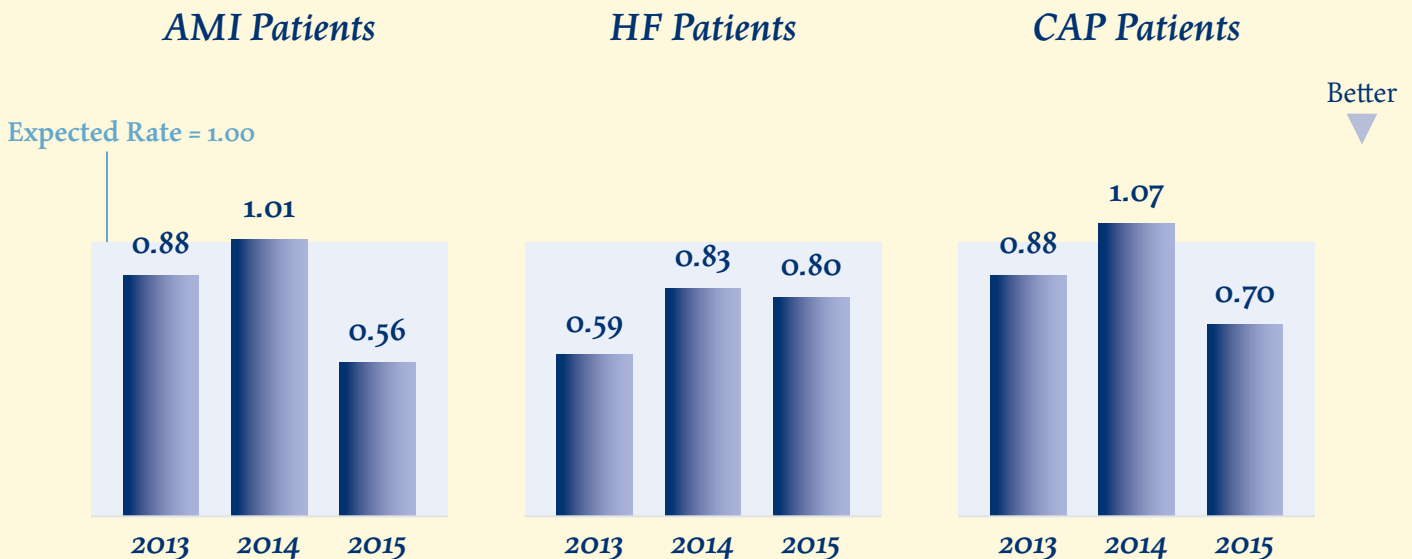
The readmissions program, created under the Affordable Care Act, was initially established to determine how often patients treated for acute myocardial infarction (AMI), heart failure (HF), and community-acquired pneumonia (CAP) had to return to the hospital within thirty days of discharge.

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 2015



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.

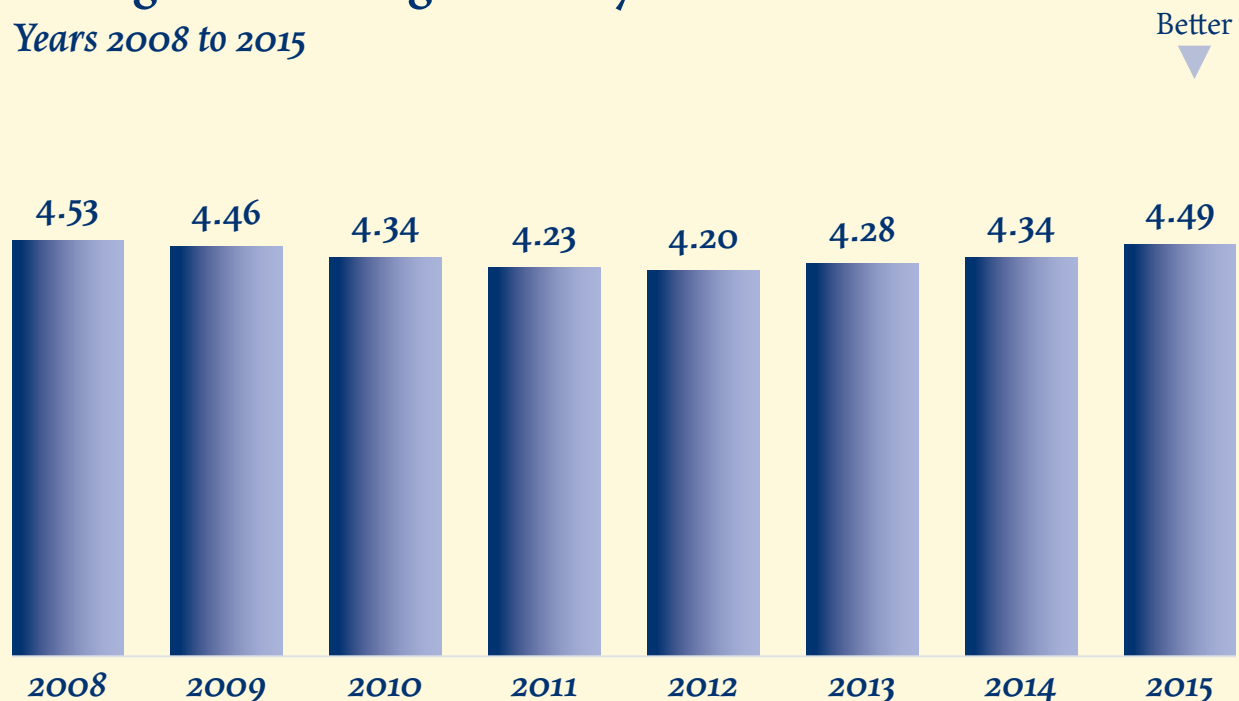
Our biggest challenge in this area continues to be finding proper placements for our patients who are economically and/or socially challenged, may not

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 formed in 2011, in order to expedite long-term care placements for those patients who require them.

Average Acute Length of Stay

Years 2008 to 2015



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.

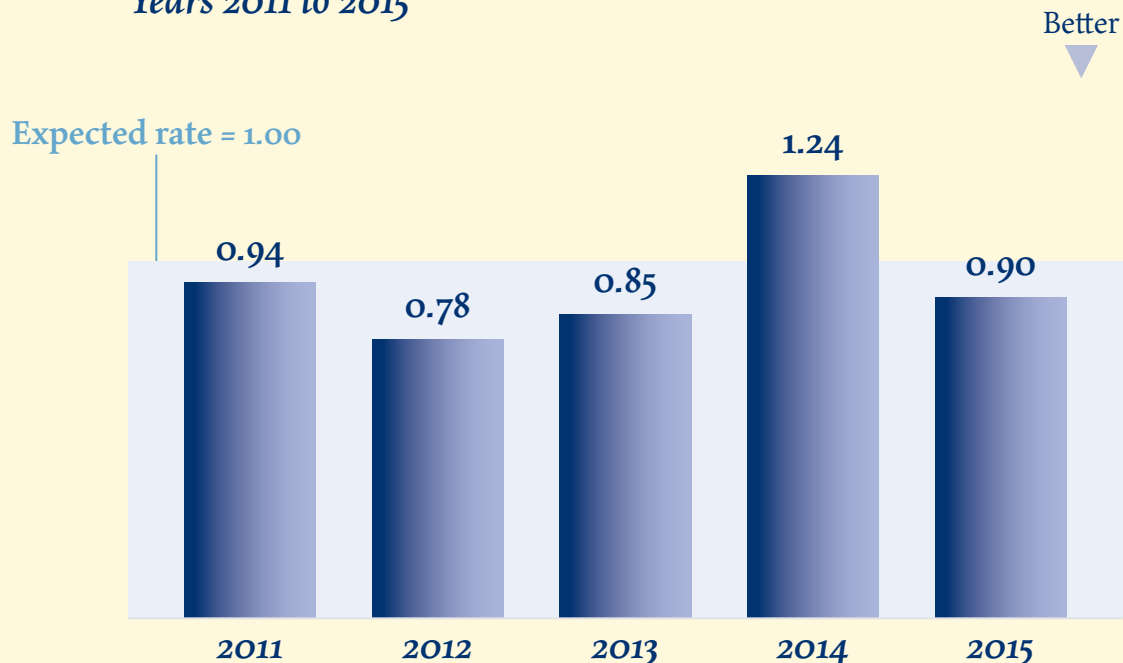
Below is Castle's risk-adjusted mortality rate for patients with diagnoses of acute myocardial

infarction, chronic obstructive pulmonary disease (COPD), coronary artery bypass graft, heart failure, pneumonia, stroke, and total hip or knee arthroplasty.

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 2015



Emergency Care



Our family wants to thank you and your very fine staff of professionals for your efforts in delivering our mom back to us whole and healthy, in spite of a major stroke. We cannot begin to express the depth of our gratitude for what you did for her.

First and foremost, you reversed the stroke's action with the tPA and did so in a timely manner so that she has no evidence of having had a stroke.

Next, our mother recites how kindly and carefully you treated her. She knows she was in an excellent facility with caring people looking after her.

We know, too, by the results.

— A thank-you card from the family of a patient

Emergency Care

Reroute Hours

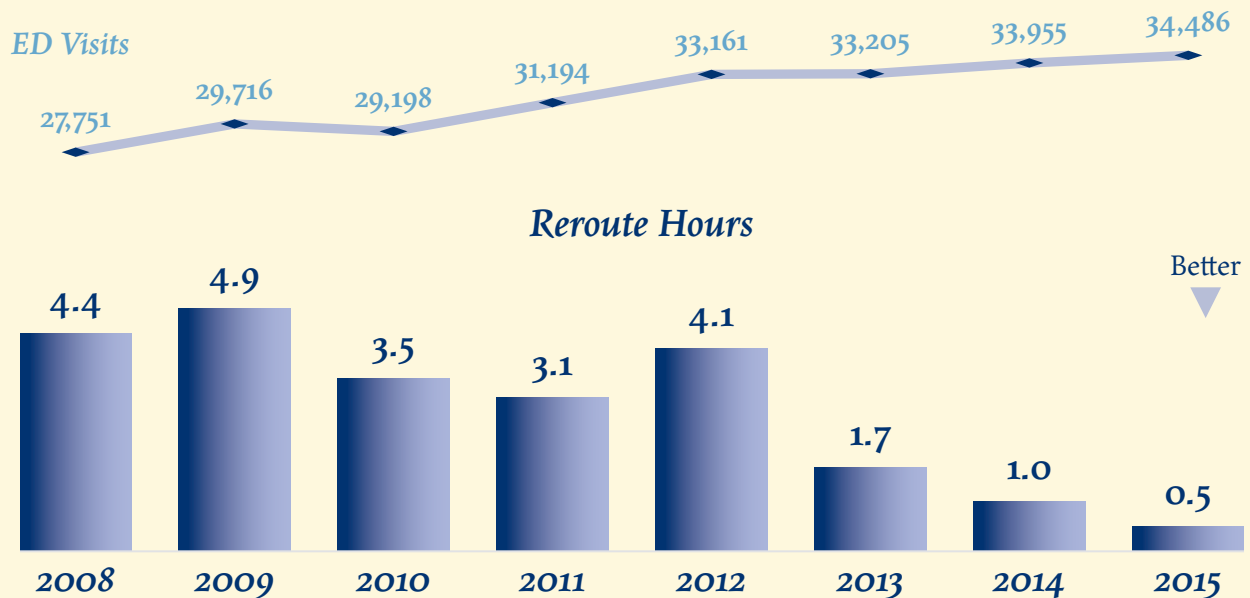
Reroute hours are the hours of an emergency department's operation during which ambulance patients are unable to be admitted because of high patient volumes and consequently need to be rerouted to other hospitals. Castle monitors its reroute hours on a monthly basis to ensure that the Windward O'ahu 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 2015



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 0.3% of our patients in 2015 left the Emergency Department (ED) without being seen.

Castle attributes our success to the following efforts:

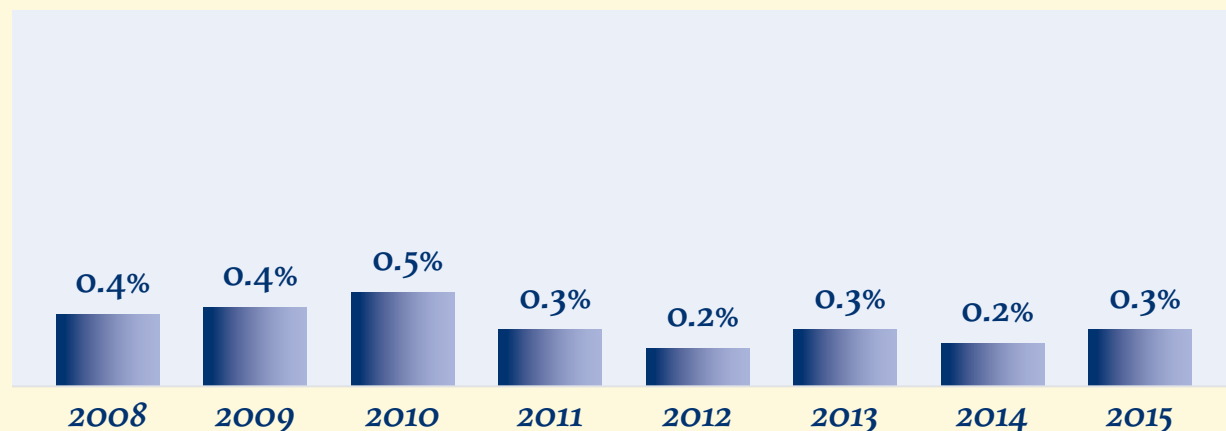
- Moving ED patients from intake to treatment as quickly as possible
- Getting a physician rapidly to each patient's bedside
- Ensuring efficiencies that reduce the time patients must spend in the ED.

ED Patients Left Without Being Seen

Years 2008 to 2015

Better
▼

Most Recent National Rate = 2.0%



Emergency Care

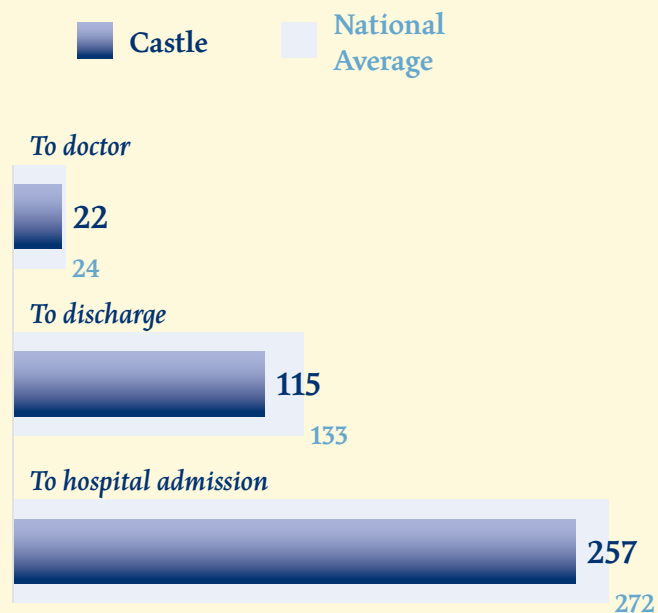
Wait Times

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 2015, 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 2015

◀ Better





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.

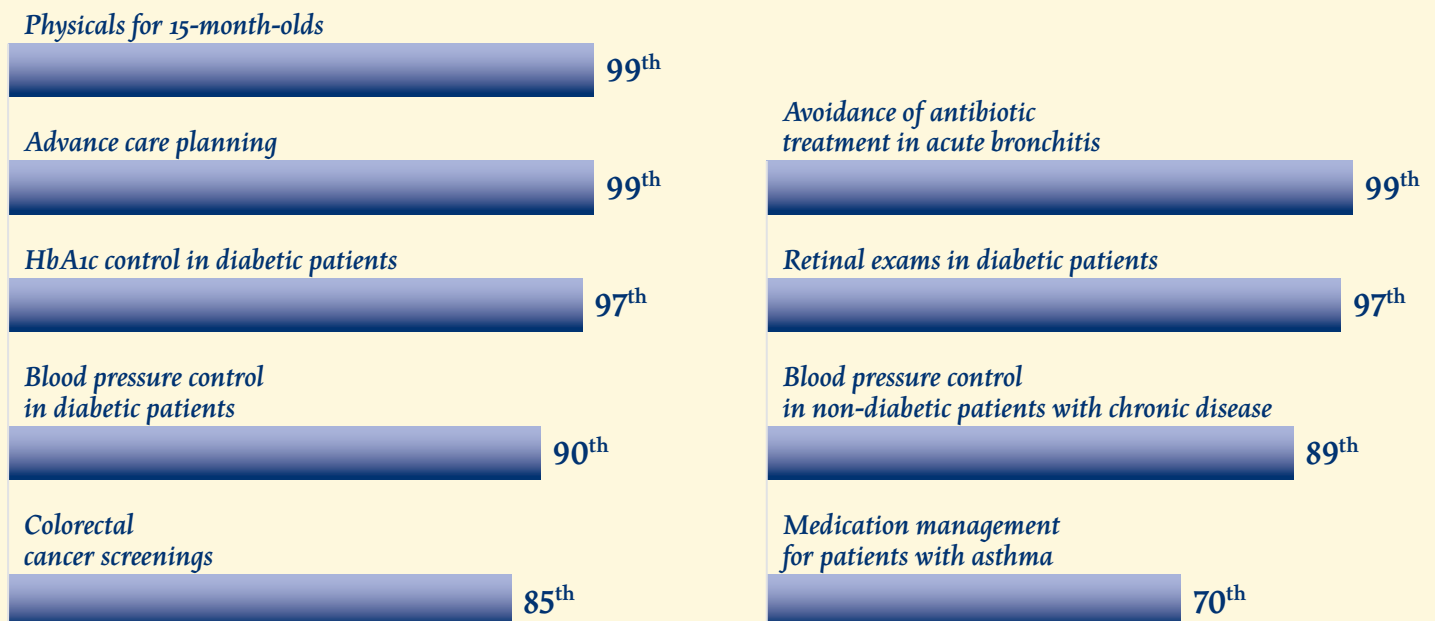
As shown in the chart below, CHG's performance in the implementation of many of these programs is in

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 continues to work on improving medication management for patients with asthma.

Castle Health Group Performance National Percentile Ranking October 2014 to September 2015

Better ►



Advancements and Innovations

Renovation of Emergency Department

The renovation of Castle Medical Center's Emergency Department (ED), begun in late 2014, was completed early this year. This project expanded the department from 7,500 to 12,000 square feet and increased the number of beds from eighteen to twenty-five.

More than 70% of Castle's hospitalized patients come through the ED, making it the front door for the majority of our patients. Our ED volumes have doubled in the last twenty years, and even during construction this past year, the department had nearly 34,000 patient visits, so this was an essential project for both the hospital and Windward O'ahu.

In addition to providing more capacity to serve the community, the completed renovation brought a number of new features to improve the patient experience, including:

- Private rooms for patients
- Improved workflow, with a separate entrance for behavioral health patients
- A dedicated three-bed behavioral health intake facility
- An all new outdoor lānai
- An updated waiting room.



Advancements and Innovations



Advancements and Innovations



Community-Based Primary Care Clinics

In 2015, Castle Medical Center began operating two community-based primary care clinics on the Windward side of O‘ahu to improve access to health care services in these areas.

In Lā‘ie, Castle welcomed Marc Shlachter, M.D., as the medical center’s first employed primary care physician. Under this new arrangement, the clinic in Lā‘ie that has been run by Dr. Shlachter for nearly

four decades is now affiliated with Castle and is known as the Lā‘ie clinic of Castle Primary Care. Castle has plans to construct an expanded space in the Lā‘ie Village Center to accommodate not only Dr. Shlachter, but also Castle specialists who wish to have hours in Ko‘olau Loa.

Then in December, Castle opened a second clinic, in Kailua Professional Center I in downtown Kailua.

Advancements and Innovations



The first two physicians to see patients at this clinic were internist Angela McCarthy, M.D., who recently joined Castle, and internist Howard Keller, M.D. Dr. McCarthy is passionate about preventive medicine and continuity of care and performs all services as a primary care physician, including women's health. As for Dr. Keller, he needed no introduction to the community, as he has been providing primary care in Kailua for over forty years.

Operating these two clinics in Lā'ie and Kailua helps Castle meet the considerable need for primary care on Windward O'ahu. We also believe that the clinics can provide a way for young physicians to establish themselves in our communities, while practicing medicine in a way they prefer and without the significant financial risk of starting up their own private practices.

Advancements and Innovations

AH Hospitals Achieve Stage 6 of HIMSS EMR Adoption

Last year, Castle became one of sixteen Adventist Health (AH) hospitals and among just 16% of hospitals nationally to have reached a key milestone in implementing electronic medical records (EMRs).

Castle and the other AH hospitals achieved Stage 6 of the Healthcare Information & Management Systems Society (HIMSS) Analytics EMR Adoption Model. This is an eight-stage process that helps hospitals track their progress in implementing EMRs. The stages begin at 0 and end at Stage 7, at which point hospitals are no longer using paper charts to deliver and manage patient care.

Reaching Stage 6 means that Castle now has full physician documentation in place in at least one

inpatient area and that we've made important progress in electronically tracking patient outcomes. Additionally, all radiology images are now viewed digitally. We no longer use film.



EMRs improve patient care and save lives by reducing medical errors and allowing caregivers to quickly access patient information from wherever they are. They also allow the hospital to track and improve patient outcomes and meet

government requirements for reporting quality data.

Hospitals must meet national standards and government objectives for using EMRs or risk reductions in their Medicare payments. Castle remains on track to meet these deadlines.

Advancements and Innovations

In Their Shoes: Empathy in Action

In 2015, Castle Medical Center implemented a \$50,000 innovations grant from Adventist Health designed to enhance empathy in our everyday workplace. Associates of all departments at Castle participated in a program of ninety-minute interventional workshops, named “In Their Shoes.”

Empathy in a clinical setting was once referred to as “good bedside manner” and traditionally regarded as less important than technical expertise. But a large number of studies in the past decade have found that it is no mere frill. Increasingly, empathy is considered essential to establishing a patient’s trust in his or her health care provider. This trust is the foundation of a good therapeutic relationship. Studies have linked empathy to greater patient satisfaction, better clinical outcomes, decreased caregiver burnout, and a lower risk of errors.



IN THEIR
SHOES

Empathy in Action
Castle Medical Center

Advancements and Innovations

Antimicrobial Stewardship Program

Castle Medical Center was one of the first health care facilities in Hawai'i to enroll in the statewide antimicrobial stewardship program (ASP) collaborative formed by the Hawai'i Department of Health. This collaborative was established in response to the National Plan for Combating Antibiotic-Resistant Bacteria.

Antibiotic resistance has a significant impact on patient morbidity and mortality. Overuse and misuse of antibiotics is linked to rising *Clostridium difficile*

infections and other patient harm. (Please turn to page 46 for more about our progress in fighting such infections.) Furthermore, antibiotic resistance affects health care costs. Currently, antimicrobials account for about 30% of a typical hospital's budget. The Centers for Disease Control and Prevention (CDC) expects that the Centers for Medicare and Medicaid



Services (CMS) will add antimicrobial stewardship to their pay-for-performance program at some point during the next few years.

Through the state ASP collaborative, Castle will develop its own vision, goals, and program. Castle has already completed its initial facility assessment and hosted a site visit from the state. Program interventions will focus on converting antibiotic administration from intravenous to oral,

narrowing the spectra of antibiotics used, correcting “drug/bug” mismatch, renal dose adjusting, pharmacokinetic adjusting, and monitoring carbapenem use. Data and analysis in each of these areas will be reported to the statewide collaborative, to Castle's leadership, to our physicians, and to other key stakeholders.

Advancements and Innovations



Choose Healthy Now Project

In October, Hawai'i's First Lady Dawn Ige kicked off a weeklong celebration of National Food Day by honoring Castle Medical Center for being the first hospital in the state to implement the Department of Health's Choose Healthy Now project. The event was hosted by Castle, together with the Department of Health, and was also attended by Lola Irvin, administrator of the Department of Health's Chronic Disease Prevention and Health Promotion Division.

The Choose Healthy Now project is a worksite wellness program designed to encourage healthier

eating habits among employees. At worksites that implement the program, a wider variety of healthy foods are offered to employees, and items for sale at the worksite are labeled, according to their healthfulness, with the three colors of a traffic light: green (for healthful), yellow (to be eaten in moderation), or red (best to avoid).

In addition, posters, e-mail messages, newsletters, taste-testing events, and small incentive items remind employees to "choose healthy" when making their food purchases.

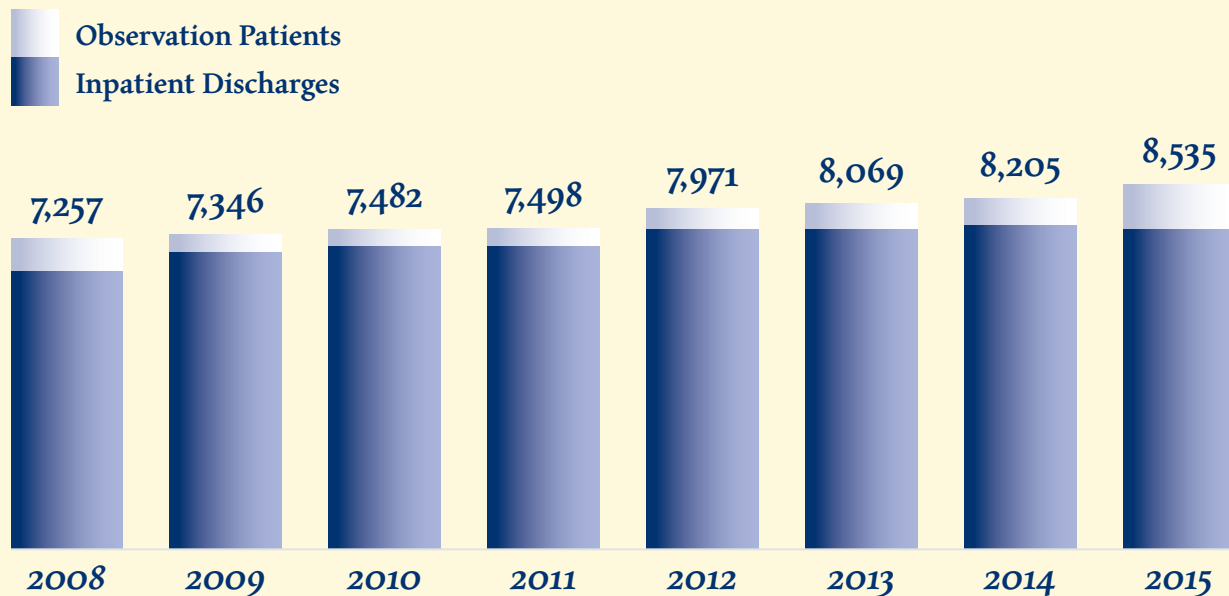
Volumes

Inpatient Volume

In 2015, Castle Medical Center had the highest number of inpatient discharges in our history. Inpatient volume continues to grow each year.

Inpatient Volume

Years 2008 to 2015



Volumes

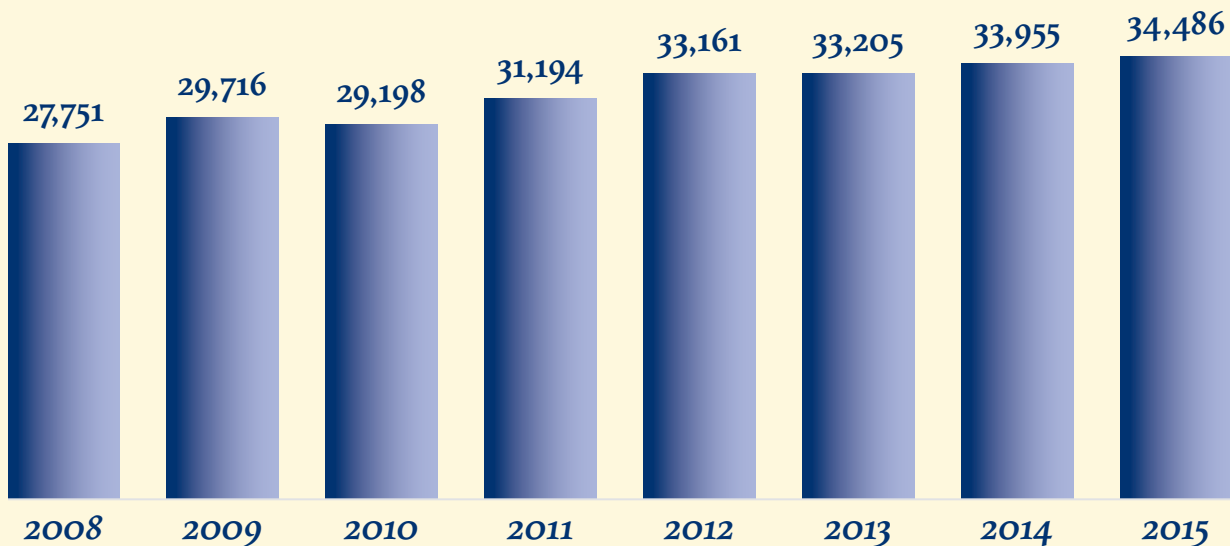
Emergency Department Visits

Despite being in the midst of a full-scale renovation, the Emergency Department at Castle had its busiest year ever in 2015.

In early 2016, the remodeling of the facility was complete. This project included the facility's expansion from eighteen to twenty-five beds in order to accommodate the increasing need for its services. (Please turn to page 60 to read more about this remodeling and expansion.)

Emergency Department Visits

Years 2008 to 2015



Volumes

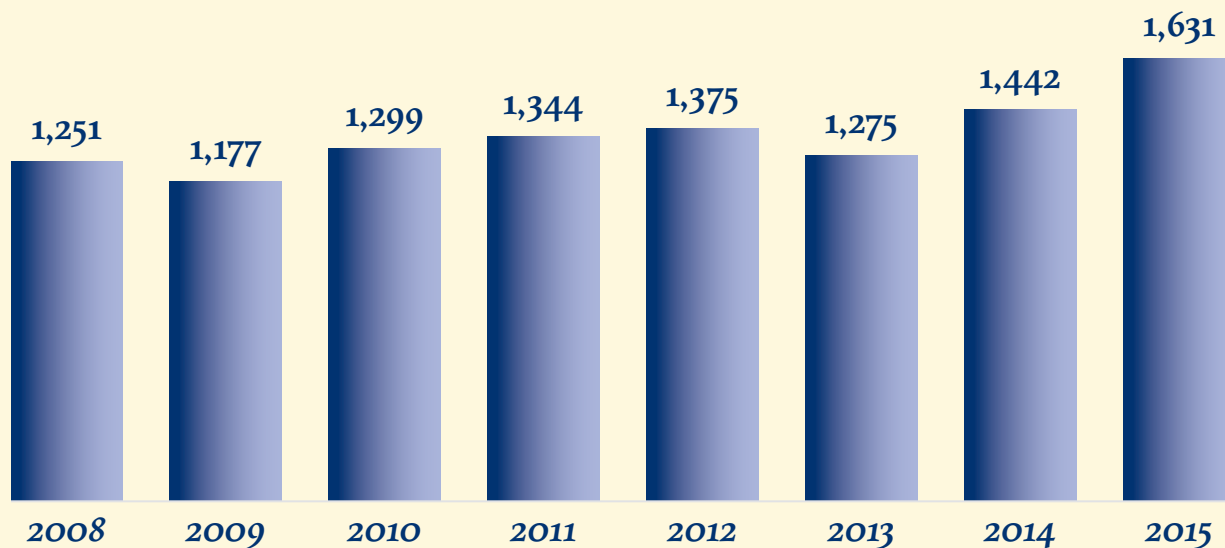
Behavioral Health Discharges

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 2008 to 2015



Volumes

Births

Castle's Vera Zilber Birth Center had yet another highly active year in 2015. 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 2008 to 2015



Volumes

Outpatient Visits

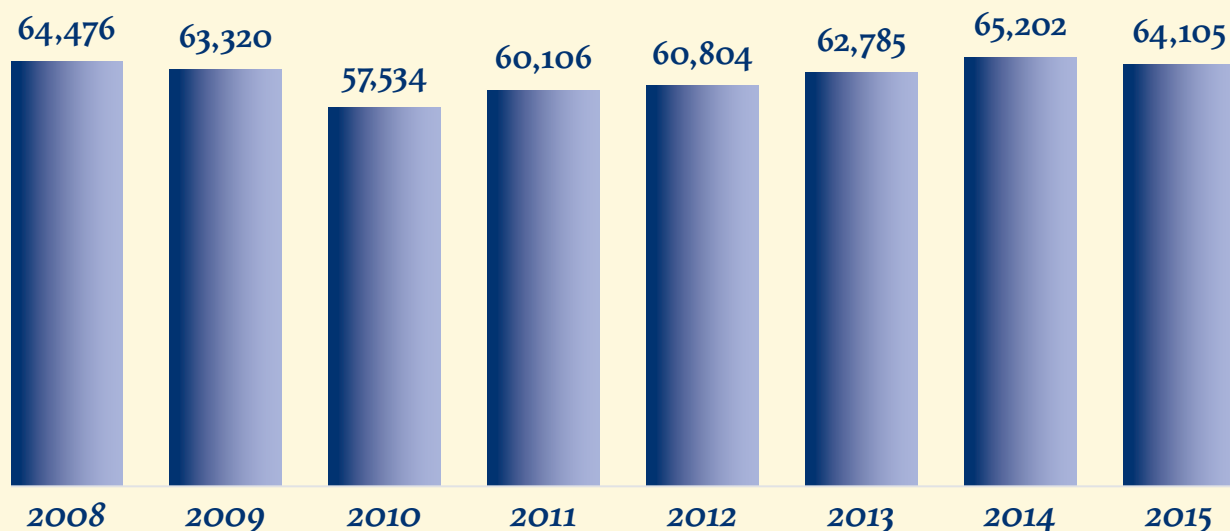
The chart below shows the number of outpatient visits to the Outpatient Clinic, Outpatient Surgery, Respiratory Care, Cardiovascular Services, the Cardiac Cath Lab, Imaging, Angiography, Neurophysiology, the Laboratory, Rehabilitation Services, and the Wellness and Lifestyle Medicine Center.

Also included in the 2015 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. (Please turn to page 62 to read more about these facilities.)

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 2008 to 2015





Wellness and Lifestyle Medicine Center

During 2015, 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 1,930 people from our community participated in the center's health and wellness outreach programs at over sixty events. Seventeen of these events included children and/or adolescents.
- 710 patients in the hospital received tobacco-use cessation services.
- We exceeded our goal, established in a grant from the Hawai'i Community Foundation, by providing outpatient tobacco-use counseling to 162 primarily low-income, low-education, or unemployed people. If appropriate, these people were provided with grant-funded nicotine replacement medications.
- In 2015, we saw 744 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.
- The Wellness Center receives referrals for children and adolescents diagnosed with obesity or diabetes.
- Our Aloha Kidney Class, taught by a nephrologist, serves those individuals who have stage 3, 4, or 5 chronic kidney disease but who are not on dialysis. 118 such patients, along with seventy support persons and eight health care providers, completed this six-class series, which was offered six times.
- Nine different types of group fitness classes, each held at least once a week, were offered throughout the year, with 7,354 session/participants. Two other fitness classes were offered on specialized topics.
- Seventeen Wellness Cuisine Cooking classes were held, with 320 people participating.
- Six different community support groups met regularly, with more than 634 attendees altogether.
- In June, the Wellness Center started a partnership with the Boys & Girls Club in Kailua to provide bi-monthly cooking classes for middle-schoolers, each limited to twelve children. We provided eleven such classes serving 132 children and eleven adults.
- Castle continues to offer massages and aromatherapy provided by licensed massage therapists. Over 881 individuals took advantage of this popular service in 2015.

Staffing

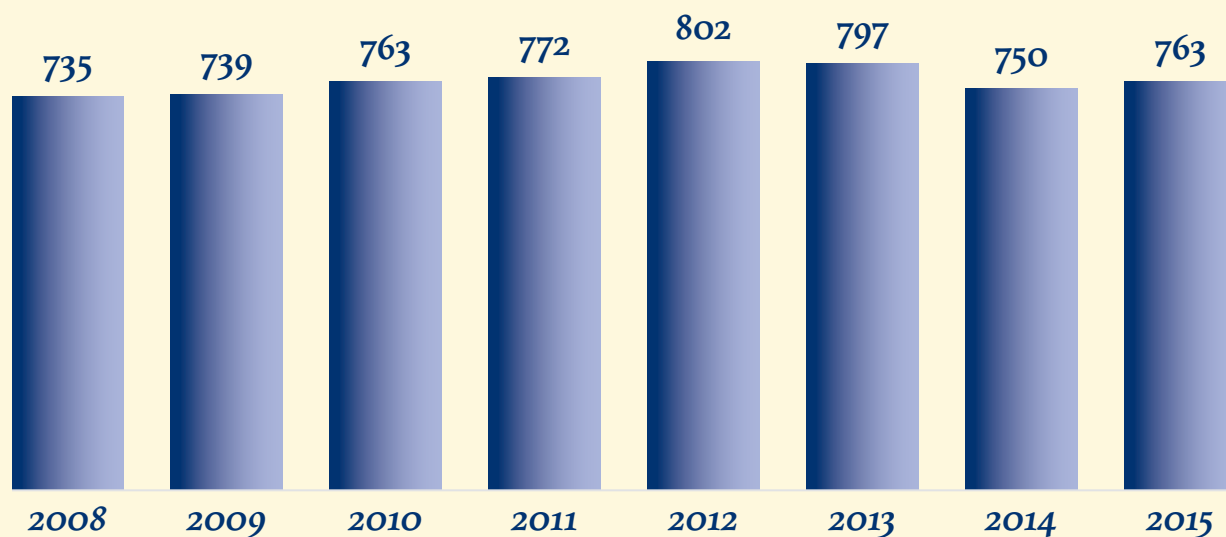
Total Hospital Full-Time Equivalents (FTEs)

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 2008 to 2015



Staffing

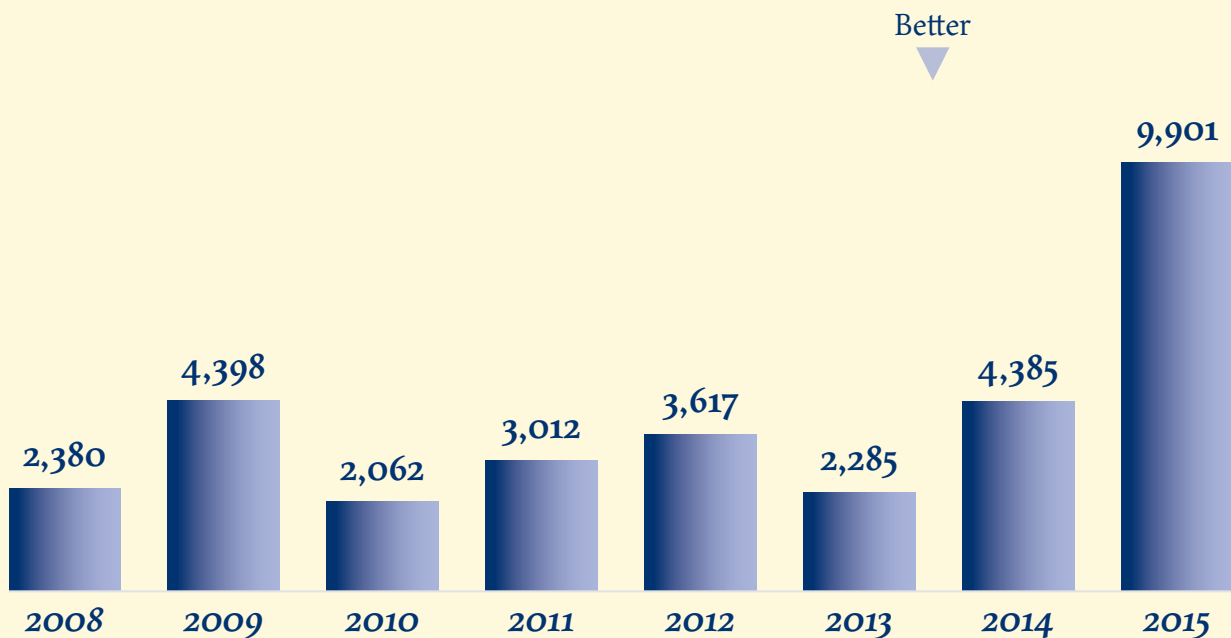
Agency Use

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.

Agency Hours *Years 2008 to 2015*



Quality Improvement Goals for 2015 and Their Results

Goal

Results

In the treatment of stroke:

- Continue efforts to perfect performance in providing head CT/MRI results within 45 minutes
- Achieve certification as a primary stroke center.

Considerable improvement was made in providing timely head CT/MRI results. Efforts continue to perfect performance in this area.

Efforts are ongoing to achieve primary stroke center certification.

Improve the care of sepsis:

- In the hospital
- Through early detection in the community.

In 2015, great improvement was seen in compliance with the Sepsis Bundle and in mortality rates.

Continue to reduce the rate of readmissions to the hospital.

Considerable reduction in the rate of readmissions was seen in 2015, especially for AMI and CAP patients.

Achieve top-decile performance in patient satisfaction for:

- Inpatient
- Outpatient surgery
- Emergency Department.

Efforts continue to reach the 90th percentile in all three areas.

For Castle Health Group, improve the management of medications for patients with asthma.

The national percentile ranking for performance in this area rose from the 59th to the 70th percentile.

Improve physician satisfaction with:

- Pathology services
- Medical records.

Our ranking for physician satisfaction with pathology services has improved greatly, from the 51st to the 84th percentile.

Satisfaction ranking for medical records has also improved, from the 52nd to the 64th percentile.

Improve associate engagement scores.

Our composite ranking for associate engagement rose from the 51st to the 65th percentile of all organizations surveyed.

Quality Improvement Goals for 2016

Improve patient satisfaction with:

- Inpatient care
- Outpatient surgery
- The Emergency Department.

Achieve certification as a primary stroke center.

Reduce our risk-adjusted mortality rate to the top-performer target rate of 0.78 or below.

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

For Castle Health Group, further improve medication management for patients with asthma.

Further improve physician satisfaction with:

- Medical records
- Cardiology.

Reduce agency hours.

Continue to improve associate engagement scores.



Castle Medical Center

 **Adventist
Health**

*Exceptional Medicine
by Exceptional People*

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.