

# QUALITY REPORT<sub>2014</sub>

*Castle Medical Center*



*Exceptional Medicine  
by Exceptional People*



**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 2013.*

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# Introduction

In 2013, Castle Medical Center proudly celebrated its 50th anniversary, for it was in January of 1963 that we first opened our doors to the people of Windward O’ahu. Over our fifty years of service to the community, Castle has not only grown physically and greatly expanded its range of services, it has continually aimed to provide health care of ever higher standards of quality.

Many aspects of Castle’s quality performance during our 50th anniversary year are revealed in this, the eighth edition of our annual *Quality Report*. This report contains charts that show our performance on various quality indicators. These indicators are nationally recognized as tools for assessing the quality of health care provided at hospitals. It is part of our commitment to openness and honesty about the care we offer to the community that we make our performance on these indicators public.

You will see in this report that Castle’s quality performance continues to improve year after year. In a large number of areas, our performance is truly exemplary. There are also some other areas where we need to improve. In these areas, you can be assured that we are making every effort in 2014 to raise our performance.

In this report, you will also read about the many awards Castle won, the innovations we made, and what we did to help fulfill our mission to our community. We include stories from our patients, associates, and physicians that are testimony to what we have accomplished.

So, as we begin our next fifty years of service to the Windward O’ahu community, we hope you will find this anniversary edition of our *Quality Report* both informative and reassuring about the work we do every single day for all of our patients and their loved ones.



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M.B.A.  
Vice President Operations

# 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 1,100 associates, 300 volunteers, and 300 physicians 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 2013, 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
- Surgical Weight Loss Institute (bariatric surgery)
- Multi-specialty surgical services
- Neurological services
- Harry and Jeanette Weinberg Outpatient Center
- Chemotherapy Clinic
- Extensive outpatient services
- Imaging and laboratory services in Kāne'ōhe
- Wellness and Lifestyle Medicine Center.

# Awards and Recognition

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## 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 experienced a highly successful four-day accreditation survey from The Joint Commission in 2013. All other hospitals in the Adventist Health system were also surveyed this same year, and across all the hospitals in the system, the commission made the fewest number of recommendations for improvement at Castle. The hospital, the home care division, and the laboratory all received the commission's Gold Seal of Approval™.

# Awards and Recognition

## The Joint Commission Recognizes Castle as a *Top Performer*

For the second year in a row, Castle Medical Center was named 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, and pneumonia. 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 1,099 hospitals in the U.S., or 33% of accredited hospitals reporting data.

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](http://www.qualitycheck.org).



# Awards and Recognition

## Gold Achievement Award for the Care of Stroke

In 2013, the American Heart Association and American Stroke Association recognized Castle Medical Center with a “Get With The Guidelines®” (GWTG) Gold Achievement Award for at least twenty-four consecutive months of 85% or greater adherence to all GWTG stroke treatment guidelines. These guidelines include starting stroke patients on aggressive risk-reduction therapies (such as the use of tPA, antithrombotics, and anticoagulation therapy), cholesterol-reducing drugs, and smoking-cessation counseling. All of these measures are aimed at reducing death and disability and improving the lives of stroke patients.

The “Get With The Guidelines®” award program for stroke helps Castle’s staff develop, implement, and maintain acute and secondary prevention guideline processes to improve patient care and outcomes. The quick and efficient use of guideline procedures improves the quality of care for stroke patients and may reduce the number of disabilities and save lives.





# Awards and Recognition

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## **Outstanding Patient Experience Award™**

Castle Medical Center was recognized in 2013 for outstanding performance in providing a positive experience for patients during their hospital stay, as measured by Healthgrades, a leading Internet resource that helps consumers find the health care providers that best meet their treatment needs.

The award highlights the performance of hospitals that were evaluated by their patients in surveys collected by the Centers for Medicare and Medicaid Services (CMS) after they were discharged from the hospital. The surveys measure patients' satisfaction with the quality of care they received and other aspects of their experience as patients.

Healthgrades determines eligibility for the Outstanding Patient Experience Award™ by identifying the hospitals that have an overall patient experience score in the top 15% of the nearly 4,500 hospitals across the nation that were evaluated. In addition to Castle Medical Center, 454 other hospitals in the United States—only 10% of those that were evaluated—received this prestigious award.



# Awards and Recognition

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## 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 and Employee Perception Surveys performed in 2012, PRC has recognized Castle Medical Center with thirteen individual National Excellence in Healthcare Awards.

**Medical Staff Perception:** Castle received five 5-Star Awards for scoring in the top 10% of hospitals whose medical staff was surveyed, in the areas of:

- Hospitalist services
- Medical records
- Nursing care
- Emergency services
- Patient safety.

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

- Overall quality of care
- Surgical services
- As a place to practice medicine
- Administration.

**Employee Perception:** Castle received four 4-Star Awards for scoring in the top 25% of hospitals whose employees were surveyed, in the areas of:

- Teamwork between departments
- Senior leadership
- Communication
- Total compensation package.



# Awards and Recognition

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## Excellence in Patient Care Awards

In 2013, Castle Medical Center received two Excellence in Patient Care awards from outcomes firm Studer Group®. Studer Group® gives its Excellence in Patient Care awards to select partners based on very high scores in a variety of categories.

Castle was selected for one of the awards for having shown a substantial reduction over recent fiscal years in the number of patients who “left without treatment” from the Emergency Department. The other award was given for having significantly improved our core measures scores from the twelve months ending June of 2011 to the twelve months ending June of 2012. Castle’s outstanding results in both areas ranked it among the highest from a database of organizations coached by Studer Group®.

Studer Group® 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

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## Community Value Five-Star® Award

Cleverly + Associates annually presents the Community Value Leadership Awards™ to recognize hospitals that provide value to the community by being financially viable, appropriately reinvesting back into the facility, maintaining a low cost structure, having reasonable charges, and providing high quality care to patients.

In 2013 and for the second year in a row, Castle Medical Center received the Community Value Five-Star® award for achieving Community Value Index® scores within the top 20% of all hospitals in Hawai'i.

Cleverly + Associates is a privately owned, professional service organization specializing in core financial strength services for the hospital industry. It provides independent, objective information to hospitals and other organizations serving the health care industry, and offers quality benchmarking and consulting services to enhance these institutions' financial performance.

# Awards and Recognition

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## Department of Health Perfect Scores

The Hawai'i Department of Health paid a visit to Castle Medical Center in 2013 to ensure that we follow safe food-handling procedures, which involves environmental health, safeguards in place to protect food from contamination by food handlers, cross-contamination, and contamination from other sources in the food establishment.

We are proud to say that Castle's Nutritional Services and our cafeteria, The Bistro, earned perfect scores on this recent inspection.



# Awards and Recognition

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## **CEO Cancer Gold Standard™ Accreditation**

In 2013, Castle Medical Center received the CEO Cancer Gold Standard™ accreditation, which recognizes the organization's extraordinary commitment to the health of our associates and their families. This accreditation comes from the CEO Roundtable on Cancer, a non-profit organization of cancer-fighting CEOs that works in collaboration with the National Cancer Institute, many of its designated cancer centers, and leading health non-profit organizations and professionals.

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 Gold Standard 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

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## The Healthiest Large Employer in Hawai'i

For the second year in a row, Castle Medical Center was recognized in 2013 with a “Healthiest Employers in Hawai'i” award by *Pacific Business News* magazine. As in 2012, the medical center was the winner in the large employer category for its commitment to workplace health and fitness.

In July, *Pacific Business News* honored all thirty-one finalists for the awards at a breakfast event attended by more than two hundred of Hawai'i's business leaders at the Waikiki Beach Marriott Resort and Spa. Castle was subsequently featured in an article of *Pacific Business News* for “Living Well,” its employee wellness program.



# Awards and Recognition

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## PRSA and IABC Awards for Marketing

The Hawai'i chapter of the Public Relations Society of America (PRSA) honored Castle Medical Center's Marketing Department with eleven of its Koa Awards in 2013, including two for the 2012 edition of the *Quality Report*. These awards tied for the most ever received by the hospital.

PRSA professionals in chapters across the nation judged the entries after marketing and communication professionals throughout the state of Hawai'i submitted their best work of 2012 to the Koa Awards program.

Castle received its eleven Koa Awards for:

- Annual Reports, Non-Profit: *2012 Quality Report*
- Other Publications: *2012 Quality Report*
- Creative Tactics: *Discharge/Quality Folder*
- External Web Site: *Castle's Web Site, castlemed.org*
- Other Publications: *Physician Directory 2012 / 2013*
- Public Service, Non-Profit: *In Sickness & In Health (seminars)*
- External Video Programs: *In Sickness & In Health (TV)*
- Annual Reports, Non-Profit: *Annual Giving Report*
- Media Relations, Health Care Services: *Pink Glove Dance Video*
- Creative Tactics: *Pink Glove Dance Video*
- Internal Newsletters: *Kū I Ka Mahalo*.

In addition, the Hawai'i chapter of the International Association of Business Communicators (IABC) recognized Castle with fourteen of its 2013 'Ilima Awards, including one for the 2012 edition of the *Quality Report*. These are the most ever received by the hospital.

Castle received its fourteen 'Ilima Awards for:

- Design, Four-Color Annual Report: *2012 Quality Report*
- Design, Brochure/Catalogue: *Discharge/Quality Folder*
- Internet Sites: *Castle's Web Site, castlemed.org*
- Design, Brochures/Catalogues: *Physician Directory 2012 / 2013*
- Media Relations: *In Sickness & In Health (seminars)*
- Public Relations Programs: *In Sickness & In Health (radio)*
- Audio Programs: *In Sickness & In Health (radio)*
- Public Relations Programs: *In Sickness & In Health (TV)*
- Writing, Features/News/Editorials: *Castle MD*
- Employee Magazines: *Castle MD*
- Design, Four-Color Annual Reports: *Annual Giving Report*
- Writing, Brochures: *Annual Giving Report*
- Direct Mail: *Annual Giving Report*
- Employee Communication: *Pink Glove Dance Video*.



# Awards and Recognition

## Gold MarCom Award for *Windward Health*



Castle Medical Center received a gold MarCom Award from the Association of Marketing and Communication Professionals (AMCP) for the Spring 2013 issue of *Windward Health*, its quarterly community health news journal. The MarCom Awards program is a creative competition for any

company or individual involved in the concept, writing, or design of print, visual, audio, or Web materials.

A panel of judges consisting of senior-level marketing and communication professionals spends two full months reviewing the approximately 6,000 entries received. The Spring 2013 issue of *Windward Health* won in the magazine design category.

Castle Medical Center has published a health news journal since 1983, when it was called *Health Scene*. In 1999, the hospital inaugurated *Windward Health*, which is distributed by mail to over fifty thousand homes on the Windward side of O'ahu.



# Mission

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*It is with great pleasure that I share this letter of commendation with you about my incredible inpatient experience at Castle Medical Center earlier this year.*

*Being a spiritual person, I was initially quite surprised and ultimately touched by the daily morning and evening prayers over Castle's public address system. I was also brought communion several times that week by a Knights of Columbus representative from St. Anthony's in Kailua. I also received prayers and several visits with Castle's chaplain. I was even prayed over by my wonderful hospital housekeeper, who touched my heart more than she'll ever know.*

*I truly believe that the spiritual nature and mission of Castle Medical Center had a profound impact on my healing process. Even the daily prayer cards I received with each meal were a godsend. They are now in my Bible.*

— A letter from a patient to Kathy Raethel,  
Castle's president and CEO

# Mission

## Philippine Relief Fund

Typhoon Haiyan, possibly the strongest storm in recorded history, slammed into the Philippines on the morning of November 8, 2013. The storm hit island after island as it moved across the country, leaving behind broken families, homes leveled by storm surge and wind, and destroyed livelihoods.

Castle Medical Center partnered with the Adventist Development Relief Agency (ADRA), a worldwide humanitarian relief agency operating in 120 countries, to assist in the response. Castle matched donations from associates, physicians, and volunteers, and a total of more than \$15,000 was sent to help families affected by disaster in the Philippines.

This assistance helped provide food, temporary shelters, and water purification systems to the affected areas. ADRA will also continue to be involved in long-term recovery programs to help families rebuild their lives.

For additional information about this effort, please visit ADRA's Web site, [www.adra.org](http://www.adra.org).



# Mission

**Saturday  
July 13, 2013**

**Caring for our community**  
**50**  
**1963** ★ Castle Medical Center ★ **2013**  
**Sharing God's Love**

**640 Ulukahiki St  
Kailua, Hawaii**

**Invocation**  
Chaplain Dave Rasmussen, Director of Spiritual Life

**Samoan Gospel Heralds**

**Castle Medical Center: 1963 - 2013**  
(Video)  
Kathy Raethel, CEO

**Praise & Worship**  
Kailua Seventh-day Adventist Church Praise Team

**"Find Us Faithful"**  
Isaac De La Cruz

**The Message**  
Ralph S. Watts, III  
President, Hawai'i Conference of Seventh-day Adventists

**Our Stories**  
Robert G. Carmen  
President, Adventist Health

Richard Guthrie, MD  
Son of William Edward Guthrie, first administrator  
of Castle Medical Center

Michele Seibel  
CMC Administration

**Revivals Ministry**

**Benediction**  
Chaplain Dave Rasmussen

**50th Anniversary Worship Service**



## 50th Anniversary Worship Service

Nearly four hundred members of our community and of O'ahu Seventh-day Adventist churches accepted an invitation to attend a special worship service on Saturday, July 13, 2013, celebrating Castle Medical Center's 50th anniversary.

Special thoughts on our history and mission were offered by Kathy Raethel, Castle's president and CEO; Robert G. Carmen, president and CEO of Castle's corporate parent, Adventist Health, and former president of Castle; Richard Guthrie, M.D., who is the son of Castle's first administrator, William Edward Guthrie; and Michele Seibel of Castle's administration. The special message for the day was presented by Elder Ralph Watts III, president of the Hawai'i Conference of Seventh-day Adventists and vice-chair of Castle's Governing Board.

# Mission

## Hele Mai Ho'ohiwahiwa: 50th Anniversary Open House

On Sunday, July 14, Castle welcomed the entire community to an open house celebrating its 50th anniversary and the completion of renovations to the hospital's first floor. (Please see page 59 to read about these improvements.)

A special program began a day that included tours of the facility, cooking demonstrations in Castle's Wellness Center, health screenings by Castle physicians, keiki activities, and entertainment by award-winning island musicians and dancers. The program also featured a hula to the song, "The Prayer," performed by caregivers from the hospital's Child Development Center, and a blessing offered by Kahu Wendell Davis of Kamehameha Schools.



# Mission

## Medical Missions to Bolivia and Papua New Guinea

This past year, Castle Medical Center helped sponsor three of our associates to take part in medical mission trips to developing nations that have serious medical needs.

- Under the auspices of Project Helping Hands, nurse Christopher Len of Castle's Emergency Department traveled to Bolivia as part of a team of eighteen volunteers from all over the United States. During their two weeks there, the team members addressed thousands of medical issues in the rainforest villages of Chapare Province, where clean drinking water is scarce and tropical diseases such as malaria, Chagas disease, and giardia are rife.
- Open Heart International, a development organization associated with Sydney Adventist Hospital in Australia, annually stages a mission trip to Port Moresby General Hospital, located in the capital city of Papua New Guinea. This trip is made by a large team of medical professionals who have experience in cardiac surgery. In July of 2013, Castle sponsored two of its nurses, Leesa Souza and Tony Glorioso, to be the only non-Australian professionals on the team. For seven days, they trained physicians and nurses in cardiac surgery and critical care, and they also worked in many direct health care roles themselves. Fifty open heart surgeries were performed during the week.



# Mission

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## Computers for the Philippines

In 2013, Castle Medical Center donated more than one hundred out-of-use computers to SaveGreenIT, LLC, a non-profit company that uses the computers to train local high school students to repair and rebuild them. The refurbished computers then get sent along with organizations that work in developing countries.

Last spring, a group of six students from local school Hawaiian Mission Academy and ten adults set out on a mission trip to Quezon City in the Philippines. The CIO of SaveGreenIT first worked with the students at Hawaiian Mission Academy and then accompanied them on their mission trip. With the generous donation of computers from Castle, they were able to build a computer lab for Commonwealth Christian Academy, the school in Quezon City where they worked.



# Mission



## Holiday Community Outreach

- In 2013, some sixty-seven needy Windward O'ahu families were provided with gift cards for Thanksgiving meals, donated by hospital associates in an effort that has become an annual event.
- For over twenty years now, Castle's Giving Tree Project has assembled large collections of gifts during the Christmas season for Windward families who otherwise would have to go without. In 2013, sixteen such families were treated to such gifts, and several more families received canned and non-perishable food, all donated by Castle associates and physicians.
- Also last Christmas, Castle's Medical Staff and Castle Health Group, a consortium of physicians affiliated with the hospital, contributed Christmas trees and ornaments 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.
- At 4 a.m. on Christmas day, Castle associates arrived at the homeless shelters run by the Honolulu-based Institute for Human Services to prepare Christmas breakfast for some 325 residents. Food was donated by the hospital, and after breakfast, gifts donated by Castle's leadership were distributed by Santa Claus and Mrs. Claus to the children who were staying at the shelter.



# Mission

## Waimānalo Country Fair

Castle Medical Center partnered with other community organizations to provide health and wellness information at the Waimānalo Country Fair in 2013. Organizers of the fair were thrilled to have a health tent for the first time ever. The tent was coordinated by Ruby Hayasaka, Castle's director of Nutritional Services.

Approximately five hundred children and adults visited the tent to take advantage of an "Ask the Doctor" table, Bible-based handouts on wellness, information on asthma, heart disease, and nutrition, and a chance to talk with local farmers and pick up more than two hundred free baby pumpkins.



# Mission

## “I Love Kailua”

Castle Medical Center’s health fair at the annual “I Love Kailua” Town Party is always a popular attraction, and its popularity has only grown with the addition of free bike helmets and bike helmet fittings for children, sponsored through the generosity of Hawai’i Pacific Neuroscience.

This year, in addition to the 150 bike helmets distributed, Castle offered free screenings, health and wellness information, and an opportunity to visit with physicians.



## “Cool Kailua Nights”

Castle’s Imaging Services, Wellness and Lifestyle Medicine Center, and home care division participated in the “Cool Kailua Nights” Health Awareness and Block Party in October of 2013. The event was held in the parking lot of Whole Foods in Kailua and raised funds for Castle Medical Center and the Boys and Girls Club of Hawai’i Windward Clubhouse. A total of \$4,106 from the event was donated to benefit Castle’s Chemotherapy Clinic.



# Mission

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## **Breast Cancer Awareness Month and American Heart Month**

In October, Castle Medical Center once again celebrated Breast Cancer Awareness Month in a dramatic way: 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.

Earlier in the year and for the first time ever, Castle recognized American Heart Month, which is February, by lighting the same tree with red lights.

No one traveling to and from the neighboring communities of Kailua and Waimānalo could fail to see our brilliant tree during these two months, decorated to increase general awareness of breast cancer and cardiovascular disease.



# Mission

## ***Inpatient Satisfaction with Spiritual Care***

Castle Medical Center is a faith-driven organization dedicated to meeting the spiritual needs of our patients.

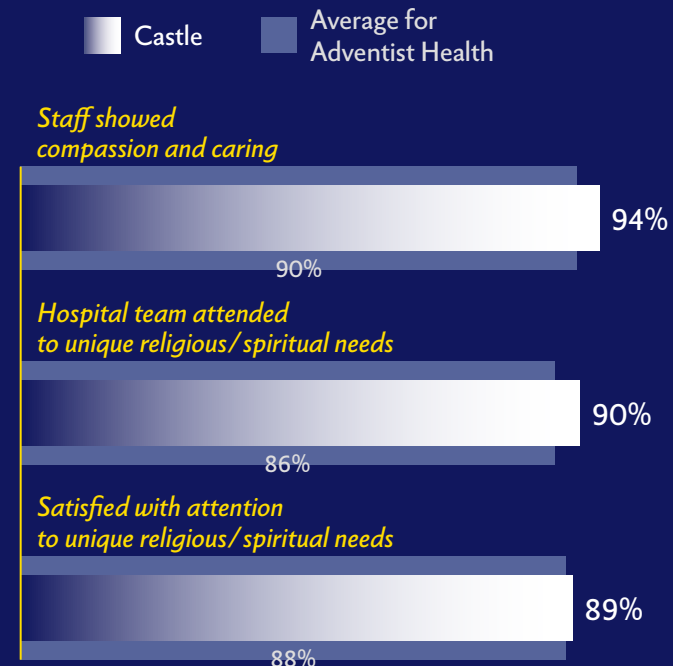
In addition to the initiatives described in the preceding pages, we focused in 2013 on the following:

- Overhead prayers every morning at 8 a.m. and every evening at 8 p.m.
- Inspiration prayer cards on all patient meal trays
- Encouraging associates to listen to the spiritual needs expressed by their patients and to pray with them, or to refer them to the chaplain when appropriate.

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

## **Inpatient Satisfaction with Spiritual Care** **Year 2013**

Better ►



# Patient Satisfaction

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*How would you like to hear about a lifetime of excellent care, compassion, and service from the Castle Medical Center staff?*

*I had my first child at Castle forty-three years ago, and the experience was totally wonderful. To this day, I still remember some of the nurses' names. Then my son, born on the Mainland, graced your emergency room repeatedly after we moved back here in the late '70s. I threatened him with being grounded forever after the ER nurses began calling him by his first name as we entered! However, the service and quality of care were always phenomenal.*

*I myself had a food incident in 1989 or 1990. I had eaten something that made me quite ill, but I had no idea what had hit me. The doctor in the ER was relentlessly patient in figuring out what had happened to me after an EEG and EKG. Again, care par excellence!*

*This year, I had hip replacement surgery. Once again, I experienced tremendous care, wonderful attitudes, and the precise skills of the nursing staff and assistants. And, oh, you can add an excellent watchfulness to that list of attributes.*

*I'd say that you folks are batting a thousand with us for almost half a century! You are enormously appreciated. I actually do not know what we would have done without you!*

*Thank you so much.*

— Comments on a satisfaction survey filled out by 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 2013. We are proud to score in the top 25% of hospitals nationwide and are striving to reach the top 10% of hospitals.

## Inpatient Satisfaction National Percentile Ranking Year 2013

Better ►

### *Discharge information*



### *Communication about medicine*



### *Cleanliness and quiet*



### *Would recommend hospital*



### *Communication with nurses*



### *Overall rating*



### *Pain management*



### *Communication with doctors*



### *Responsiveness of staff*



# Patient Satisfaction

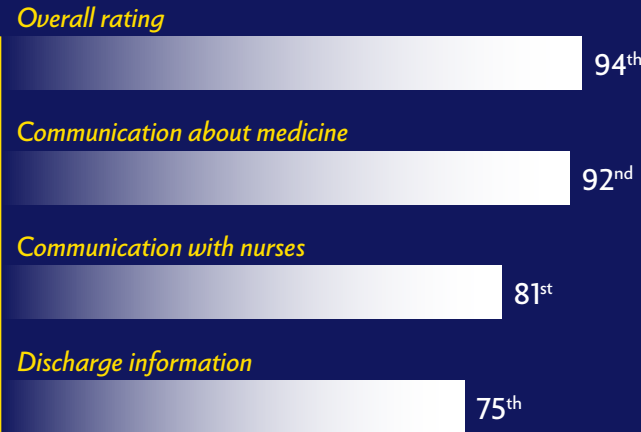
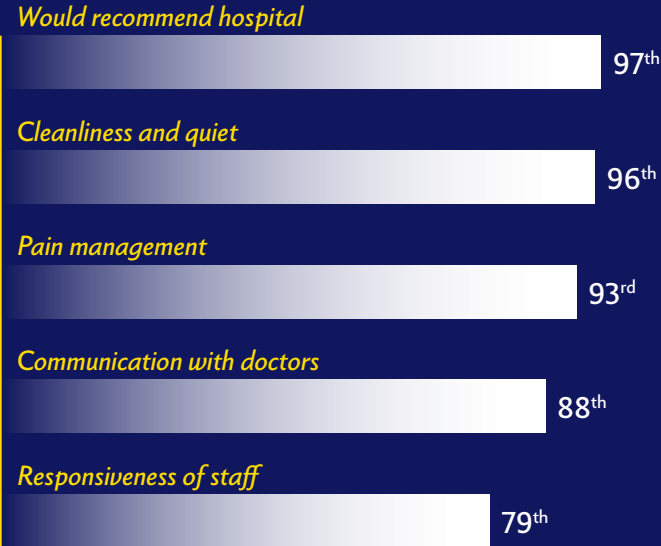
## Birth Center

Patient satisfaction with Castle Medical Center’s Birth Center has kept our hospital in the top 25% of hospitals nationwide over the past several years.

We are most pleased that the number of patients who said they would recommend our Birth Center to others placed us in the 97th percentile nationally.

## Birth Center Patient Satisfaction National Percentile Ranking Year 2013

Better ►



# Patient Satisfaction

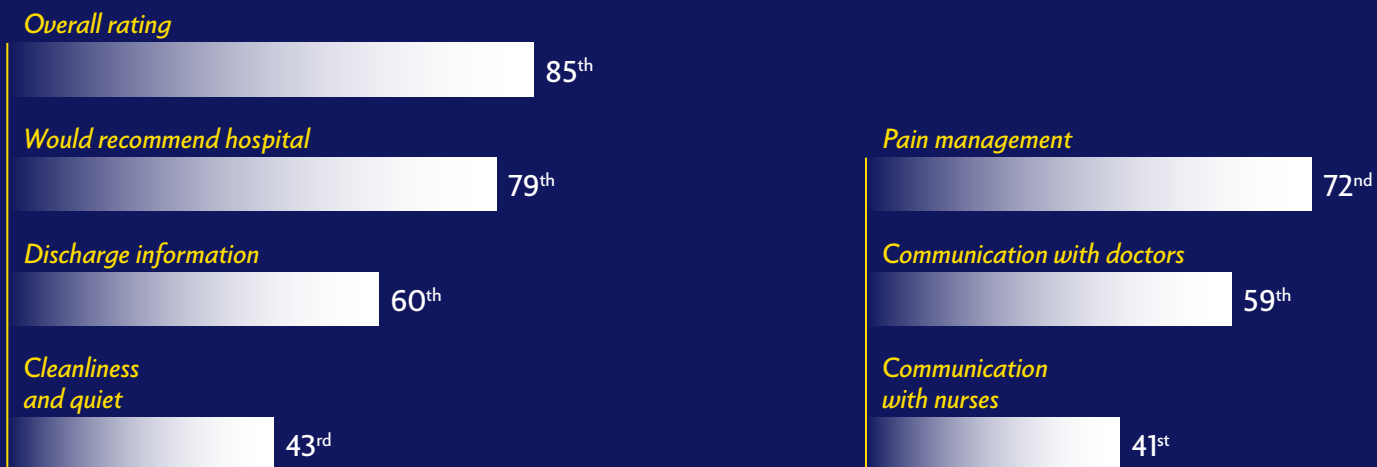
## Emergency Department

Our patients' overall rating of Castle's Emergency Department has consistently been in the top 25% of hospitals nationwide over the past several years. Our goal for 2014 is to raise our other scores to the same level.

The Emergency Department is just about to begin a full-scale renovation to provide more space and a more pleasant patient experience for the increasing number of patients needing our services.

### ED Patient Satisfaction National Percentile Ranking Year 2013

Better ►





# Patient Satisfaction

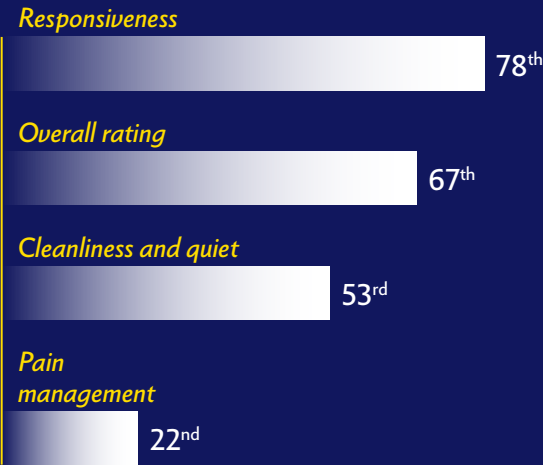
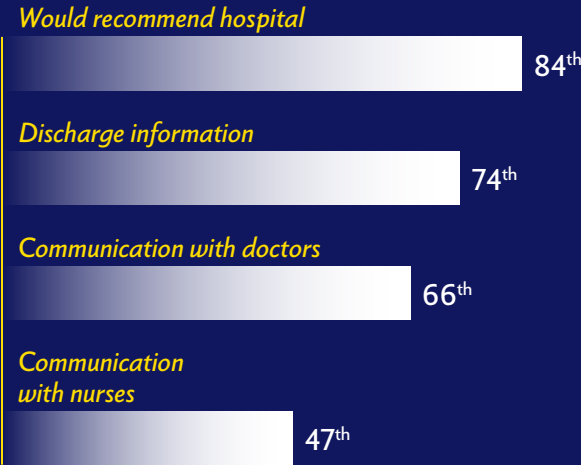
## Outpatient Surgery

Construction work to improve and modernize our operating rooms in 2013 had a negative effect on our patient experience scores, but we are committed to bringing them back up to the top 25% in the nation, as they were prior to construction.

The chart below shows our most recent patient satisfaction scores, from the fourth quarter of 2013.

### Outpatient Surgery Satisfaction National Percentile Ranking 4th Quarter 2013

Better ►



# Physician Satisfaction

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*When my wife first suggested in 2009 that we look into practicing at the 160-bed Castle Medical Center, I thought she had lost her mind, because at the time I was leading a successful academic and research career at a 1,000-bed academic hospital on the Mainland.*

*After visiting Castle, my perception of this “small” community hospital changed dramatically, as I realized that Castle is not just another out-of-town medical facility. It is a forward-thinking and progressive hospital that is serious about bringing “exceptional people” together to create “exceptional medicine.” I then realized that I have nothing to lose and everything to gain by aligning myself with the men and women who work at Castle.*

*I have to admit that setting up a private practice in this uncertain time wasn't easy. But the challenges were nothing compared to the joy and thrills of traveling this journey with the amazing people whom I have come not just to befriend, but now count as part of my 'ohana. I thank God every day for His providence and the privilege entrusted to us to provide neuroscience care for the people here.*

*Indeed, we are indebted to so many people here at Castle and in the community for giving us a chance to be part of the exceptional care you so graciously provide. Our wonderful patients continue to teach and inspire us to be better at what we do and to improve on the care we deliver as a team.*

— Kore Liow, M.D., neurologist and founder of Hawai'i Pacific Neuroscience in Kailua

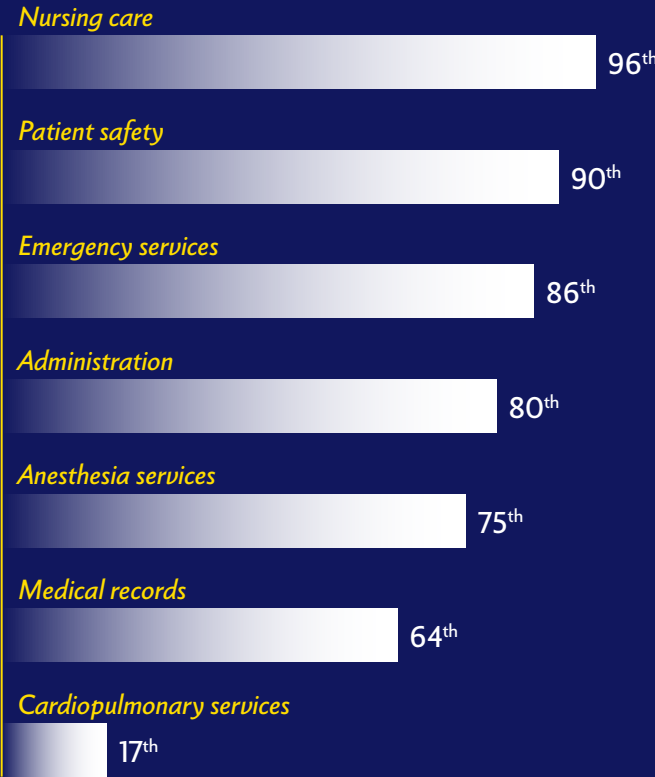
# Physician Satisfaction

Castle’s medical staff provided feedback on the hospital’s clinical service areas, administration, and overall quality by participating in the 2013 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.

Castle is proud that the hospital ranked in the top 25% nationally in eleven of the fourteen measures shown on the chart below, and in the top 10% nationally in four of them. The survey also provided us with information that we can use to increase physician satisfaction, especially in the area of cardiopulmonary services. We believe that our expanded cardiovascular services, including the new open heart program (please see page 56), will improve satisfaction in this area.

## Physician Satisfaction PRC Percentile Ranking 2013 Survey

Better ►



# Associate Satisfaction

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*My first exposure to working at Castle Medical Center was in 1995 when I was picked up as a temporary hire to help in Education and Training. I immediately loved working with the people here so much that I basically begged for a job. Luckily for me, Castle hired me for four months in Medical Records, which then lead to my work in the ED for the next sixteen years. I had worked at several different health care facilities as a temporary hire before arriving at Castle, and I realized that this place was special. Everyone was so friendly. Everyone was 'ohana!*

*The opportunities to grow at Castle have been amazing. If you had asked me eighteen years ago what I would be doing now, I never would have dreamed I'd be doing what I am today. I've been blessed by working with so many wonderful people who have helped me grow professionally and personally. People who have helped encourage and push me out of my comfort zone. People who make me smile and laugh. People I'm lucky to have as friends.*

*Castle Medical Center is a wonderful place to work amongst friends "caring for our community and sharing God's love."*

— Erik Anderson, R.N., clinical indicator specialist for Quality Resources

# Associate Satisfaction

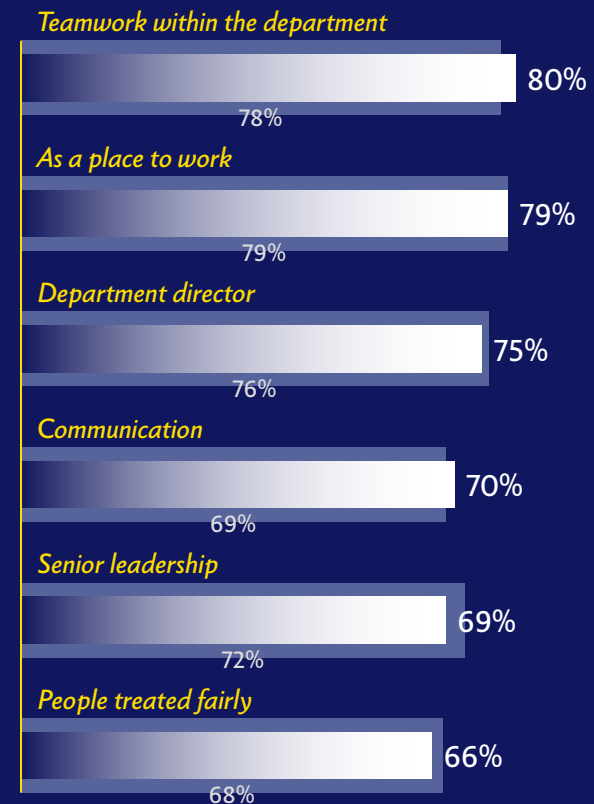
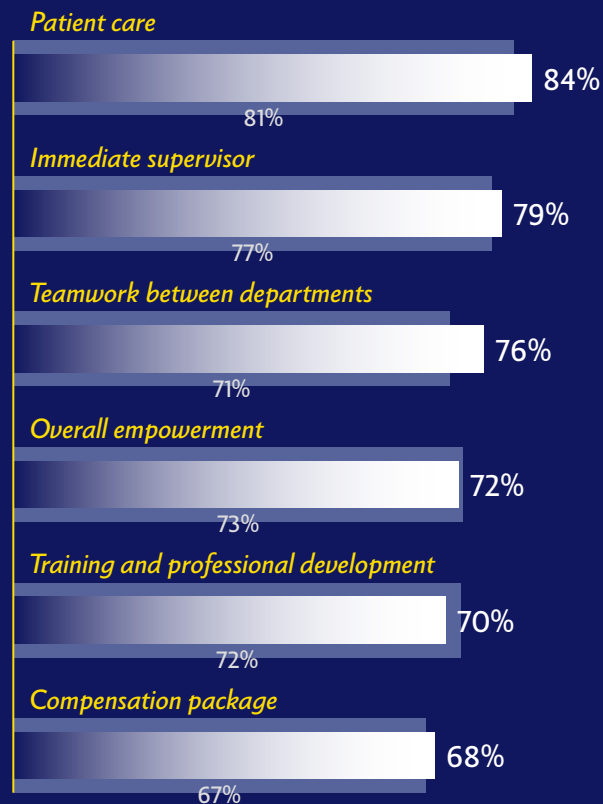
Castle Medical Center also contracts with health care research and consulting firm Professional Research Consultants (PRC) to survey our associates about how satisfied they are with their employment at the medical center.

In our 2013 Employee Engagement Survey, Castle's performance was better than the PRC national average in most measures.

## Associate Satisfaction PRC Score 2013 Survey

Castle National Average

Better ▶



# Inpatient Care

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*From the moment I arrived, your ER staff was caring, professional, and compassionate. The ER team immediately began assessing and treating my wound. I was examined by two members of the nursing staff and the ER doctor, and I was immediately placed on an aggressive IV antibiotic regimen.*

*I can be quite an inquisitive individual, so I was relieved that each and every procedure and medication was explained to me. My many questions were answered in words I could understand.*

*I figured I'd finish the IV antibiotics, get a couple shots, and be on my way home in an hour or two. It wasn't to be. Next I received the shocking news that I would be admitted because of the serious level of infection in my foot. My next five days as an inpatient could be summed up as nothing short of phenomenal. I could easily write a novel about what I describe as my "Castle Care Team." Just as with the ER staff, I was blessed with a daily rotation of the most caring, professional, and compassionate team of health professionals and lay staff ever assembled.*

*While my situation was definitely not a bed of roses, my Castle Care Team made sure I was always comfortable and pain-free. I was continually asked if I needed anything else to make my hospital stay any better. The staff's caring nature was genuine, as if they were caring for their own family member. Once again, every procedure, medication, test, and next step were explained to my satisfaction, and every one of my many questions were answered.*

*In closing, I want to thank and commend you for your leadership in guiding your incredible facility to a level of health care expertise that truly "walks the talk" of your tagline, "Exceptional Medicine by Exceptional People." I am a living testimony of that.*

— A letter from an appreciative patient

# Inpatient Care

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Castle Medical Center is committed to the provision of quality health care in a highly complex and high-risk environment. For this reason, the hospital has participated with organizations, such as the Institute for Healthcare Improvement, the National Quality Forum, the American Heart Association, The Joint Commission, the Centers for Medicare and Medicaid Services (CMS), Hawai'i Medical Service Association (HMSA), and Duke University, with the goal of complying with evidence-based, best-practice guidelines. These guidelines have been designed to ensure that patients receive the highest quality care and achieve the best clinical outcomes possible.

The following pages highlight some of the recent improvements to patient safety and medical treatment that have been made as a result of Castle's endeavoring to comply fully with best-practice guidelines.

# Inpatient Care

## Acute Myocardial Infarction (AMI), Heart Failure (HF), and Community-Acquired Pneumonia (CAP)

Research has established guidelines for the optimal treatment of patients experiencing heart attack, heart failure, or pneumonia. Castle has shown great improvement over the last several years in compliance with these guidelines.

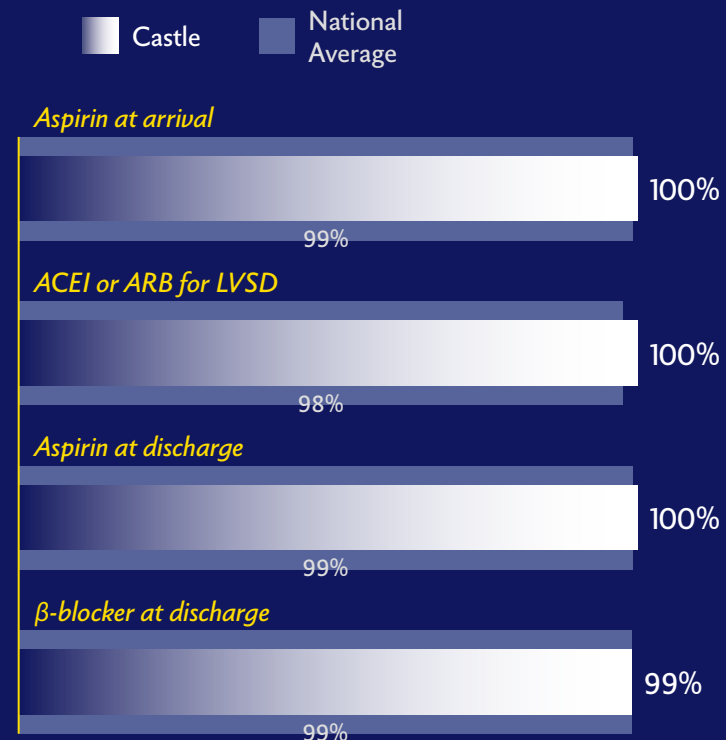
For over two years now, compliance with every guideline for hospital patients diagnosed with heart failure (HF) has been 100%. The hospital continues to focus its efforts on clinical feedback and collaboration with physicians to make further improvements.

The following charts display the most recent results available from Premier, Inc., a national health care research firm that consolidates data on quality measures from hospitals across the United States.

- ACEI = Angiotensin-converting enzyme inhibitor
- ARB = Angiotensin receptor blocker
- LVSD = Left ventricular systolic dysfunction

## AMI Guideline Compliance Year 2013

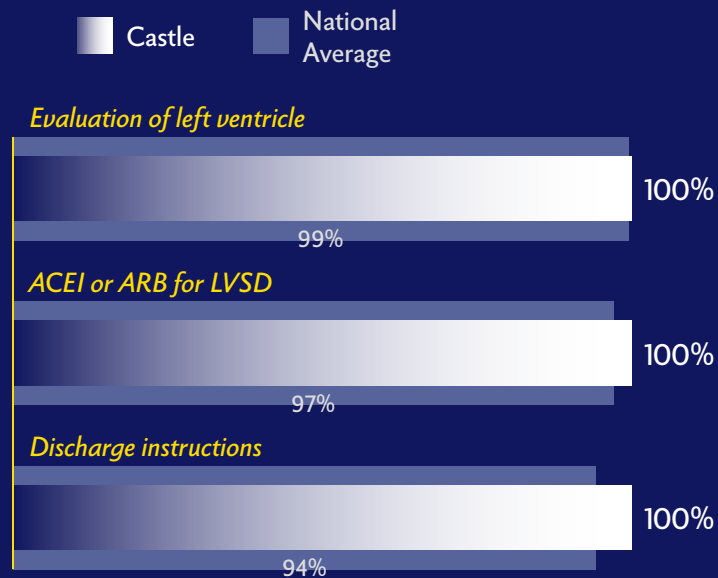
Better ►



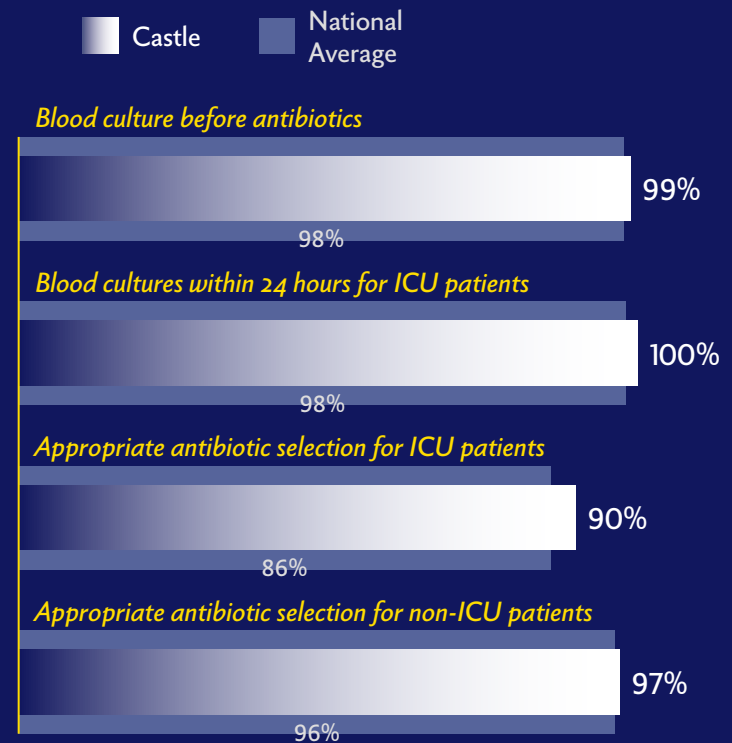


# Inpatient Care

## HF Guideline Compliance Year 2013



## CAP Guideline Compliance Year 2013



# Inpatient Care

## ***Surgical Care Improvement Project (SCIP)***

Research has established guidelines that, when followed, produce the best clinical outcomes for surgical patients.

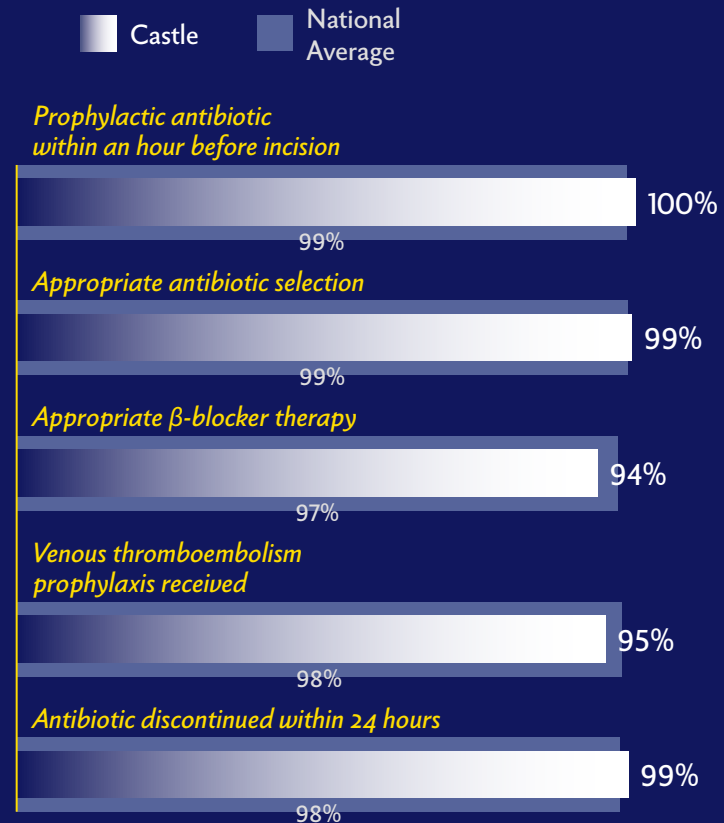
As shown in the chart on this page, during the latest twelve-month period for which data are available, Castle performed better than the national average in most measures.

We attribute our success to the following processes:

- Implementation of a tracking board on the surgical unit to monitor best-practice care for each patient. After a few refinements to the tracking board, we were able to reach 100% compliance in the fourth quarter.
- Implementation of a bedside shift report and daily tracking board rounds with all staff on the surgical unit to consistently relay information to oncoming staff and to update patients on their progress and care plan.
- Performance feedback to staff and their engagement to improve processes.

## **SCIP Compliance** Year 2013

Better ►



# 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 American Stroke Association.

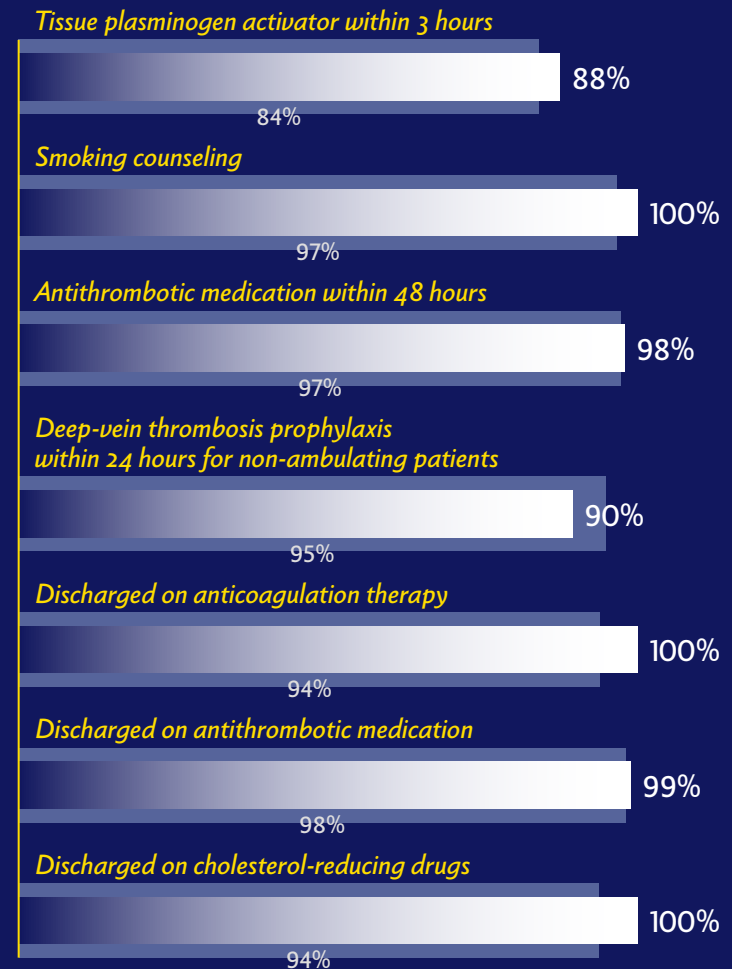
Castle was awarded the Gold Achievement Award in 2013 for our adherence to all the GWTG stroke treatment guidelines for twenty-four consecutive months.

## Stroke Guideline Compliance

Year 2013

Better ▶

■ Castle ■ National Average



# Inpatient Care

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## ***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 for 2013 a stringent target of no more than 2.5 falls per 1,000 patient days. Over the last five years, the hospital has not only met but exceeded its target in fall prevention.

We attribute this success to the following ongoing measures recommended by Castle's Fall Task Force, which is made up of team members from a variety of disciplines such as nursing, pharmacy, imaging, rehabilitation therapy, and quality:

- When a patient is assessed as being at risk for falling, they are provided with specially designed fall prevention footwear. They are also given a special armband and door display that help alert the entire health care team that they are at risk for a fall and may need urgent assistance.
- "No pass zones" were implemented so that all health care team members are involved in responding to a patient's request for assistance. No team member will walk by a patient room in which a call bell or alarm has been activated without first checking on the patient.
- Nurses are regularly tested on their competency in the use of fall prevention equipment.

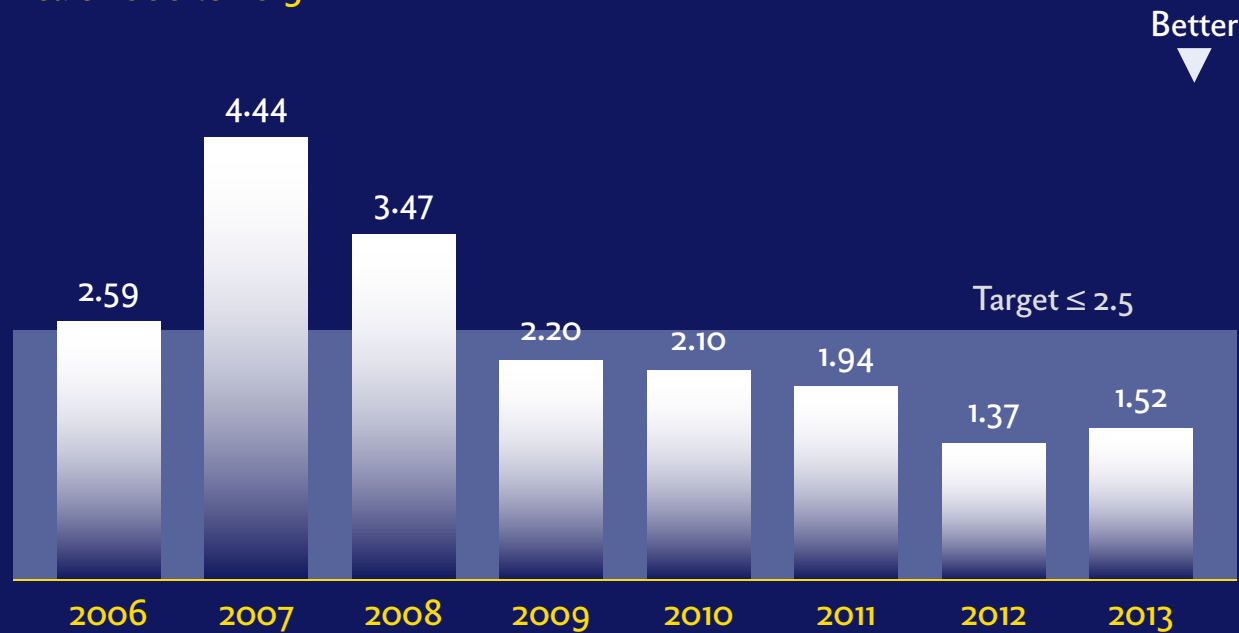
- Staff has been given special training to help unstable patients who might prefer to be left alone in the bathroom, but who still need assistance getting back to bed safely.
- Feedback is provided to staff, and additional safety measures are put in place as needed, based on analyses performed by our multi-disciplinary team of fall responders.
- "Call, Don't Fall" signage has been placed on the ceilings above patient beds. This continually helps to remind all patients of the importance of asking for assistance before getting out of bed.
- Information on fall prevention is included as a part of Castle's welcome packet.
- Nursing staff members check on and communicate with all patients at least every hour to help anticipate and meet their needs.
- Patients and their visiting friends and family members are encouraged to be an active part of the fall prevention team. Educational pamphlets are provided that explain why patients are more prone to falls in the hospital than at home and what the patients and family members can do to help prevent them.

While we successfully met our target for 2013, 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.

# Inpatient Care

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**Patient Falls per 1,000 Patient Days**  
Years 2006 to 2013



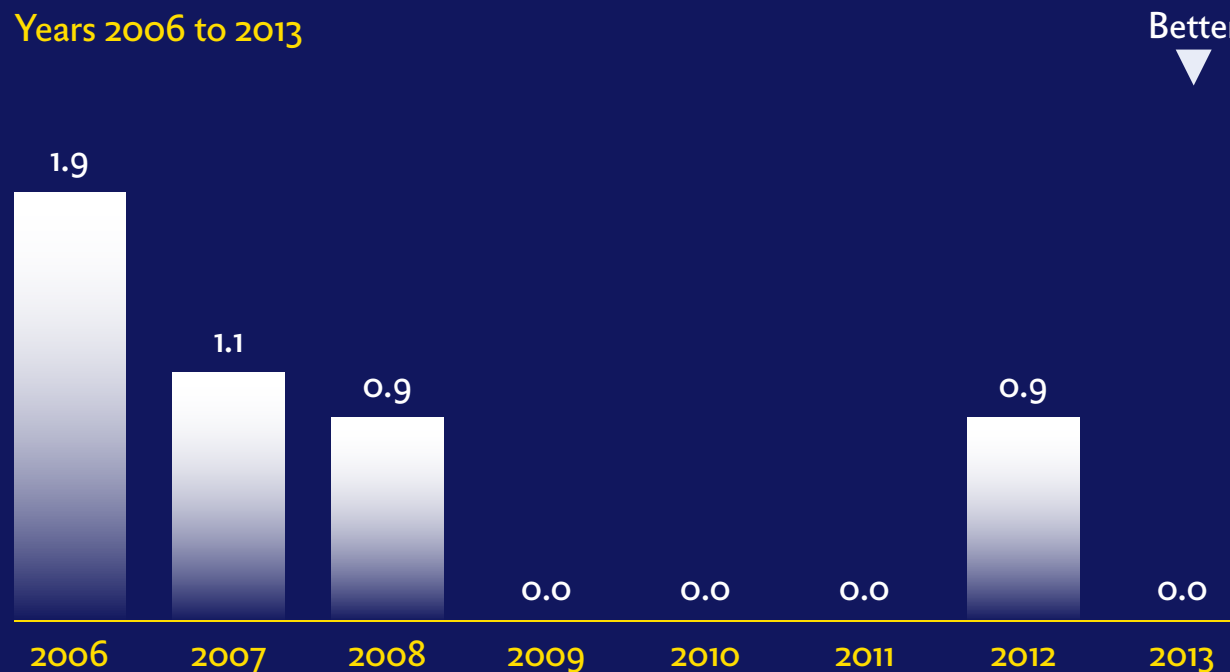
# Inpatient Care

## Ventilator-Associated Pneumonia

Castle implemented all elements of the ventilator-associated pneumonia (VAP) prevention bundle in 2005. At Castle, the bundle is also used with all open heart surgery patients to reduce their risk of complications after a major surgery. Bundle elements include oral care with chlorhexidine, elevating the patient's head, and assessing the need for the ventilator daily.

The 90th percentile national benchmark for VAP is zero cases per 1,000 ventilator days. In 2013, Castle met this national benchmark and, in fact, has experienced only a single case of VAP over the last five years.

### Ventilator-Associated Pneumonia Rate per 1,000 Ventilator Days Years 2006 to 2013



# Inpatient Care

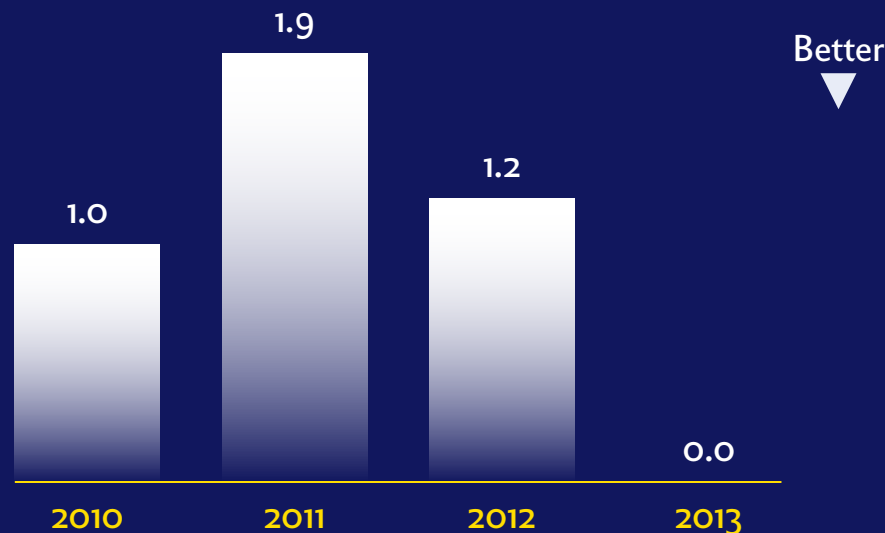
## **Catheter-Associated Urinary Tract Infections**

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.

The 90th percentile national benchmark for CAUTIs is zero cases per 1,000 patient days. In 2013, Castle met this national benchmark.

Prior to the insertion of a catheter, the health care team screens each patient for appropriate criteria. Whenever a catheter is used, evidence-based practices are followed, including the use of a securement device, hanging the drainage bag below the level of the bladder, associate hand hygiene, and daily prompts to remove the catheter if it is no longer needed.

**Catheter-Associated Urinary Tract Infections  
per 1,000 Patient Days  
Years 2010 to 2013**



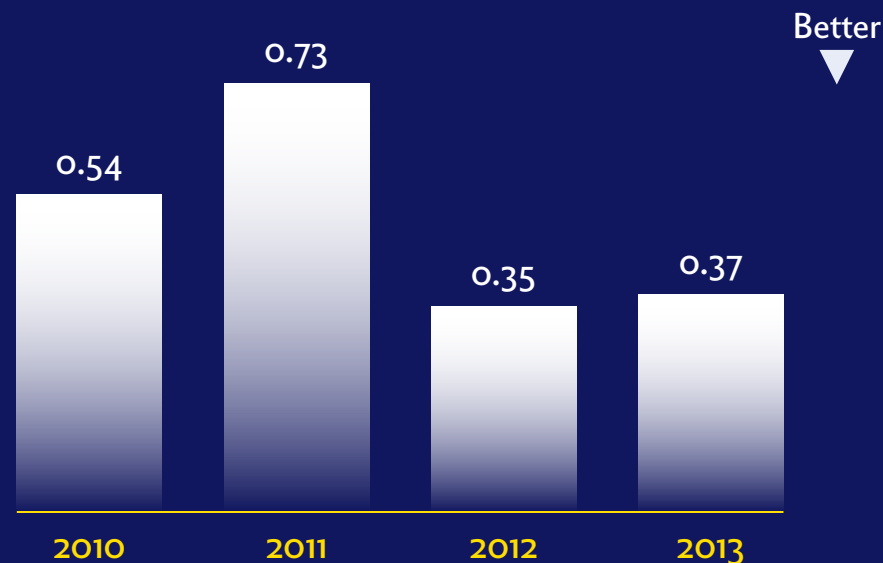
# Inpatient Care

## Central Line–Associated Bloodstream Infections

Central line–associated bloodstream infections (CLABSIs) can increase patient mortality rates up to 25%. CLABSIs cause severe illness, extended lengths of stay (LOS), and loss of function. The 90th percentile national benchmark for CLABSIs is zero cases per 1,000 line days.

Castle’s goal is to eliminate these infections by implementing evidence-based practices, including full-barrier precautions during line insertion, IV tubing caps to keep ports sterile, using sterile drapes during hemodialysis, and daily patient bathing with chlorhexidine to reduce bacteria that could enter the central line catheter.

## Central Line–Associated Bloodstream Infections per 1,000 Line Days Years 2010 to 2013





# Inpatient Care

## Hospital-Acquired Pressure Ulcers

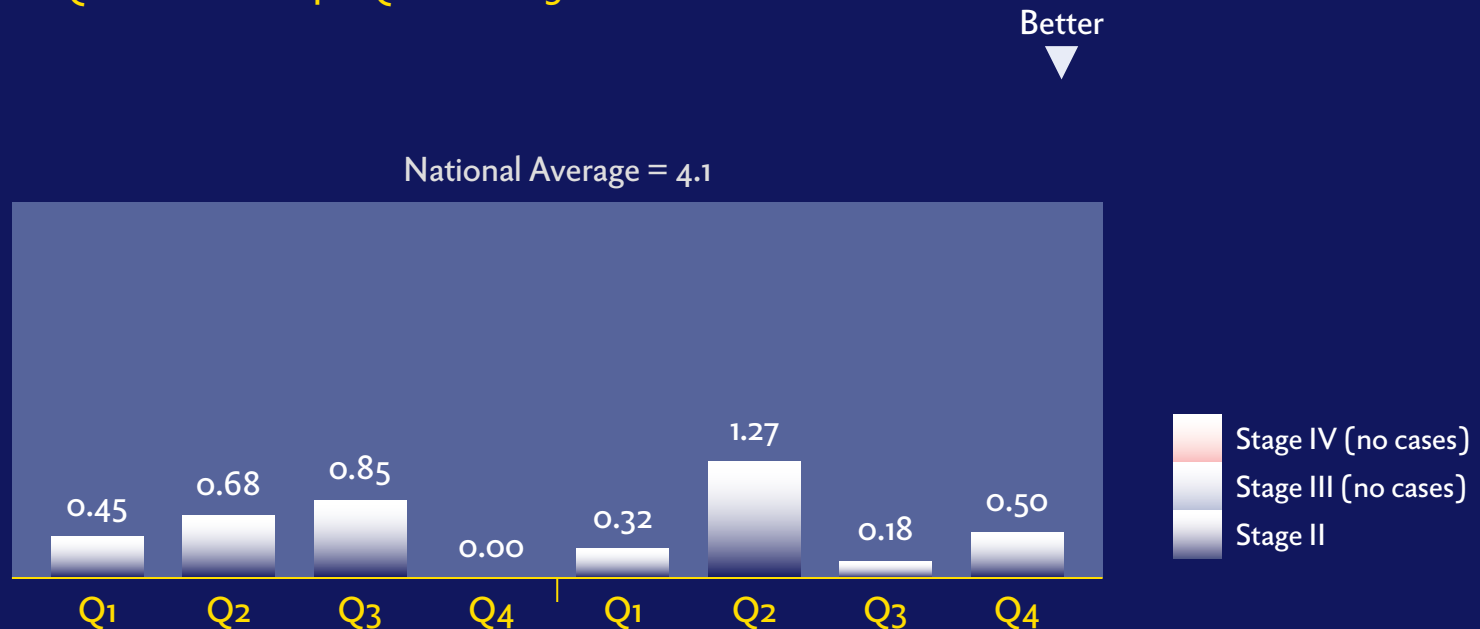
Pressure ulcers can lead to patient discomfort, increased length of hospitalization, and other more serious complications.

Our goal at Castle is to eliminate all stage III and IV hospital-acquired pressure ulcers. We are pleased that throughout the last two years, this goal was entirely achieved.

Pressure ulcers can have four stages:

- Stage I:* Intact skin with slight redness
- Stage II:* Red with slight skin breakdown
- Stage III:* Full-thickness tissue loss
- Stage IV:* Full-thickness tissue loss with exposed bone, tendon, or muscle.

## Hospital-Acquired Pressure Ulcers per 1,000 Patient Days 1st Quarter 2012 to 4th Quarter 2013



# Inpatient Care

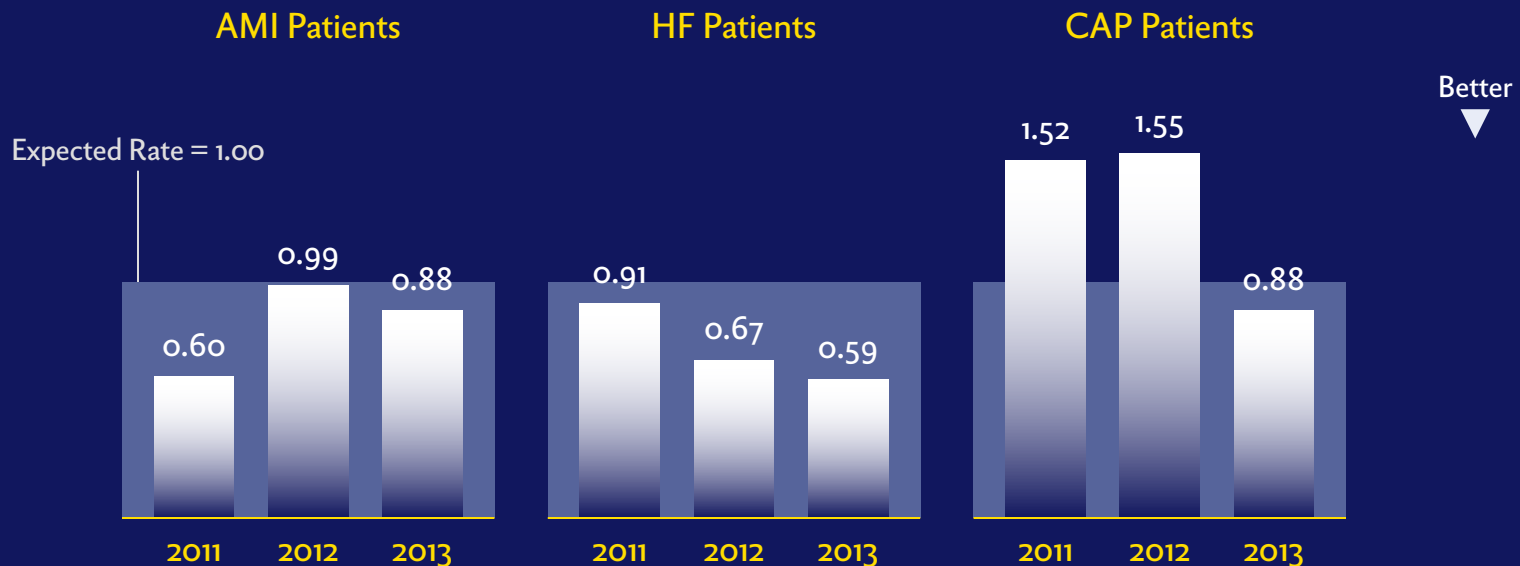
## Thirty-Day Readmissions

Tracking the number of patients who experience unplanned readmissions within thirty days of discharge is another measure used to judge the quality of care for patients with acute myocardial infarction (AMI), heart failure (HF), or community-acquired pneumonia (CAP). It is important to note that unplanned hospital readmissions may or may not be related to the previous visit, and some unplanned readmissions are not preventable even if the hospital did provide quality care.

The rates on the chart below are risk-adjusted based on the patient's age, gender, past medical history, and other diseases or conditions that are known to increase the patient's risk of readmission. The expected risk-adjusted rate is 1.00. A lower rate is considered better than expected, and a higher rate is worse than expected.

Castle is pleased that, based on data that were available at the time of this report, the readmission rates for patients with all three of these conditions were lower than expected in 2013.

## Thirty-Day Readmission Rates Years 2011 to 2013



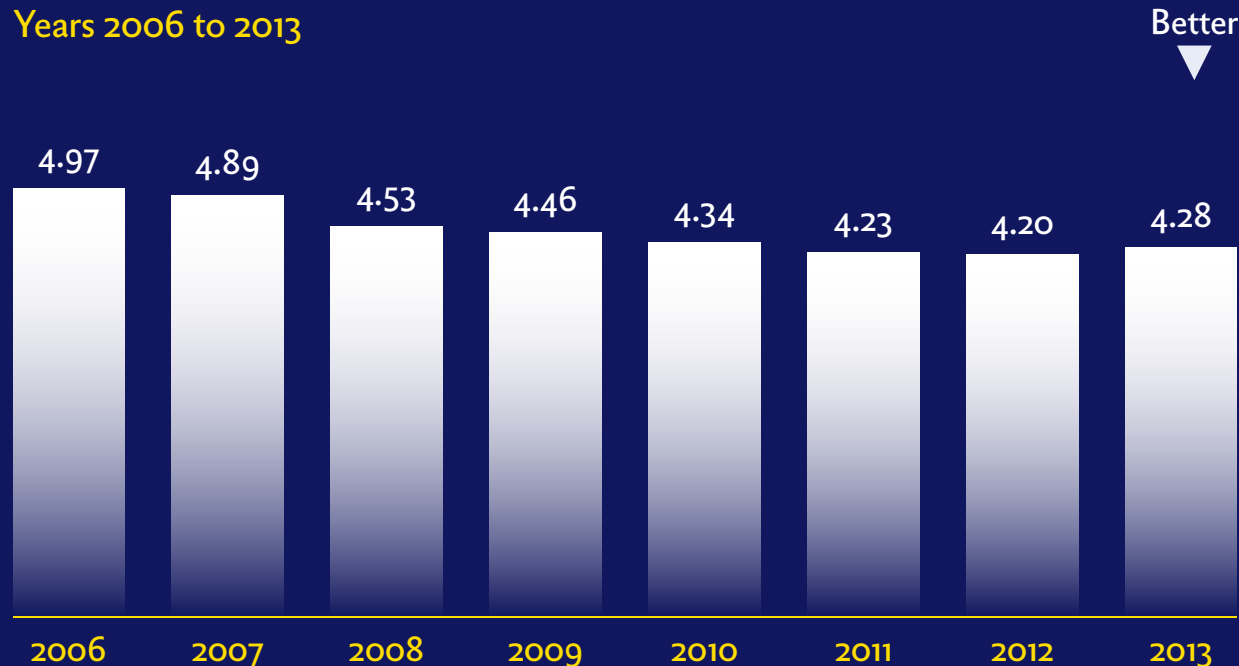
# Inpatient Care

## 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 returned to the healing environment of their own homes as soon as it is appropriate.

Efforts have also 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 2006 to 2013



# Outpatient Care

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*Last week I had a repair done on my lip due to a dog bite. The staff, nurses, anesthesiologist, and surgeon gave me excellent care.*

*I am 54 years old and have had a lot of outpatient and emergency room assistance over the past three years at various hospitals. The care I received at these other facilities wasn't bad, but it pales in comparison to the care I received last week at Castle.*

*The nurses who assisted me, especially in post-op, were so compassionate. The anesthesiologist was so caring and empathetic, and my surgeon had an excellent bedside manner. I could not be more pleased with the outcome of the repair of my upper lip.*

*You are blessed with an excellent staff.*

— A letter from a Castle outpatient

# Outpatient Care

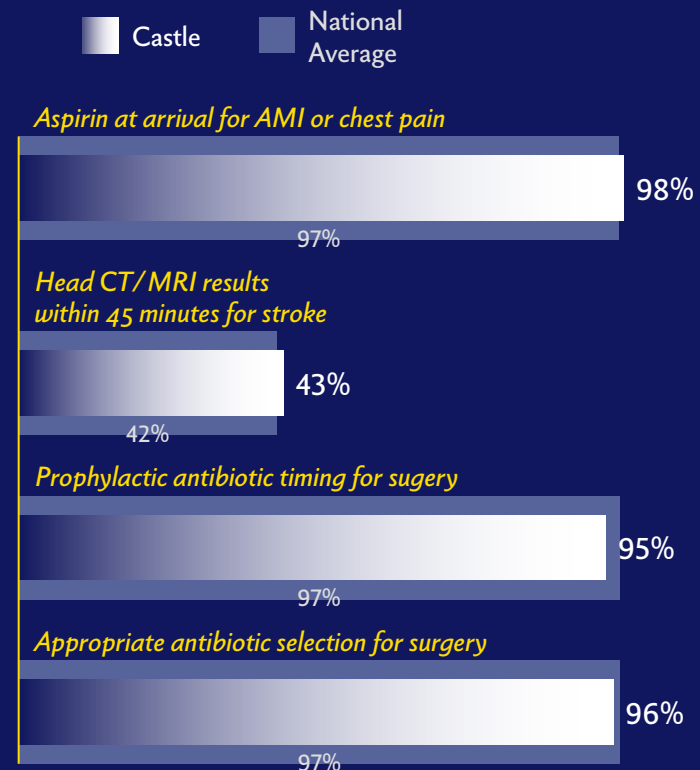
Based on research, the Centers for Medicare and Medicaid Services (CMS) have established a uniform set of quality measures to be implemented in hospital outpatient settings. The primary purpose of these measures is to promote high quality of care for patients who receive outpatient services, such as emergency care and outpatient surgeries.

The term “outpatient” often refers to a patient who leaves the facility after treatment on the same day, but it may also include patients who spend the night at the hospital but for whom a doctor has not written orders for inpatient admission.

In 2014, the four measures shown in the chart on the right will be given the highest priority for improvement.

## Outpatient Guideline Compliance Year 2013

Better ►



# Emergency Care

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*"I really want someone to know how much I love going to the ER at Castle. Even though I live in Chinatown, I drive over the Pali to go to Castle. My friends think that's crazy, but I am so happy with the service."*

*"Everyone there, including the doctors, nurses, and the rest of the staff, always treat me so well. I have a complicated medical history, and I am always treated like a human being."*

*"You guys are doing such a great job. This follow-up call today just shows how much better your service is and how much you care."*

— From a post-discharge phone call  
with a patient

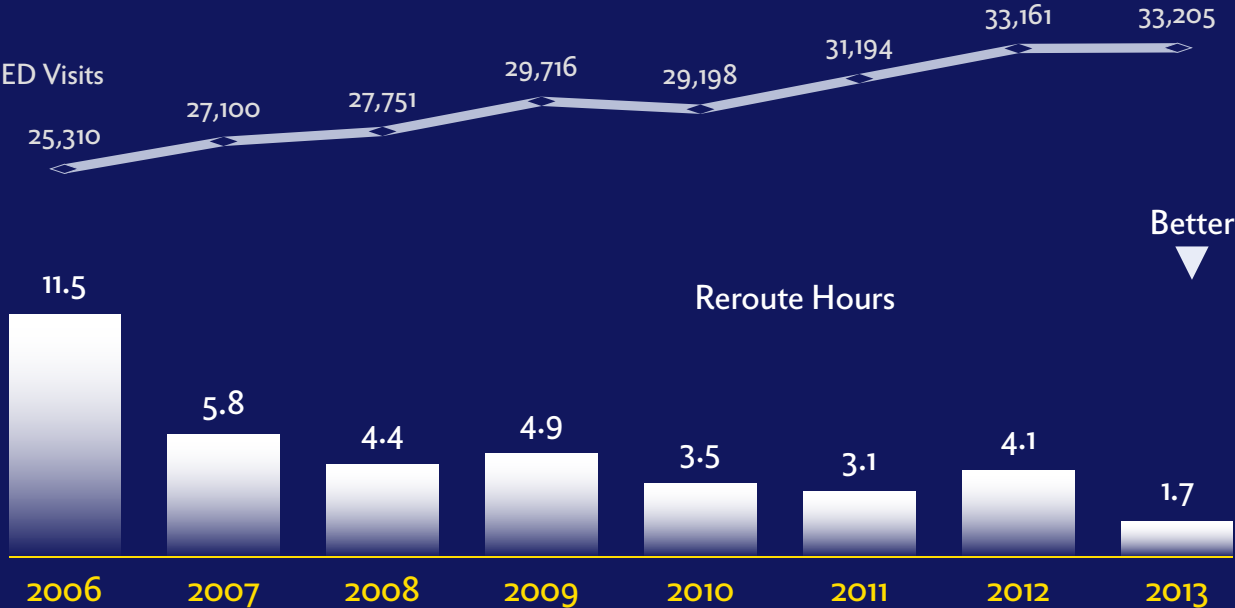
# Emergency Care

## 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.

We are pleased that Castle's ED was able to reduce reroute hours substantially in 2013, despite the increased number of patient visits.

### Reroute Hours per 1,000 ED Visits Years 2006 to 2013



# Emergency Care

## Patients Left Without Being Seen

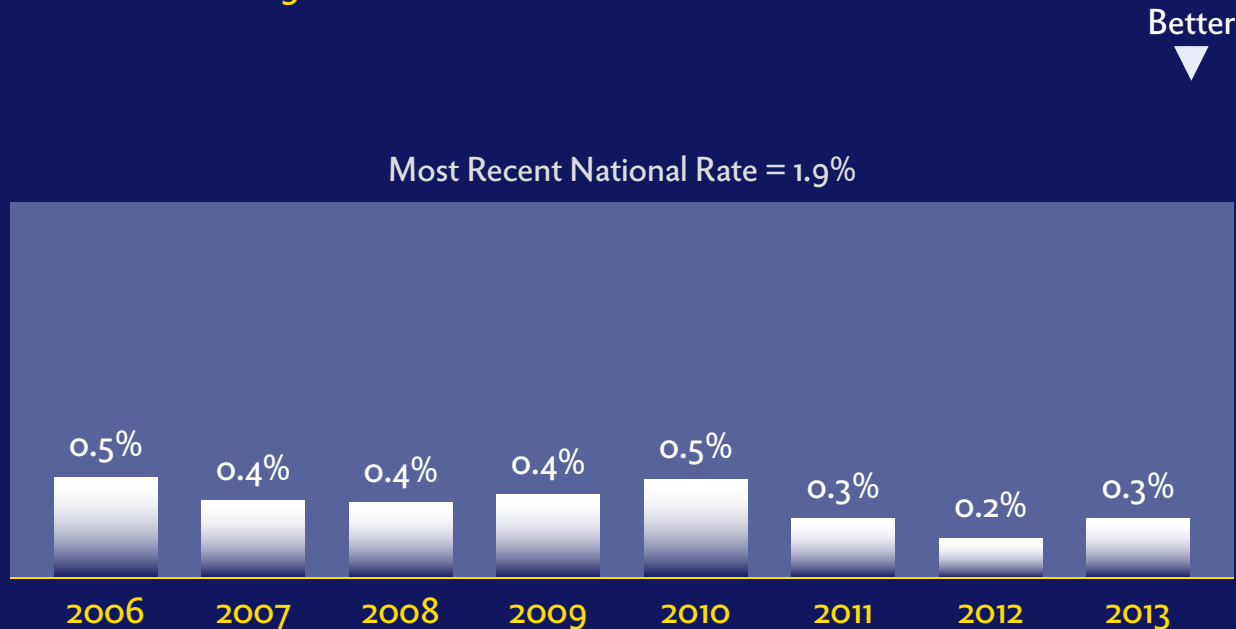
The most recent publicly available analysis shows that about 1.9% of emergency patients in the United States leave an emergency facility without ever being seen, frequently due to long wait times. Even though Castle's patient volume has grown over the years, only 0.3% of our patients left the Emergency Department (ED) in 2013 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.

This past year, Castle was recognized by health care consulting firm Studer Group® with its Excellence in Patient Care award for achieving a substantial reduction over recent fiscal years in the number of patients who left the ED without being seen. (Please see page 9.)

## ED Patients Left Without Being Seen Years 2006 to 2013





# Emergency Care

## Wait Times

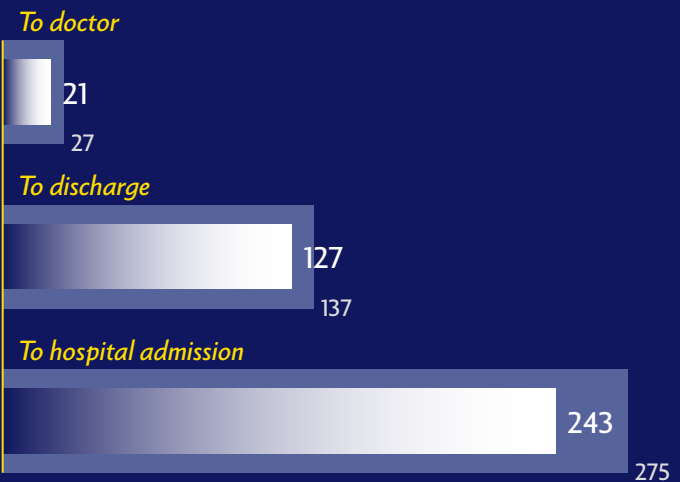
A major part of a patient's experience at any ED is how long the patient has to wait for care. The chart on this page shows our ED wait times, from the moment a patient enters the door to the times the patient sees a doctor, is discharged, or is admitted to the hospital.

In 2013, patients coming to Castle's ED had significantly shorter wait times in all three categories compared to the national averages.

## ED Wait Times Minutes after Entering Year 2013

◀ Better

■ Castle   ■ National Average



# Advancements and Innovations

## Open Heart Surgery

For the first time in history, the residents of Windward O'ahu have their own state-of-the-art open heart surgery program. After months of careful planning, Castle expanded its cardiovascular service line to include the ability to perform high-acuity surgeries. Program development included the following:

- Over 1,100 hours of clinical education and testing were completed by a core of ten ICU staff members over six months. This included extensive training in a critical care simulation lab.
- Physicians, nurses, and respiratory therapists participated in an on-site visit at the Tyler Heart Institute in Monterey, California, to observe real-time open heart surgery and ICU post-op care.
- Castle's Intensive Care Unit was completely renovated, with the installation of dedicated equipment for advanced cardiovascular patients.
- An entirely new cardiovascular operating room was constructed, outfitted with the very newest and finest cardiovascular equipment in Hawai'i. (Please see the facing page.)
- A new hybrid cardiovascular and surgery room was also built. As its name implies, the hybrid room is a combination of an operating room and a cardiac/endovascular catheterization lab. (Please see page 58.)

Castle is pleased to offer this new high-tech program, along with highly skilled and compassionate physicians and staff, to the Windward community. At the time of this report, over eighteen open heart and complex abdominal aortic aneurysm procedures have already been performed at Castle.



# Advancements and Innovations



## Cardiovascular Operating Room

Castle's new cardiovascular operating room was completed in July of 2013. This room was specifically designed for open heart surgery patients. The room is large enough to house all of the necessary open heart equipment, including a heart-lung machine.

The new operating room contains the following technological advances:

- Skytron lights and booms
- Eight monitors, some mounted on booms and some wall-mounted, ranging in size from 24 to 55 inches
- Cameras mounted on the walls and in the center of the surgical lights
- A Stryker video integration network, which allows high-definition enlargements of the surgical procedure to be displayed while it is being performed
- A cardiovascular information system, which combines an advanced imaging system and physician reporting station that allow physicians to capture and read studies from outside of the operating room
- The ability of a care team to log in remotely from another computer outside of the room to view the procedure and control the wall-mounted cameras as needed.

# Advancements and Innovations



## Hybrid Cardiovascular and Surgery Room

In addition to the cardiovascular operating room, a new hybrid cardiovascular and surgery room at Castle was completed in November of 2013. This room is designed to meet both the needs of multiple procedures that use small endovascular catheters as well as the major needs of nearly all types of open surgical procedures, including open heart surgery, with state-of-the-art surgical lights, cameras, booms, and video integration.

The workhorse of the room is the new Philips FD20 X-ray imaging system. This new equipment can be used to perform all types of endovascular and cardiovascular procedures with brilliant 2-D and 3-D displays for visualizing the entire vascular system. These assist cardiologists, radiologists, and surgeons to navigate throughout the body as they perform life-saving miniature surgery. Complex procedures such as abdominal aortic aneurysm repair and extremity revascularization are now easier to accomplish and safer to perform.

Castle's new hybrid room is the first in the state of Hawai'i that was designed from its inception to be used in such a dual capacity, endowing it with uncompromised functionality.

# Advancements and Innovations

## **New Main Lobby and Outpatient Diagnostic Center**

Castle Medical Center's beautiful new main lobby opened in May of 2013, with a new admitting area, information desk, waiting room, and gift shop.

Located just behind the new lobby and admitting area is our new outpatient diagnostic center for laboratory services, mammography, ultrasound, and DXA scanning.



# Advancements and Innovations

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## Improved Breast-Imaging Technology



Castle's new outpatient diagnostic center (please see the previous page) opened in the spring of 2013 with a new state-of-the-art breast tomosynthesis system. According to Hologic, the manufacturer of the Selenia® Dimensions® digital system being used at Castle, the clinical benefits of breast tomosynthesis as a screening tool include:

- Earlier cancer detection than with conventional digital mammography
- Greater accuracy over conventional digital mammography
- Better visualization of masses, distortions, and asymmetric densities
- Fewer false positive results, with one study reporting a 40% reduction in call-backs.

For suspicious findings, the use of breast tomosynthesis may also result in a reduction in the number of a patient's exposures to diagnostic imaging, without sacrificing any valuable data.

To enhance Castle Medical Center's total breast care program, we also purchased two premium ultrasound systems for both general imaging and breast imaging. These new systems feature superior 2-D and 3-D quality that gives a better perspective during localization and biopsy procedures. They also offer improved detection of breast abnormalities with elastography, the technique of detecting or classifying tumors by analyzing the stiffness of tissue.

# Advancements and Innovations

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## Hawai'i Health Information Exchange

In 2013, two major hospital systems, Castle Medical Center and Hawai'i Pacific Health, signed data-sharing agreements that now enable the hospitals to connect their patients' electronic health data to the Hawai'i Health Information Exchange via the Health eNet. Authorized participants, who have a treatment relationship with a patient, can now send queries to the Health eNet to access patient data such as medical histories, lab results, and prescribed medications over a secure electronic platform.

Health eNet also facilitates public health reporting. For example, the state Department of Health (DOH) is now able to receive information about communicable diseases that may adversely impact the entire community. Using the Health eNet allows the DOH to collect data more efficiently from the health care community.

These agreements have significantly broadened and enhanced information exchange for patient care in communities across the state. Moreover, we are proud that Castle Medical Center was the first hospital in the state to connect to the Hawai'i Health Information Exchange.



# Advancements and Innovations

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## Color-Coded Scrubs

A recent study in *Nursing Management* magazine shed light on how difficult it can be for patients and families to single out nurses easily from other hospital staff. Over a patient's hospital stay, staff members entering a patient's room might have many different roles but all be similarly dressed. At the same time, patients and families interviewed for this study said it was important for them to know whom to approach when they had concerns and be able to differentiate nurses from other health care staff. Family members reported feeling embarrassed when they approached the wrong person with their questions. This discomfort could quite possibly keep them from asking questions or providing important information.

To help avoid these kinds of problems, Castle Medical Center introduced color-coded scrubs (clinical garment sets) in 2013. Ten different colors of scrubs are now used to distinguish hospital staff members who have ten different roles, such as registered nurses, nursing assistants, respiratory therapists, and housekeepers.

We find that the use of color-coded scrubs:

- Improves communication with patients and families
- Helps patients know who is speaking to them and where to find help or ask questions
- Builds confidence in patients and families and spares them embarrassment
- Improves patient safety and satisfaction
- Even improves communication between care providers
- Fosters a team environment
- Reinforces to everyone that we are here to care for our patients.

With continued emphasis on patient safety and satisfaction, the ways hospital staff members present themselves and communicate to our patients and their families are more important than ever. Castle's goal is to help patients properly identify what their care providers do and give them confidence that they are being treated by an organized and professional team.

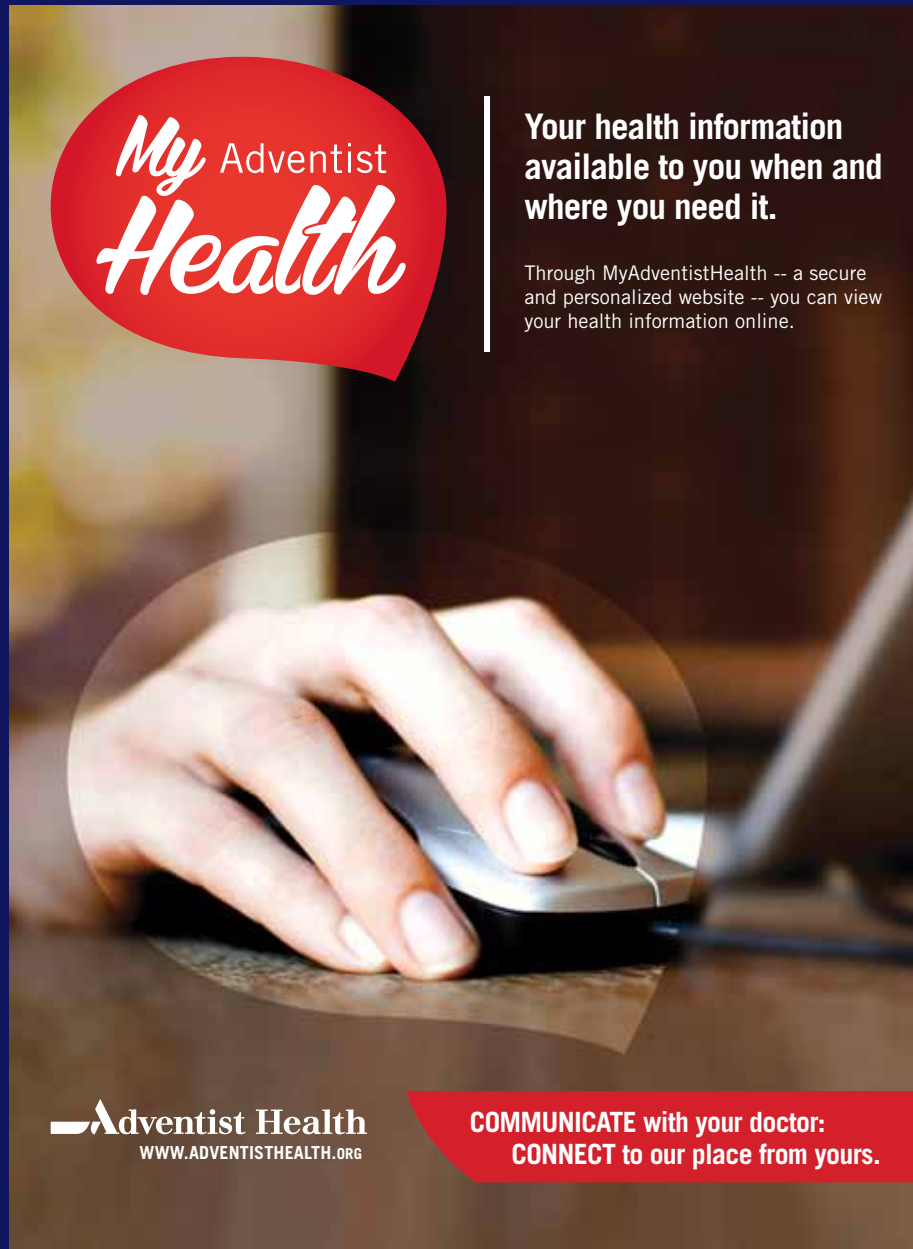


# Advancements and Innovations



	<b>Registered Nurse</b>		<b>Cardiovascular</b>
	<b>Nursing Assistant</b>		<b>Laboratory</b>
	<b>Respiratory</b>		<b>Imaging</b>
	<b>Rehabilitation</b>		<b>Housekeeping</b>
	<b>Pharmacy</b>		<b>Unit Secretary</b>

# Advancements and Innovations



**My Adventist Health**

**Your health information available to you when and where you need it.**

Through MyAdventistHealth -- a secure and personalized website -- you can view your health information online.

**Adventist Health**  
WWW.ADVENTISTHEALTH.ORG

**COMMUNICATE with your doctor:  
CONNECT to our place from yours.**

## New Patient Portal

In September of 2013, Castle launched MyAdventistHealth, a Web portal for patients that provides secure on-line access to personal health records and test results. Patients are now able to see several parts of their record in real time:

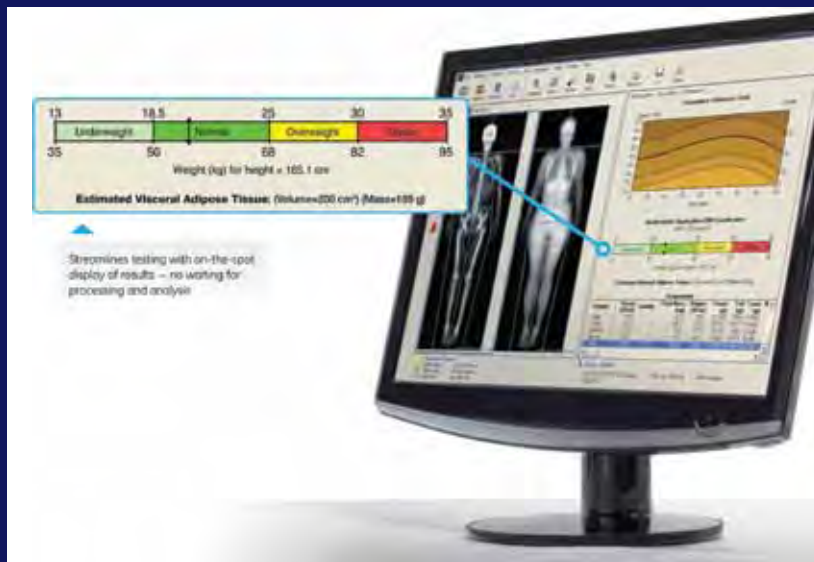
- Medications
- Allergies
- Immunizations
- Lab results (with some exceptions)
- Procedures
- Patient health issues
- Education and discharge instructions.

All patients, both inpatient and outpatient, are now being asked during the registration process if they would like to sign up for secure access to MyAdventistHealth. By providing this service, Castle is giving patients a valuable tool for managing their own health care.

# Advancements and Innovations

## Analyzing Body Composition with CoreScan®

The Lunar iDXA scanner, by GE Healthcare, was originally designed to perform obesity research and is one of the most accurate and precise body composition systems, particularly for thicker, heavier people. It is also the only DXA scanner that is FDA-approved to quantify dangerous deep belly fat, knowledge of which is important for a true assessment of health.



The CoreScan® software application, used with the iDXA scanner, features an exclusive algorithm that takes data from the scanner and analyzes body composition in detail. Castle Medical Center is currently the only hospital in Hawai'i with this technology. There are numerous benefits of using the CoreScan® application with the iDXA scanner:

- Results are repeatable.
- Results correlate very well with CT.
- A distinction is made between visceral adipose tissue (VAT) and subcutaneous fat, using geometric calculations and attenuation measurements.
- Results highlight muscular imbalances between the left and right sides of the body.
- Analysis is important for “pre-hab,” or making one injury-resistant through the correction of left-right imbalances.
- It's fast. In just five to ten minutes, the iDXA provides a crystal-clear picture of mass imbalances.
- Low cost.

Castle's Wellness and Lifestyle Medicine Center has integrated this new technology into its Individualized Weight Management Program. If weight management clients have a physician referral, they receive the scan upon signing up for the program and once again after the program is completed.

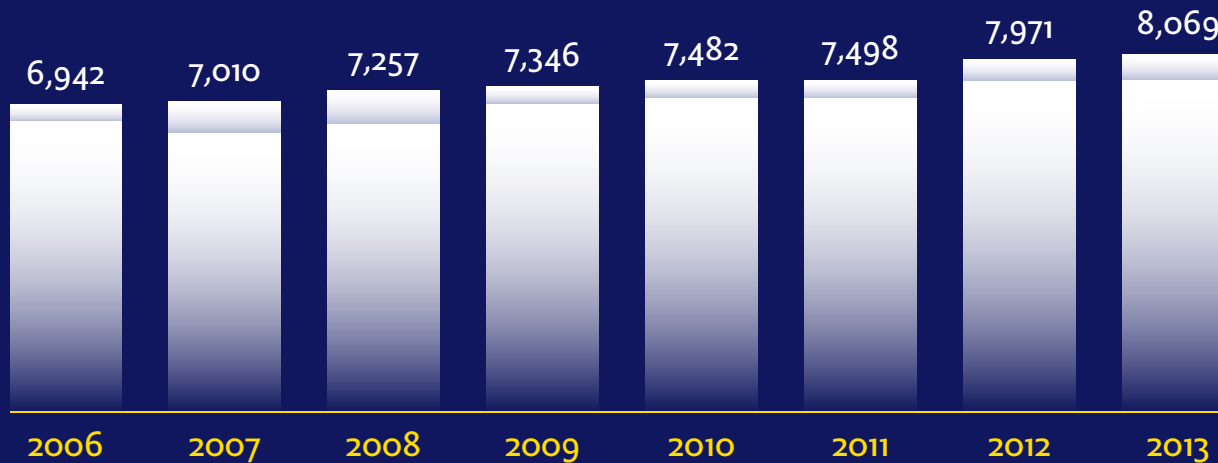
# Volumes

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## ***Inpatient Volume***

In 2013, Castle Medical Center had the highest number of inpatient discharges in our history. Inpatient volume continues to grow each year.

### **Inpatient Volume** **Years 2006 to 2013**



# Volumes

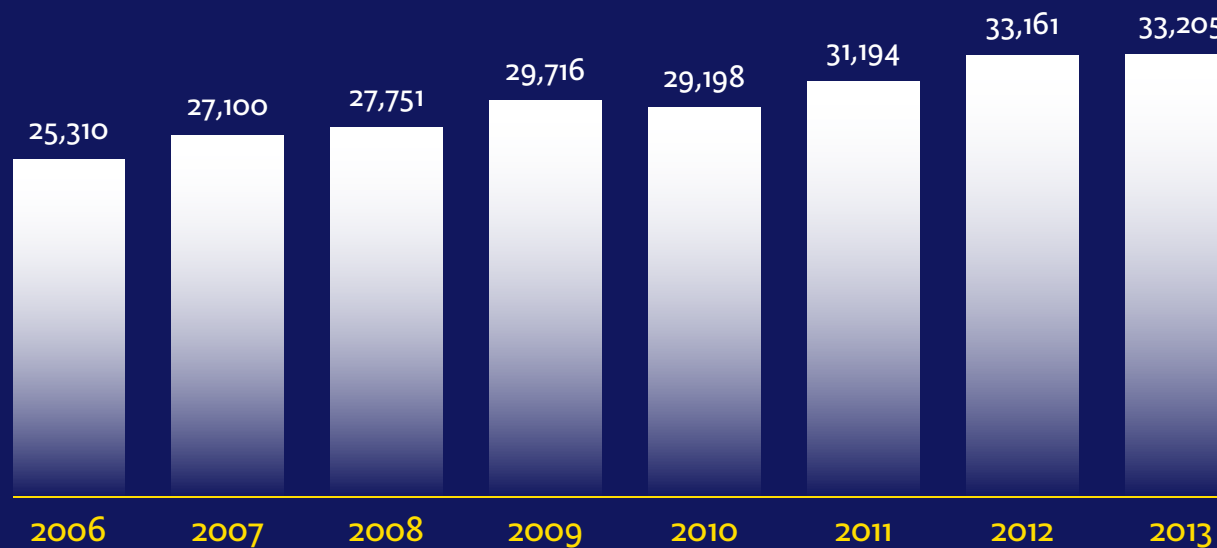
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## ***Emergency Department Visits***

The Emergency Department at Castle had its busiest year ever in 2013, and the number of visits continues to grow.

Plans have been approved to expand and remodel the department from eighteen to twenty-six beds in order to accommodate future growth.

## **Emergency Department Visits** **Years 2006 to 2013**



# Volumes

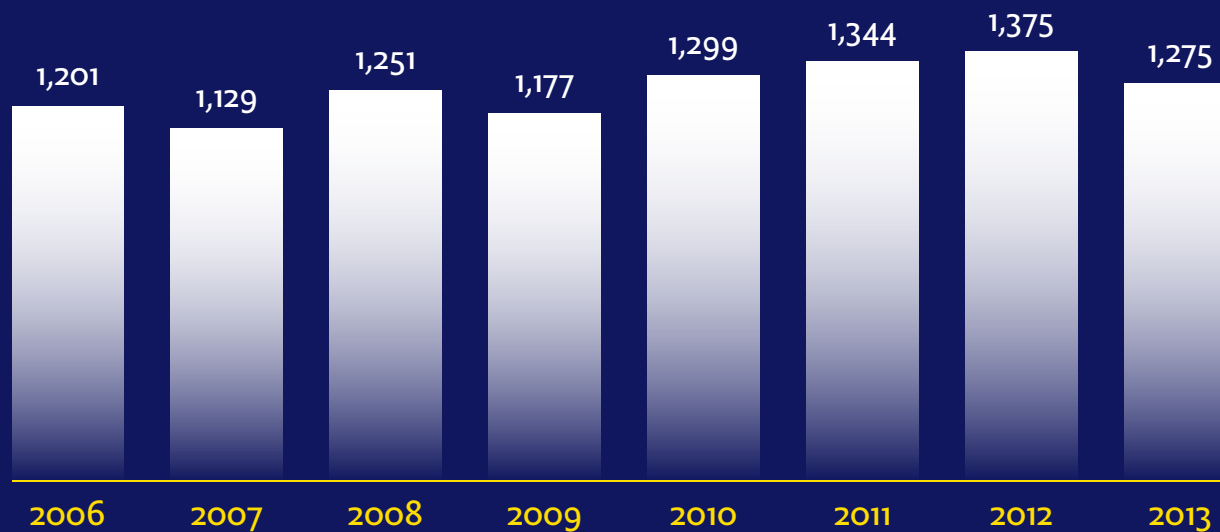
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## ***Behavioral Health Discharges***

As one of the few providers of inpatient behavioral health care on the island of O'ahu, Castle's Behavioral Health unit continues to offer essential services to our community.

Castle's unit had somewhat fewer patient discharges last year due to an extensive renovation and modernization project that required closing off large portions of the facility. The renovations of the unit will be complete in the spring of 2014.

## **Behavioral Health Discharges** **Years 2006 to 2013**



# Volumes

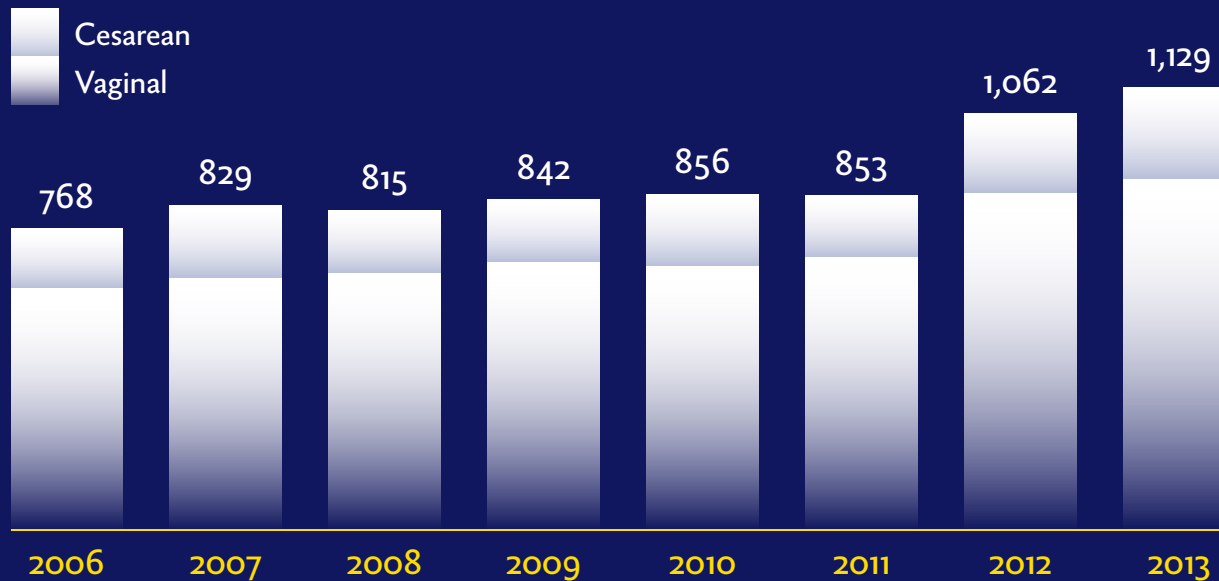
## Births

More deliveries of newborns were performed at Castle in 2013 than in any previous year, as our Vera Zilber Birth Center continues to provide quality birthing options that draw patients from all parts of the island of O'ahu.

Castle continues to celebrate each new arrival to our Birth Center with the playing of Brahms's Lullaby over the hospital's public address system.

## Births

Years 2006 to 2013



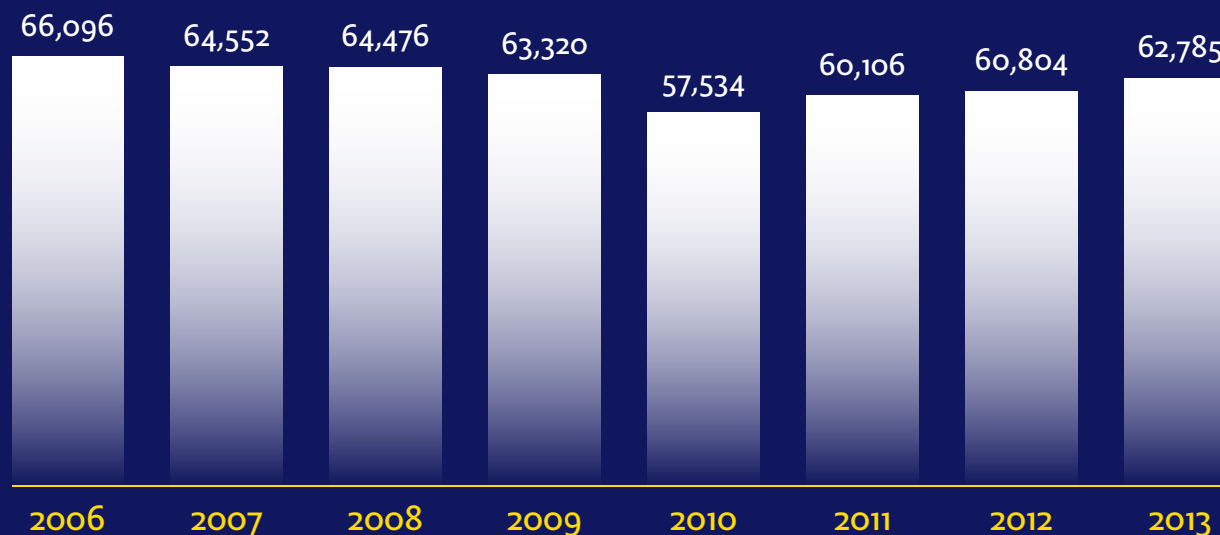
# Volumes

## Outpatient Visits

The chart below shows the number of outpatient visits to the Outpatient Clinic, Outpatient Surgery, Cardiopulmonary, Imaging, the Cardiac Cath Lab, Angiography, the Laboratory, the Performance and Rehabilitation Center, and the Wellness and Lifestyle Medicine Center. Castle's various outpatient services continued to experience steady growth in 2013.

Please note that the figures below no longer include care provided by what was formerly Castle's home care division. This division, Castle Home Care, is now owned and operated by our corporate parent, Adventist Health, rather than by Castle Medical Center. Adventist Health is headquartered in Roseville, California.

### Outpatient Visits (excluding Emergency) Years 2006 to 2013







## Wellness and Lifestyle Medicine Center

During 2013, 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 2,676 people from our community participated in the center's health and wellness outreach programs at thirty-five events.
- 785 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 151 low-income, low-education, or unemployed people. At their option, these people were provided with complimentary nicotine-replacement medications.
- In 2013, we saw 279 diabetic patients in our diabetes program, which was newly accredited by the American Association of Diabetes Educators. We now provide small group classes twice a week, and we have also added a quarterly grocery shopping tour and diabetes cooking class for our participants.
- In June, Castle's Wellness Center started offering our Aloha Kidney Class, taught by nephrologist Ramona Wong, M.D., to those individuals who have stage 3, 4, or 5 chronic kidney disease but who are not on dialysis. Thirty-nine patients with over twenty-seven spouses, family, or friends completed the six-class series, which was offered three times.
- Ten different types of group fitness classes were offered throughout the year, with 193 people participating.
- Fourteen Wellness Cuisine Cooking classes were held, with 389 people participating.
- Six different community support groups met regularly, with approximately 800 people attending altogether.
- The Wellness Center now receives referrals for children and adolescents diagnosed with obesity or diabetes.
- Castle continues to offer massages provided by licensed massage therapists. Over 915 individuals took advantage of this popular service in 2013.

# Staffing

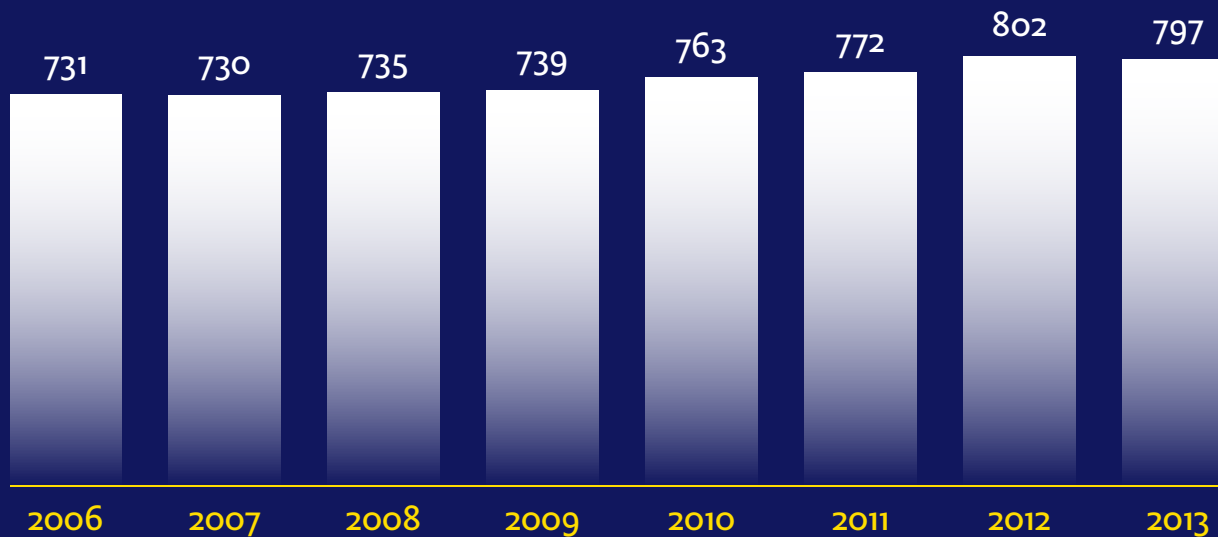
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## **Total Hospital Full-Time Equivalents (FTEs)**

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

Castle Medical Center is recognized as the largest non-military employer on Windward O'ahu.

## **Total Full-Time Equivalents (FTEs)** Years 2006 to 2013



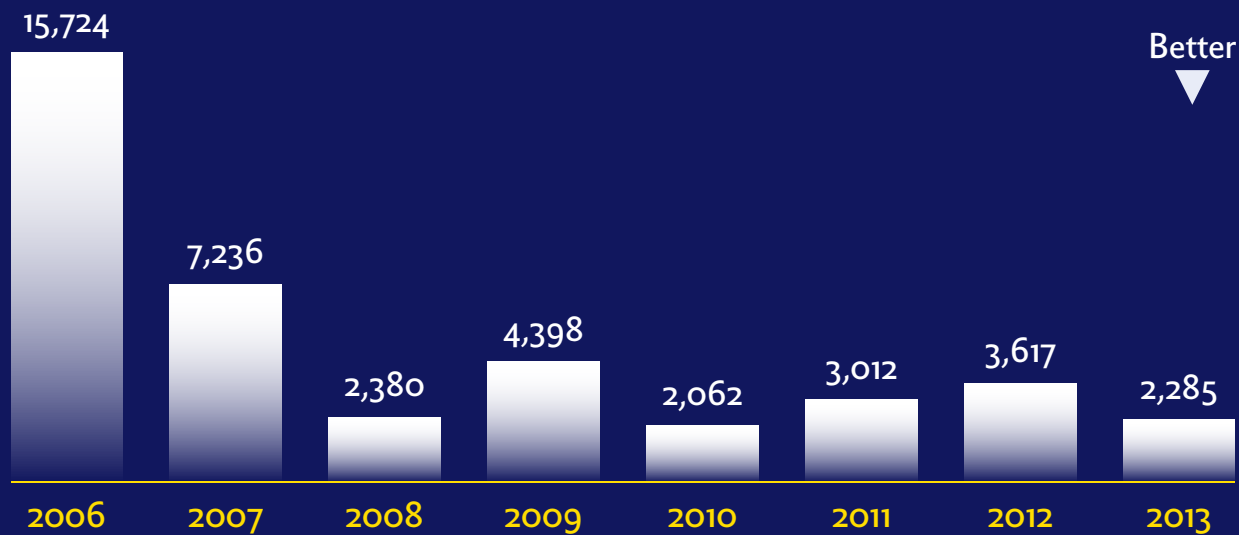
# Staffing

## 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 2013, the use of agency staffing remained low due to improved hiring, lower turnover, continued use of the BidShift rewards program with expanded scheduling of hours, and the continued hiring of new nursing graduates.

## Agency Hours Years 2006 to 2013



# Quality Improvement Goals for 2013 and Their Results

## Goal

Continue efforts to perfect performance in recognized evidence-based clinical guidelines for:

- Acute myocardial infarction
- Surgical Care Improvement Project
- Stroke.

Achieve top-decile performance in patient satisfaction for:

- Inpatient
- Outpatient surgery.

Improve physician satisfaction with cardiopulmonary services.

Improve associate satisfaction scores in key driver categories.

Eliminate the incidence of:

- Catheter-associated urinary tract infections
- Central line–associated bloodstream infections.

Improve Home Care clinical outcomes by reducing the frequency of patients' needing emergency care or hospitalization.

## Results

Considerable improvement was made in all three areas.

In 2013, we received the “Get With The Guidelines®” Gold Achievement Award for the care of stroke.

Much progress has been made, especially for inpatient scores.

Efforts to reach the 90th percentile continue for both inpatient care and outpatient surgery.

Scores improved by seven percentile points over last year. We continue to make improvement efforts.

We made improvements in some areas, but we need to continue improvement efforts.

We successfully eliminated catheter-associated urinary tract infections in 2013.

We continue work on eliminating central line–associated bloodstream infections.

Castle Medical Center no longer operates a home care division. Castle Home Care is now owned and operated by our corporate parent, Adventist Health, headquartered in Roseville, California.

# Quality Improvement Goals for 2014

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**Continue efforts to perfect performance in recognized evidence-based clinical guidelines for:**

- Surgical Care Improvement Project
- Stroke
- Outpatient core measures.

**Continue to reduce the rate of readmissions to the hospital.**

**Achieve top-decile performance in patient satisfaction for:**

- Inpatient
- Outpatient surgery
- Emergency Department.

**Improve physician satisfaction with cardiopulmonary services.**

**Improve associate satisfaction scores in key driver categories.**

**Eliminate the incidence of central line-associated bloodstream infections.**

# Notes

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*Castle Medical Center*



*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 healthcare organizations operating in California, Hawai'i, Oregon, and Washington.

Please visit us on the Web at [castlemed.org](http://castlemed.org).

