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Introduction

In 2010, the United States Congress passed the Patient Protection and Affordable Care Act (PPACA), the health care reform act. Within this legislation is a renewed focus on health care quality and safety. The federal government realizes that better and safer care is also less expensive.

For the leadership and board of Castle Medical Center, however, this principle is not a new one. Indeed, we have been focused on better and safer care for a very long time. This fifth annual edition of the hospital's *Quality Report*, as with the previous four, informs our community where this institution stands in relation to quality and safety. Once again, we also reveal advancements and innovations made by Castle in 2010.

Since we believe in transparency, you will see results in this publication of which we are very proud, as well as areas where there remains room for improvement. In all of these areas, however, our commitment to continued improvement will never wane. Our mission at Castle – to “care for our community and share God’s love” – will always drive our passion for quality.

As we identify new and better ways to deliver care and service to our community, we will implement them as rapidly as possible. Health care is a vital, dynamic, and constantly changing service to the community, and at Castle Medical Center, it is a duty that we take very seriously.



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Chief of Staff

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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, outpatient, and home-based services. With 160 beds, more than 1,000 associates, 200 volunteers, and 280 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 care in a caring environment that extends well beyond hospital and clinic walls. Our many programs are developed to serve the medical needs of our communities.

In 2010, Castle's services included:

- 24-hour emergency services
- Inpatient acute care
- Vera Zilber Birth Center
- Joint and Spine Care Center
- Inpatient behavioral health services
- 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 and home-based services
- Imaging and laboratory services in Kāne'ōhe and Kailua
- Wellness and lifestyle Medicine Center.

Awards and Recognition

Blue Distinction Center for Bariatric Surgery®

In October of 2010, Castle Medical Center's Surgical Weight Loss Institute became a designated Blue Distinction Center for Bariatric Surgery®.

Blue Cross Blue Shield America (BCBSA) companies, such as Hawai'i Medical Service Association (HMSA), have awarded this distinction to only 270 facilities nationwide that have met the rigorous criteria for such a designation.



Designated by:

HMSA

 **Blue Cross
Blue Shield
of Hawaii**

An Independent Licensee of the Blue Cross and Blue Shield Association

**Blue
Distinction
Center**

for Bariatric Surgery®

In recognition of distinguished clinical care and processes

Awards and Recognition

The Joint Commission Survey



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

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

As the surveyors from The Joint Commission conduct their survey of the medical center, they also provide education to our staff. Furthermore, Castle uses their recommendations as guidelines for improvement in the provision of health care. The survey, then, is not only about our receiving an accreditation, but is something from which our patients benefit.

Thanks to our associates and physicians, Castle Medical Center experienced a highly successful accreditation survey from The Joint Commission in 2010.

Best Places to Work in Hawai'i

Castle Medical Center was named one of the top ten "Best Places to Work in Hawai'i" in the large company category for 2010, this time ranking fifth overall. Since the awards program began six years ago, this is the fifth time that the hospital has been recognized with a place on the top-ten list.

The "Best Places to Work" list is sponsored by ProService Hawai'i and is published annually by *Hawai'i Business* magazine.



Awards and Recognition

Medical Staff and Employee Perception 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. Last year, PRC recognized Castle Medical Center with seventeen individual National Excellence in Healthcare Awards, based on results from the organization's Medical Staff and Employee Perception Surveys performed in 2009.



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

- Emergency services
- Medical records.

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

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

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

- Teamwork between departments
- Teamwork within departments
- Communication
- As a place to work
- Senior leadership
- Overall empowerment
- Training and professional development
- Total compensation package.

Awards and Recognition



'Ilima and Koa Hammer Awards for Marketing

The Hawai'i chapter of the International Association of Business Communicators (IABC Hawai'i) honored Castle Medical Center's Marketing Department with ten 'Ilima Awards in 2010. The 'Ilima Awards recognize and award excellence in communication programs.

Marketing and communication professionals throughout the state of Hawai'i submitted their best work of 2009 for the 'Ilima Awards program, and IABC professionals in chapters across the nation judged the entries.

Castle won two Awards of Excellence for:

- Marketing and Communications: The Joint Care TV ad
- One-Time Special Event: Women's Health & Beauty Fair.

The hospital won eight Awards of Merit for:

- Special Print Communications/Design & Content: *Annual Quality Report*
- Publication Design: *Annual Quality Report*

- Marketing and Communications: Vera Zilber Birth Center TV ad
- External Publication: *Windward Health*
- Publication Design: *Ulupono*
- Internal Publication: *Ulupono*
- Internal Publication: *Castle MD*
- Internal Publication: *Kū I Ka Mahalo*.

These ten 'Ilima awards are the most ever received in a single year by a non-profit organization or by any organization in the health care field.

Also in 2010, the Hawai'i chapter of the Public Relations Society of America (PRSA Hawai'i) honored Castle's Marketing Department with three of its Koa Hammer awards, which recognize excellence in public relations tactics:

- External Publication: *Windward Health*
- Internal Publication: *Castle MD*
- Internal Publication: *Kū I Ka Mahalo*.

Mission

A letter received from a thankful family attests to the Sacred Work that is delivered daily in our hospital:



We wanted to extend our appreciation to your hospital's ministry program and to the chaplain. Our mom passed away recently, and although we opted not to use the minister's services when offered, our family was extremely impressed by the outpouring of aloha spirit that followed.

Our family is quite large and had spent many hours at the hospital with little to no rest. It was a sad time for all of us, as hope had dwindled, and all we could do was stand by and watch Mom gasp for breath, praying each would be her last so that she could finally enjoy the eternal peace she deserved. Your chaplain made this observation and sent over a cart of refreshments to the waiting area. This kind gesture immediately lifted the spirits of everyone present. As we savored the refreshments, we were able to talk to each other more, instead of just crying and pacing. This simple, yet generous, act of kindness somehow changed the mood of the entire room. The thick cloud of gloom and depression suddenly lifted, and acceptance slowly took its place.

We are so thankful for this and would like you to accept this monetary gift for your chaplain's ministry so that another family can enjoy this special gift of aloha in their time of need. Words cannot begin to express our appreciation for this wonderful gesture.

Mission

Sacred Work

At Castle Medical Center, where our mission is “caring for our community and sharing God’s love,” health care is truly Sacred Work. We serve not only to earn a living, but to do God’s work on Earth. He is the healer, we are His ambassadors.

During 2010 and early 2011, the medical center’s Sacred Work Council, comprising a cross-section of the workforce – housekeepers, nurses, spiritual care givers, administrators, and board members – brought forth several initiatives to illustrate and reinforce this message.

- Magnets were placed on the doorposts of each of the patient rooms to remind everyone of the Sacred Work of health care.
- Castle associates wrote 22 stories to describe what Sacred Work looks like at Castle. These stories were then submitted to *Our Stories: Volume II*, a book published by Castle’s corporate parent, Adventist Health, to be distributed throughout its hospital system.
- A weekend retreat of prayer and Sacred Work was held to bring associates closer in a bond of service.
- Castle initiated a chain of associates who pause when a “code” is called in the hospital in order to pray for the patient, the patient’s family, and the associates who are providing care during the code.
- Training sessions were begun for the hospital’s new graduate nurses at an associate’s beach house to provide them with an introduction to the concepts of Sacred Work.



Mission



Adoption of Porgera Hospital, and Mission Trip to Papua New Guinea

During September of 2010, Castle Medical Center sponsored a medical mission team of six health care professionals to Porgera Hospital, located in the remote highlands of Papua New Guinea. The members of our team were ophthalmologist Dr. George Nardin; physical and occupational therapist Kara Carlyle; registered nurse Rachel Dick; biomedical engineer Rick Yenke; registered nurse and Vice President for Patient Care Services Kathy Raethel; and registered nurse, President, and CEO Kevin Roberts.

At the Porgera Hospital, Castle's health care team performed nearly 400 eye examinations, fitted approximately 100 pairs of prescription eyeglasses, performed three cataract removal/lens replacement surgeries, provided rehabilitative therapies, and repaired numerous pieces of equipment. Our team also delivered 27 boxes of much-needed equipment and supplies that included clothing, school supplies, nearly 100 baby carriers, and 300 hand-knitted caps sent to us

from all over the world to be given to this needy community. In addition, the team was able to procure more than 100 pairs of donated sunglasses to assist in preventing eye damage, as well as several used laptop computers to assist in the work at both the hospital and in the surrounding Adventist schools.

The trip was both invigorating and exhausting. Our team met many precious and dedicated health care providers who love their patients and community. The team's members were also inspired by the dedicated teachers and principals who are determined to infuse the next generation with hope and love for each other and for God.

We hope that future support activities for our "sister" hospital in Papua New Guinea will include the delivery of more essential equipment and supplies, and perhaps even annual visits by medical teams from Castle.

Mission

Kōkua Me Ka Laulima

Castle Medical Center is partnering in a joint project with Aloha Medical Mission, The Queen's Medical Center in Honolulu, private surgeons and anesthesiologists, and two Hawai'i community health centers to provide free outpatient surgery to the uninsured poor in the state. This program is called Kōkua Me Ka Laulima ("Help With Many Hands"). Under the partnership agreement, The Queen's Medical Center and Castle have agreed to cover the costs of surgery for uninsured patients who have general surgical problems and who can be treated as outpatients. In addition, the surgeons and anesthesiologists in the program have agreed to waive their fees for surgery performed.

The program became operational in August of 2010. We expect that from ten to twelve patients a year will be referred to the program from the Kalihi-Pālana and Kōkua Kalihi Valley Health Centers.

Dental Residency Program for Children with Disabilities

In 2010 and in association with Lutheran Medical Center in New York City, Castle began a dental residency program for mentally and physically challenged children in Hawai'i whereby these children, who are often under-served, receive vital dental care at the hospital. Because of their disabilities, these children frequently require general anesthesia and a formal surgical environment for basic dental preventive care and reconstructive work.

Anesthesiologists and pediatricians from Castle collaborated with the residency program to initiate these vital services.

Meals on Wheels

Castle's Nutritional Services has partnered with Hawai'i Meals on Wheels to prepare and package more than forty hot meals for delivery to homebound seniors in the Kailua and Kāne'ōhe communities every weekday. This program provides basic nutritional and human support to isolated, disabled, and frail elderly neighbors.

Associates of Nutritional Services appreciate the opportunity to contribute to the community and to interact with community volunteers on a daily basis.

Mission

Inpatient Satisfaction with Spiritual Care

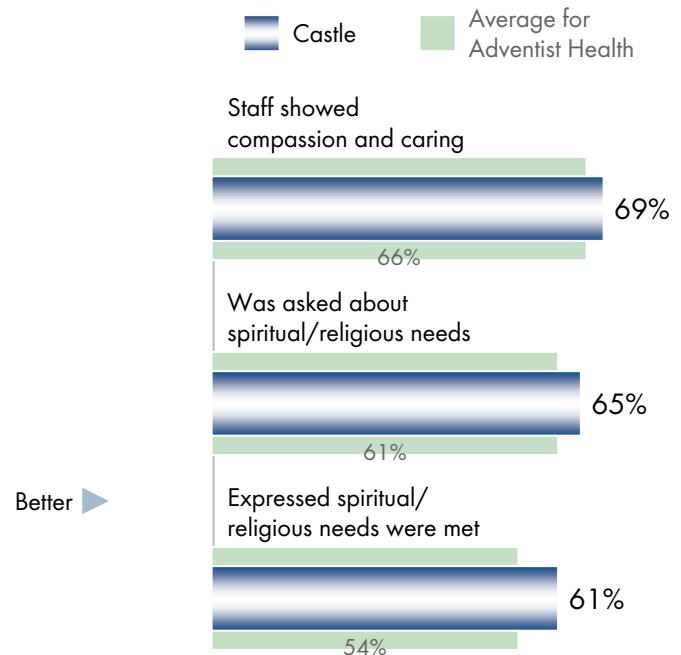
Castle Medical Center is a faith-driven organization dedicated to meeting the spiritual needs of our patients.

In addition to the initiatives described under “Sacred Work” on page 9, we focused in 2010 on the following methods:

- Overhead prayers every morning at 8 a.m. and every evening at 8 p.m.
- Ongoing education related to Sacred Work and loving care in our weekly bulletin for all associates, the *Weekly Huddle*
- 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 seventeen faith-driven hospitals within the Adventist Health system.

Inpatient Satisfaction with Spiritual Care 3rd Quarter 2010



Patient Satisfaction



My brother has been in your hospital for quite a while, dealing with some very challenging medical issues that have also been very challenging emotionally. The members of your staff – nurses, aides, housekeeping, et al – have been so very gracious and supportive of him. They are professional, respectful, and kind. They display extraordinary patience and prompt attention and have never displayed annoyance or frustration, though I am sure there has been occasion to do so.

My brother received excellent care from your entire staff, and he received it every day, every hour. He and his family believe he has been blessed to have been admitted to Castle, and they cannot thank everyone enough.

– A grateful family member

I came into Castle’s emergency room due to extreme pain and difficulty in breathing. Within an hour or so, I was informed by the doctor that I had a blood infection and pneumonia. He somehow took all the concerns and worry away from me when he said, “You are going to be OK!” and offered to give me a painkiller immediately. I knew that I was in good hands.

The three days I spent at the hospital were filled with so many wonderful people who tried so hard to make me feel comfortable. They made me feel like they were treating a family member, and not an ordinary patient. For that, I would like to thank them from the bottom of my heart. They went beyond their responsibilities to make sure that I was OK during a difficult time.

I was so blessed to have had such a positive experience at Castle Medical Center. It was my very first stay at any hospital, and I am sure that next time, if I ever need special medical attention, I would not hesitate to come to Castle again. Thank you very much for having such an excellent team of people whose sole goal is to make patients feel better.

– A thankful patient

Patient Satisfaction

Inpatient

The chart on the facing page represents the most recent results listed on the Centers for Medicare and Medicaid Services (CMS) "Hospital Compare" public Web site. During the twelve-month period of the CMS report, Castle's performance was better than the Hawai'i state average in nearly all measures of patient satisfaction.

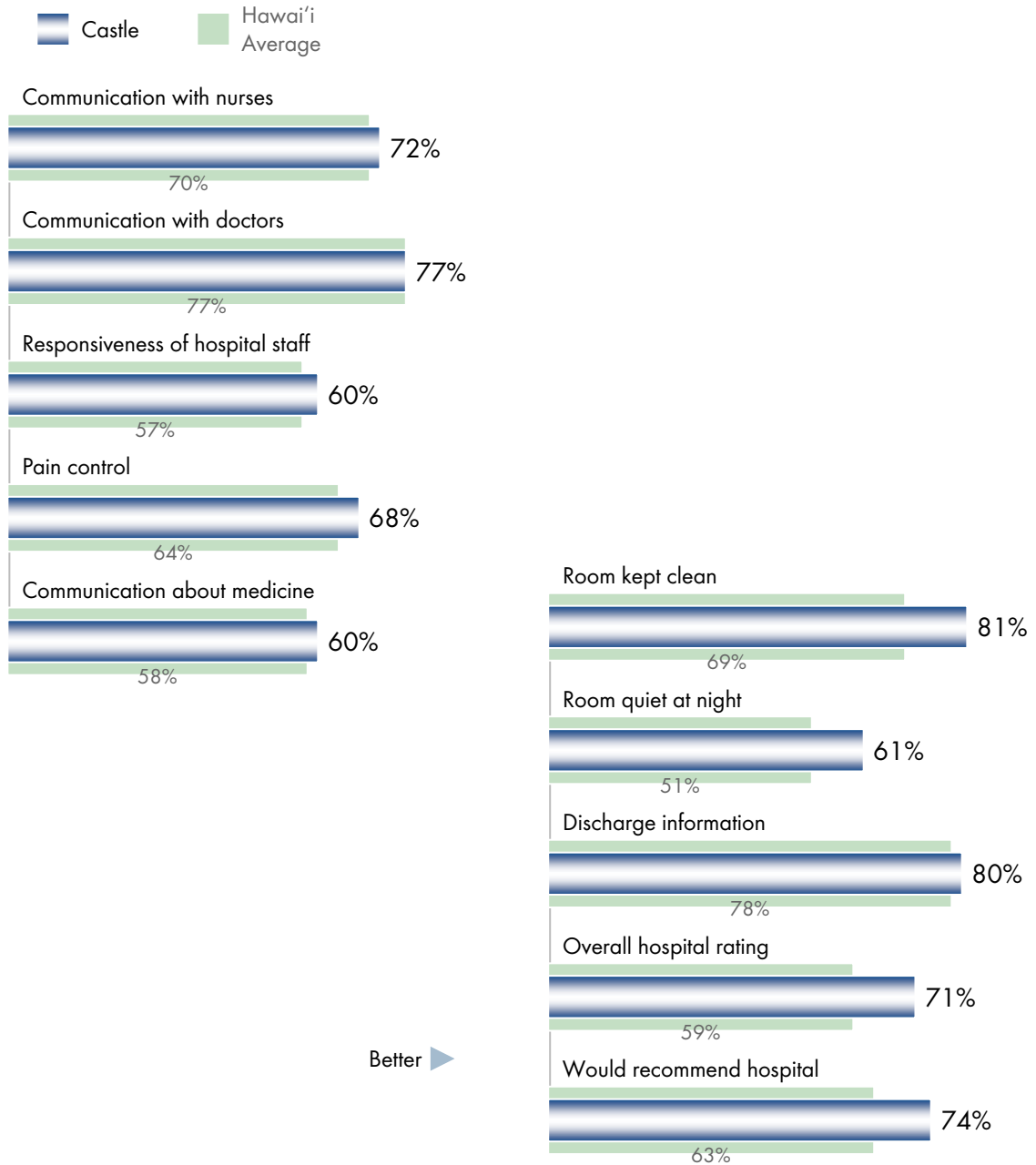
We attribute this success to the following processes:

- Hourly patient rounds that focus on meeting patients' needs
- The "Take Five" program in which nurses sit down and listen carefully to patients' concerns
- Patient care boards to enhance communication between associates, patients, and families
- Post-discharge phone calls to patients to assist in their transition home
- Feedback to associates regarding patient satisfaction, including monthly postings of survey results on the hospital's intranet
- Mission-driven loving care that goes beyond customer service.

Castle's goal for 2011 is to improve patient satisfaction so that we rank in the top 25% of hospitals nationally in all of the measures reported by CMS.

Inpatient Satisfaction

April 2009 to March 2010



Patient Satisfaction

Birth Center, Emergency Department, and Outpatient Surgery

Patient satisfaction with Castle Medical Center's Birth Center has kept our hospital in the top 10% of hospitals nationwide during six of the last seven quarters.

We attribute this success to the following:

- Patient care boards to enhance communication between associates, patients, and families
- The beautiful new Vera Zilber Birth Center facility
- Staff who go beyond customer service by providing loving care to their patients
- Post-discharge phone calls to patients
- Sharing patient feedback and satisfaction survey results with associates.

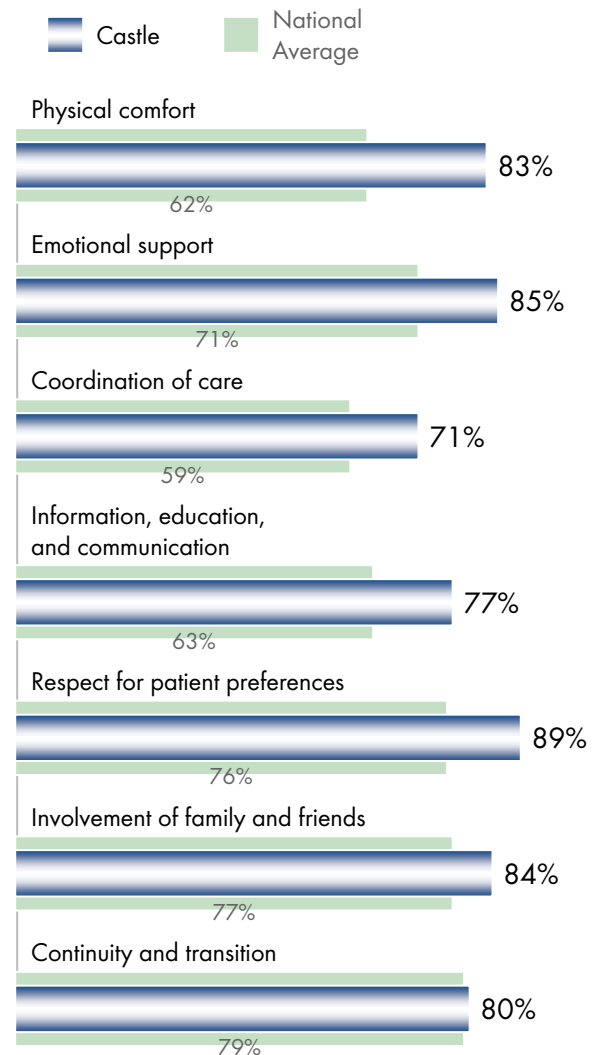
Patient satisfaction with Castle's Emergency Department and Outpatient Surgery is similar to national averages. Our goal, however, is for our satisfaction scores to be in the top 25% of the nation.

Strategies to improve patient satisfaction in these two areas include:

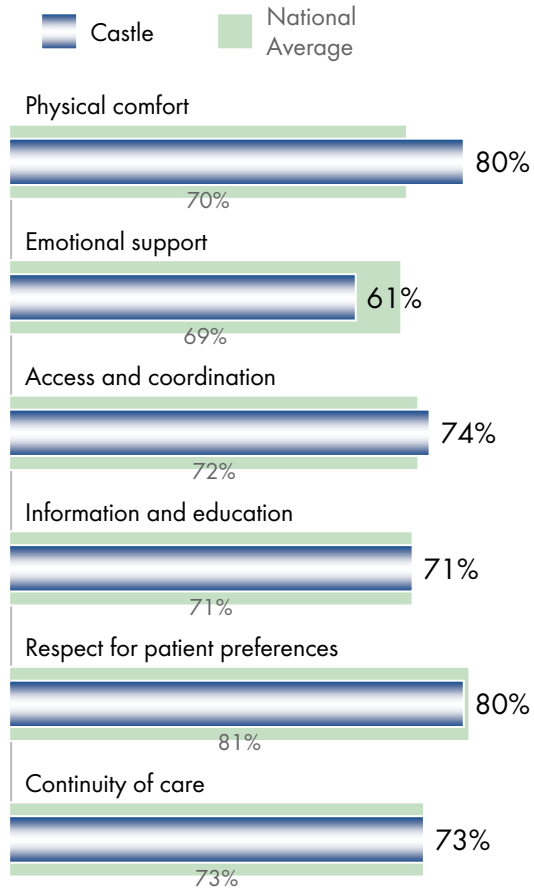
- Improved communication to provide education and reassurance to patients
- Reduced wait times
- Post-discharge calls to patients
- Sharing patient feedback and satisfaction survey results with associates.

Better 

Birth Center Patient Satisfaction 3rd Quarter 2010

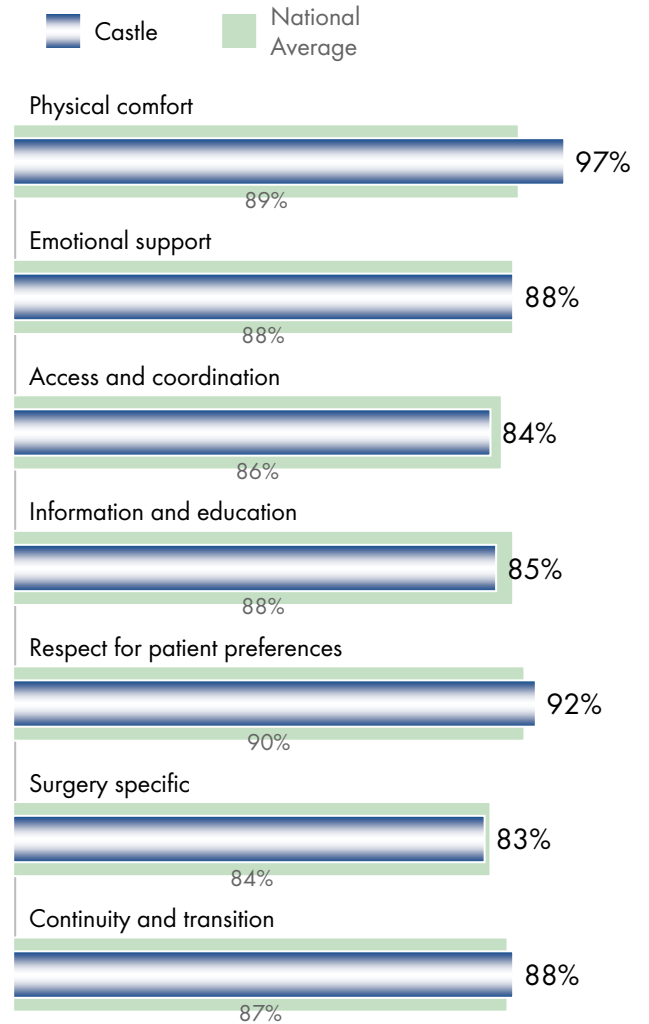


Emergency Department Patient Satisfaction 3rd Quarter 2010



Better ►

Outpatient Surgery Satisfaction 3rd Quarter 2010



Physician Satisfaction



This is my eighteenth year as a practicing anesthesiologist. While eighteen years may not seem like such a long time to many of our venerable physicians at Castle, it is long enough that I'm able to reflect back on the many, many hospitals at which I've had clinical appointments over the years.

My experience is that after working at a health care facility for some time, one is able to appreciate the intangible attributes that distinguishes one from another, such as a sense of place. Often, while clinically excellent, a hospital can leave its staff and physicians feeling like they can't wait to go home for the day. Much more rarely does a hospital engage everyone who works there with a real team spirit.

At Castle Medical Center, it seems that everyone is not only friendly, but genuinely interested in helping each other excel at whatever task they're doing. At Castle, we see and listen to each other. This sense of caring and mutual support, while invisible to the eye, is clearly visible to our patients, and is certainly infectious.

I can only believe that healing must be improved for patients exposed to so much emotional and spiritual goodwill. I'm pretty sure it's good for us providers as well.

**– Bryan Smith, M.D.,
chair of Castle's Department of Anesthesia**

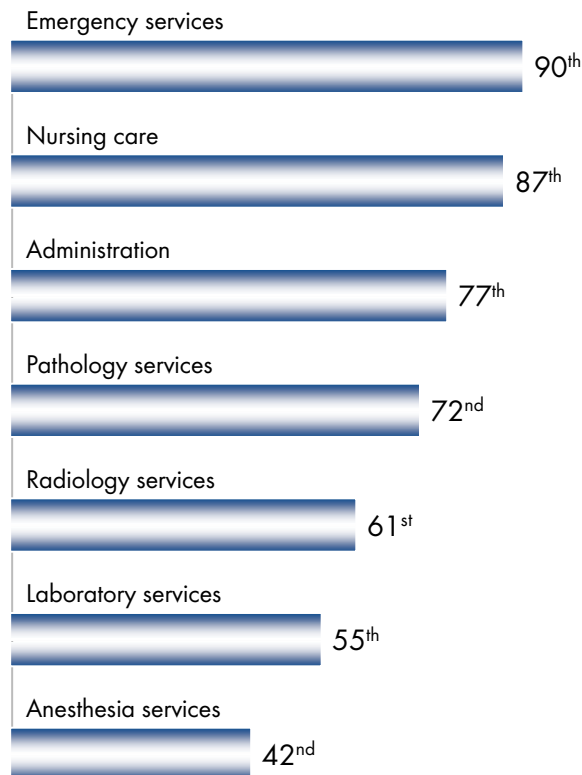
Physician Satisfaction

One hundred seventeen members of Castle's medical staff provided feedback on the hospital's clinical service areas, administration, and overall quality by participating in the 2010 Physician Loyalty Survey. This survey is administered by Professional Research Corporation (PRC), which compares

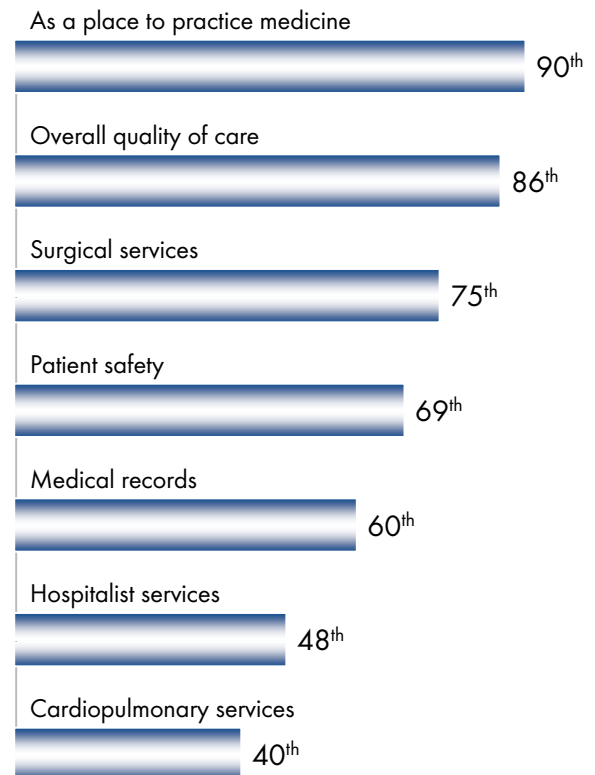
our results with over 350 other hospitals nationally that also participate in the survey.

Castle is proud that in eleven of the fourteen major measures shown on the chart below, the hospital ranked higher than the national median (50th percentile), and that Castle ranked in the top 10% of the nation "as a place to practice medicine."

Physician Satisfaction PRC Percentile Ranking 2010 Survey



Better 



Associate Satisfaction

What are the things about an organization that make it a great place to work? I guess I can say something about this, as I have been employed now at Castle Medical Center for twenty-six years!

The most important thing to me is the overall feeling of goodwill that is part of each workday. The people I interact with at Castle have a genuine desire to be helpful and to encourage one another. I feel a strong sense of teamwork and collaboration here. We understand the importance of each individual's role to our success, and we want to accomplish great things together.

I also like working at Castle because we have a strong sense of purpose. "Caring for our community and sharing God's love" is not just a phrase that we have memorized. It is the foundation on which we have built both our care for our patients and our care for each other. Coming to work each day, we welcome the challenges because we know why we are here.

For me, it's also great to be involved in a workplace that is constantly looking forward and seeking improvement. Nothing is ever boring around here. We are always part of the ever-changing landscape of health care, and we are always pursuing new levels of excellence.

Over the past twenty-six years, I have participated in many changes at Castle, and I have grown with those changes. I started out as a staff nurse on the medical/surgical unit, and now I am the manager of the telemetry unit.

It has truly been an adventure!

– Ann McKenna, R.N., B.S.N., nurse manager of Castle's Lulima Unit

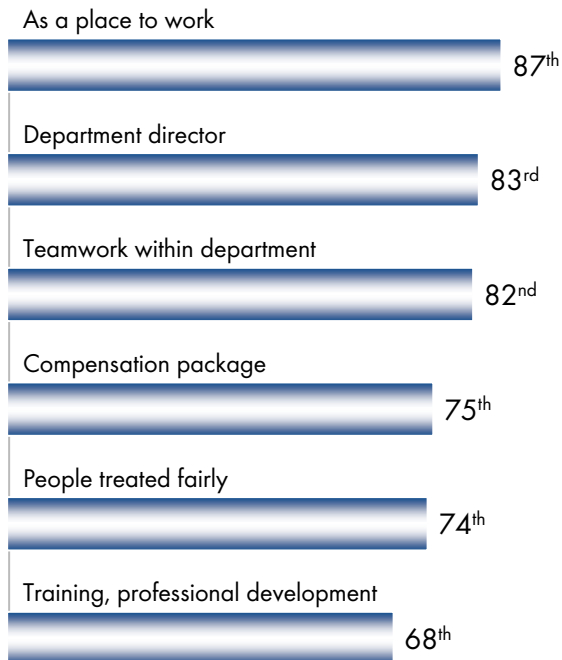


Associate Satisfaction

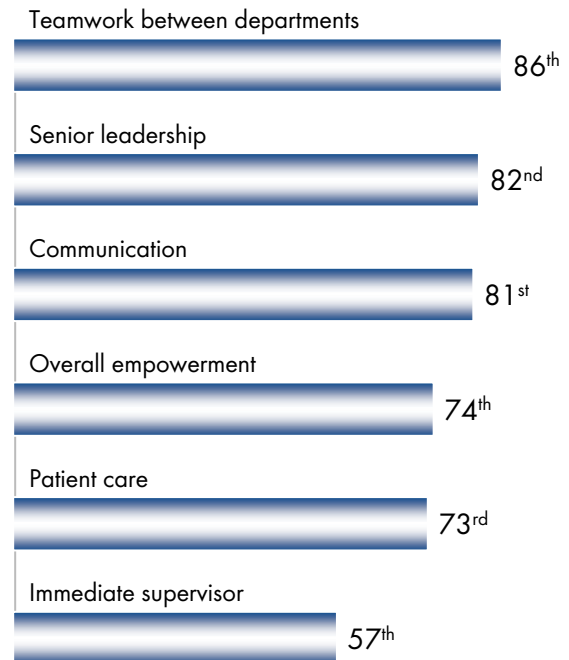
In the most recent Employee Engagement Survey administered by Professional Research Consultants (PRC), Castle's overall score "as a place to work" remains above the 85th percentile of hospitals nationwide that participate in the survey. In 2010, Castle received eight 4-Star Excellence Awards from PRC for scoring in the top 25% of hospitals nationally in various categories.

Castle was also recognized again in 2010 by *Hawai'i Business* magazine as one of the "Best Places to Work in Hawai'i." Last year, the magazine created two new awards for "Family-Friendly Companies" and for being a "Healthy Workplace." Castle received both awards for companies with 150 employees or more.

Associate Satisfaction PRC Percentile Ranking 2010 Survey



Better ►



Inpatient Care

A gentleman suffering from a long terminal illness was admitted to our hospital. He was hoping to gain enough strength to qualify for a lung transplant. Neither he nor his loved ones realized that these would actually be his final days.

Prior to his admission, he and his wife had been planning to renew their wedding vows. They had been happily married for over forty years and had raised two children together. When it became clear that our patient would still be in the hospital on the date they had chosen for their ceremony, they asked about the possibility of having the ceremony in the hospital chapel. Approval was granted, the priest was contacted, and twenty guests were invited to join them for their renewal ceremony.

The day before the ceremony, our patient took a grave turn. It became apparent that he would not be able to tolerate being moved to the chapel. All of the staff felt saddened and wanted to help create an experience that would be uplifting and special, even within the patient's room.

The word went out that assistance was needed with decorations for the room and for a small reception for the guests. So many people from all over the hospital rallied to make sure that this was a special time for everyone. The room was decorated with beautiful local foliage and flowers, and looked like a true wedding venue. The reception, though simple, was beautiful and appropriate to the setting. Our patient was weak, but mustered the strength to say, "We never expected anything like this!" The celebration provided a brief time of happiness for all who were privileged to be there. Our patient passed away peacefully several days later.

As we tell this story, we are reminded that it is not about us, but rather about a very courageous firefighter whose many virtues touched us all. We were all blessed to witness how he cared for his family, and even for his caregivers in the hospital. There are few times in our lives when we meet others who touch our lives in such a deep and meaningful way. This was one of those times, and God was there with us through it all.

Inpatient Care



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 Johns Hopkins 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. The hospital continues to focus its efforts on clinical feedback and collaboration with physicians to make further improvements.

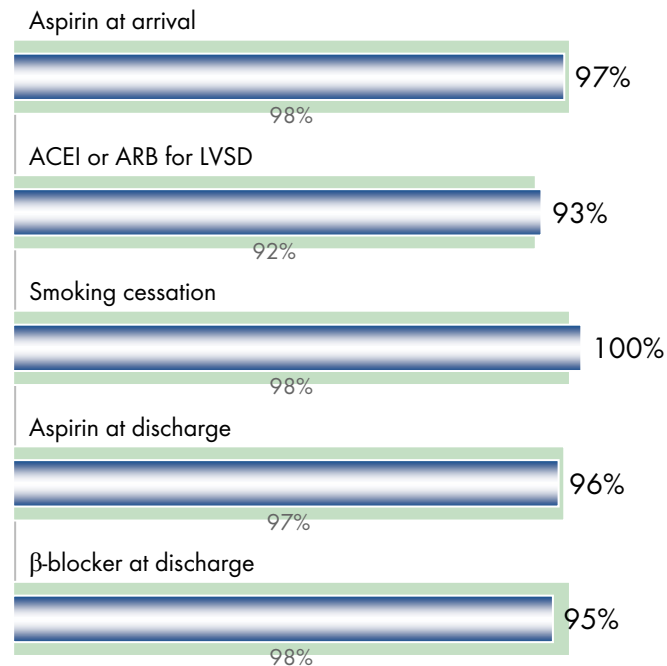
The following charts represent the most recent results available on the Centers for Medicare and Medicaid Services "Hospital Compare" public Web site. During the twelve-month period of the report, Castle's performance was better than the Hawai'i state average in most measures.

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

Better 

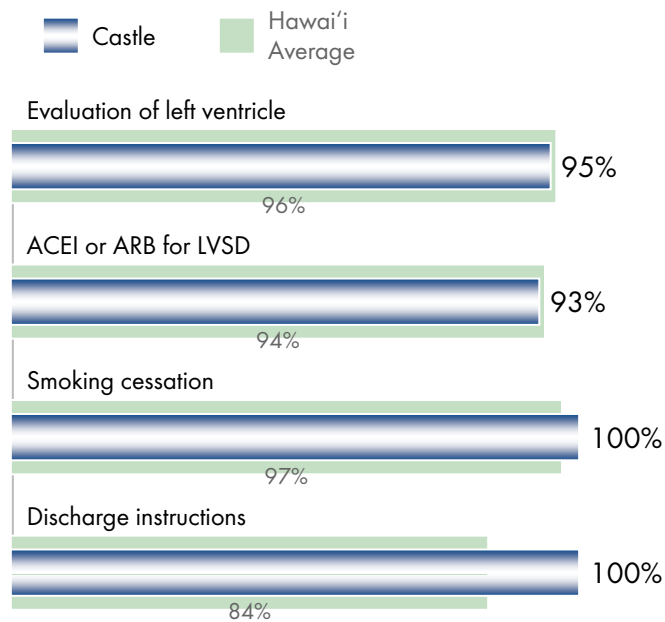
AMI Guideline Compliance April 2009 to March 2010

 Castle  Hawai'i Average



HF Guideline Compliance

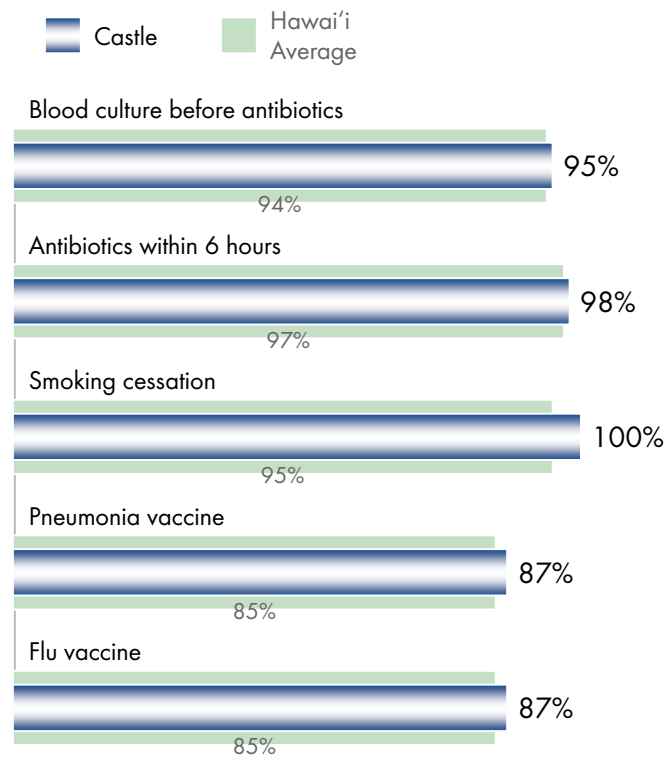
April 2009 to March 2010



Better

CAP Guideline Compliance

April 2009 to March 2010



Inpatient Care

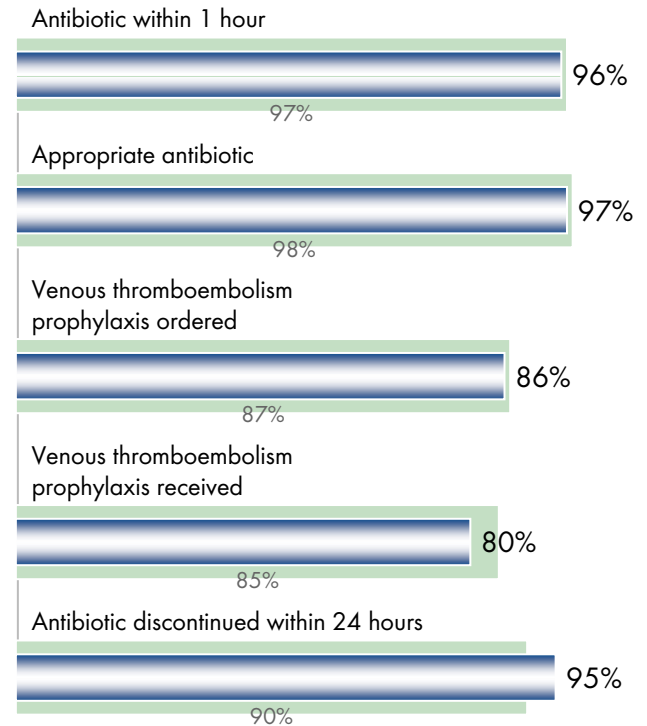
Surgical Care Improvement Project (SCIP)

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

The hospital is working closely with surgeons to prescribe medications that are listed in the guidelines as being the most effective to prevent venous thromboembolism.

SCIP Compliance April 2009 to March 2010

■ Castle ■ Hawai'i Average



Inpatient Care

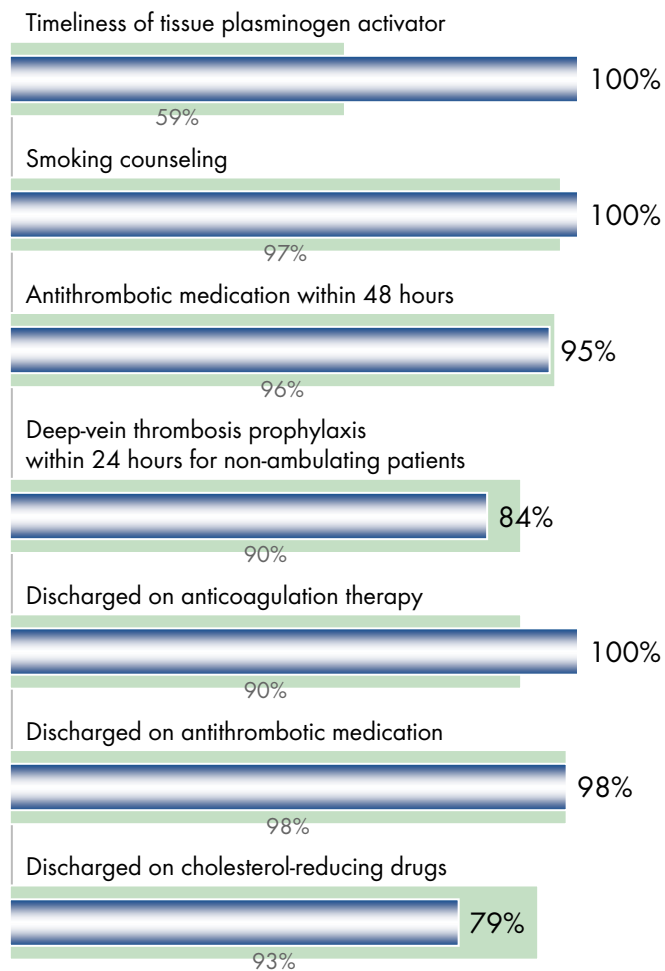
Stroke

Castle has maintained its designation as an official "Get With The Guidelines" hospital for stroke since 2006, after implementing the secondary prevention guidelines issued by the American Heart Association and American Stroke Association.

During 2010, Castle significantly increased the percentage of patients discharged with documented antithrombotic medication, from 57% to 98%. In the coming year, the hospital plans to have similarly near-perfect rates of compliance with two other clinical guidelines: providing deep-vein thrombosis prophylaxis within 24 hours for non-ambulating patients, and discharging patients on cholesterol-reducing medication.

Stroke Guideline Compliance Year 2010

■ Castle ■ Hawai'i Average



Better ▶

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 has set an initial target of no more than 3.1 falls per 1,000 patient days, and a stretch target of no more than 2.95 falls per 1,000 patient days. Over the last two years, the hospital has seen considerably fewer falls than even our stretch target.

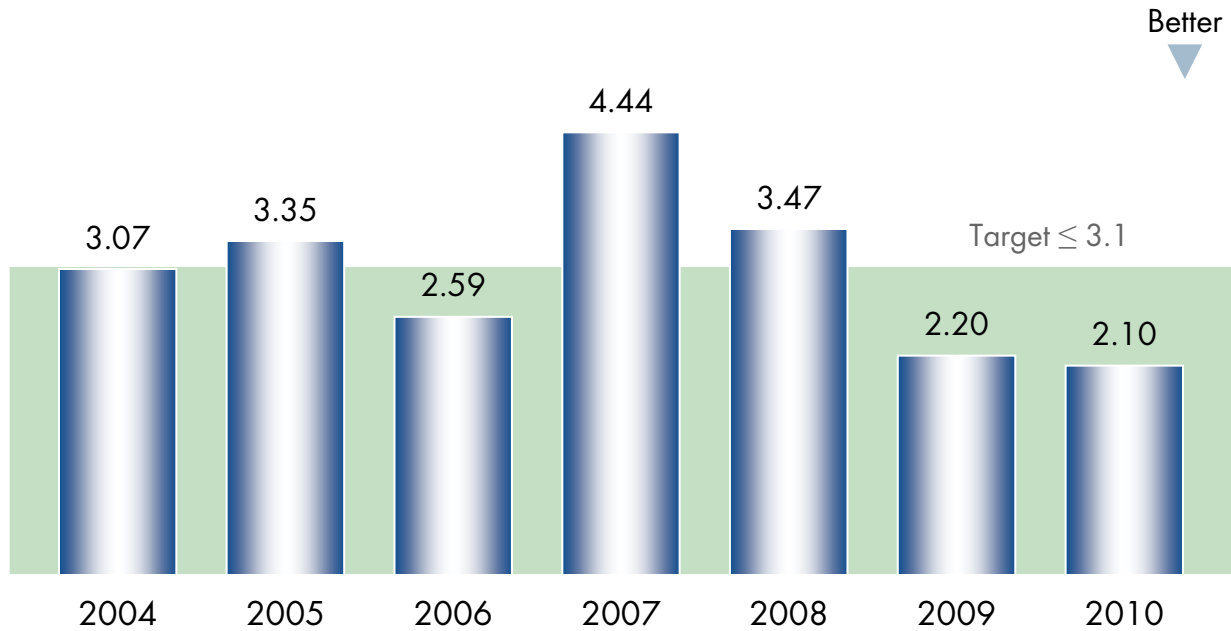
We attribute this success to the following ongoing measures recommended by Castle's Fall Task Force:

- To alert caregivers, an image of a falling leaf is now displayed outside each patient room in which a patient is assessed as being at risk for falling.
- Patient-friendly pull-cords were installed in patient bathrooms, with a very clear instruction, "Pull this cord for help."
- Patient bathrooms were equipped with safer shower chairs. Falls from shower chairs have thereby been eliminated.
- Chair alarms were integrated with existing nurse call systems.
- Competencies were established for nurses on the use of fall prevention equipment.
- Feedback is now provided to staff based on patient fall review analysis.
- Table tents with the message "Call Don't Fall" are placed at each patient's bedside, and information on fall prevention is now a part of Castle's welcome packet.

While we have successfully met our target for 2010, we believe that even a single patient fall is one too many, and we will continue to seek ways aggressively to prevent them entirely.

Inpatient Care

Patient Falls per 1,000 Patient Days
Years 2004 to 2010

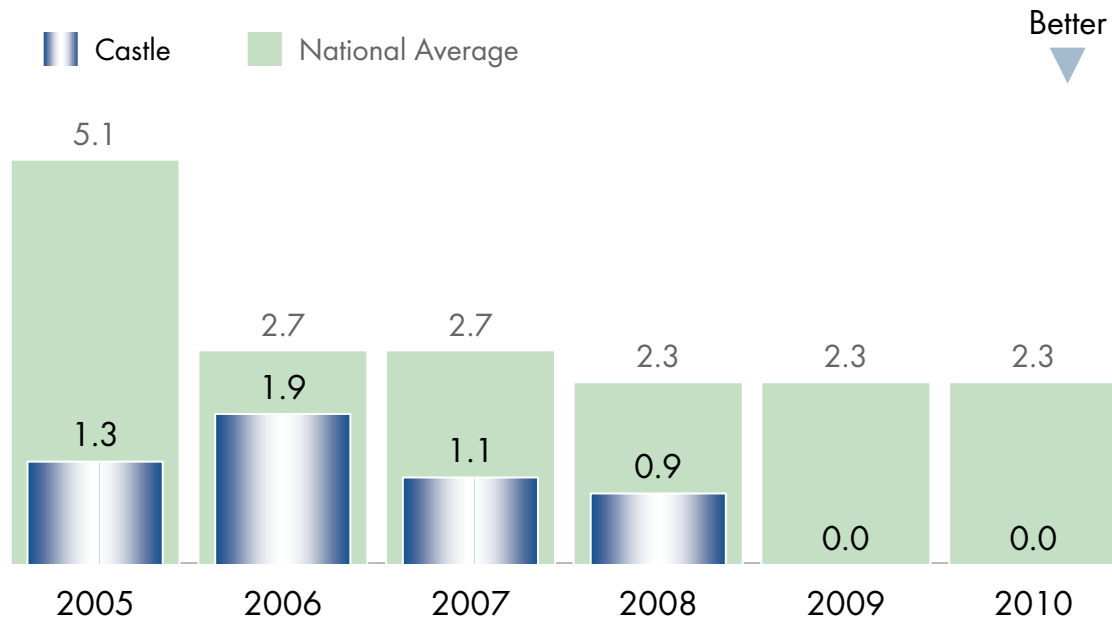


Inpatient Care

Ventilator-Associated Pneumonia

In 2005, Castle Medical Center implemented all elements of the ventilator-associated pneumonia prevention bundle. Since the bundle's implementation, Castle's incidence of ventilator-associated pneumonia has been well below nationally reported rates. In 2009 and 2010, we experienced exceptional results, with no cases at all of ventilator-associated pneumonia.

Ventilator-Associated Pneumonia Rate
per 1,000 Ventilator Days
Years 2005 to 2010



Inpatient Care

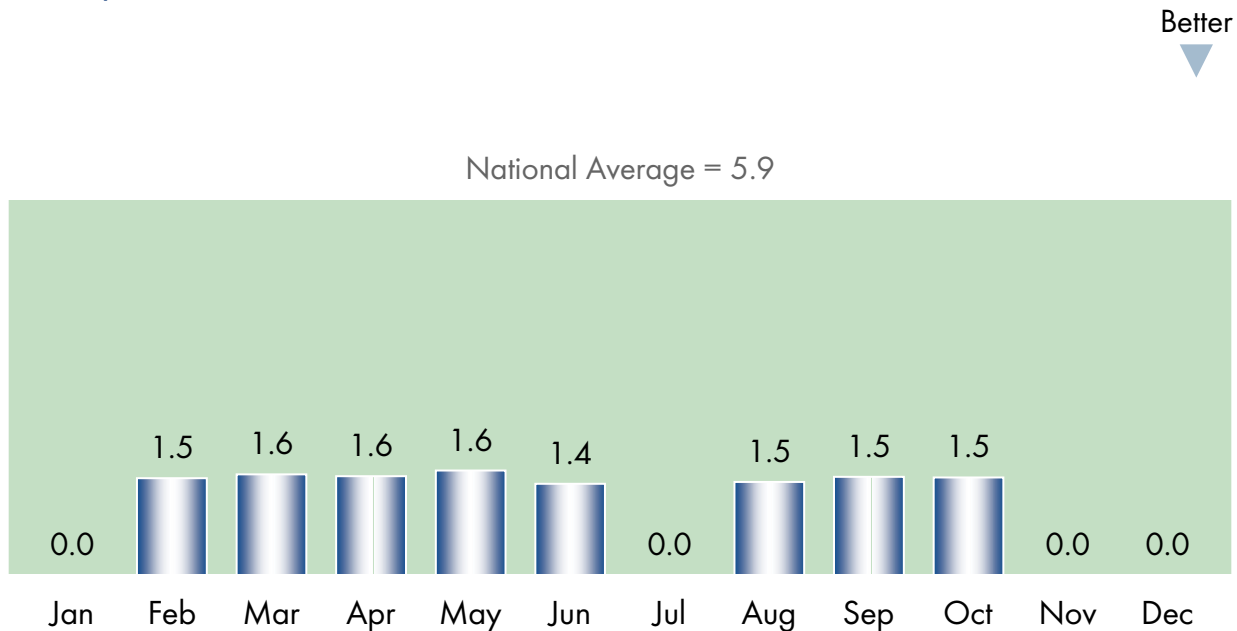
Catheter-Associated Urinary Tract Infections

Catheter-associated urinary tract infections (CAUTIs) account for up to 40% of all hospital-acquired infections and are the most common hospital-acquired infections in the United States. CAUTIs have a significant negative effect on the well-being of patients, and they can increase hospital costs substantially.

Castle has been very successful in reducing CAUTIs over the past two years as a result of implementing the following improvement strategies:

- The development of criteria for the initial insertion of urinary catheters, in conjunction with our parent company, Adventist Health
- Rounds by Castle's infection control coordinator to each patient who has a urinary catheter inserted, in order to re-evaluate the need for the device
- Training of nursing staff on best practices to prevent CAUTIs
- Use of a daily checklist to prompt early removal of urinary catheters where appropriate.

Catheter-Associated Urinary Tract Infections per 1,000 Patient Days January to December 2010



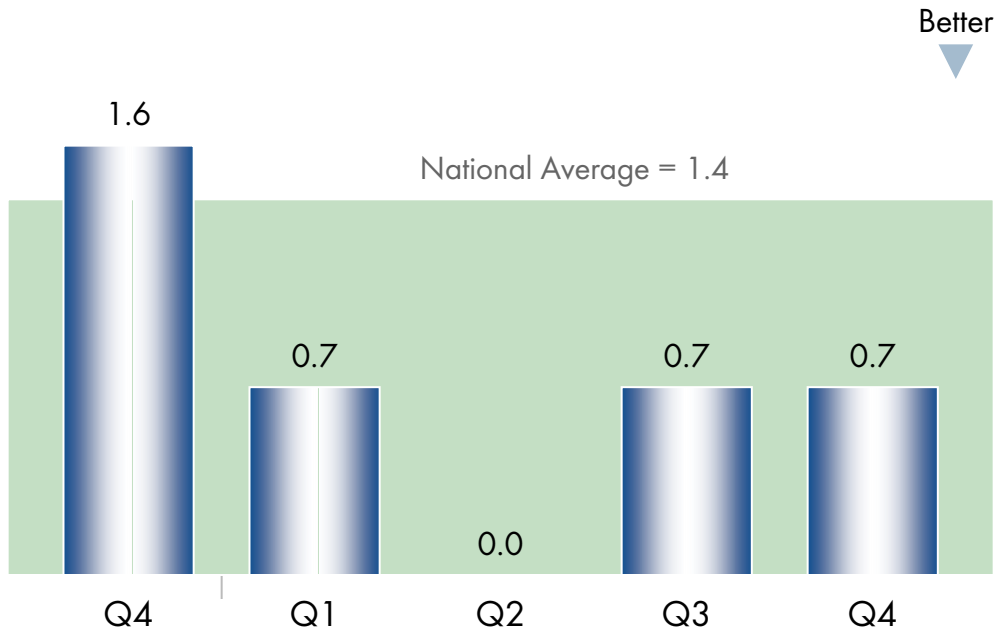
Inpatient Care

Central Line-Associated Bloodstream Infections

Central line-associated bloodstream infections (CLABSIs) may increase mortality rates by 10% to 20% and increase hospital length of stay and medical costs. Castle's goal is to eliminate these infections by implementing evidence-based steps that standardize infection-control practices.

The chart below of hospital-wide CLABSI rates shows our progress towards this goal.

Central Line-Associated Bloodstream Infections
per 1,000 Line Days
4th Quarter 2009 to 4th Quarter 2010



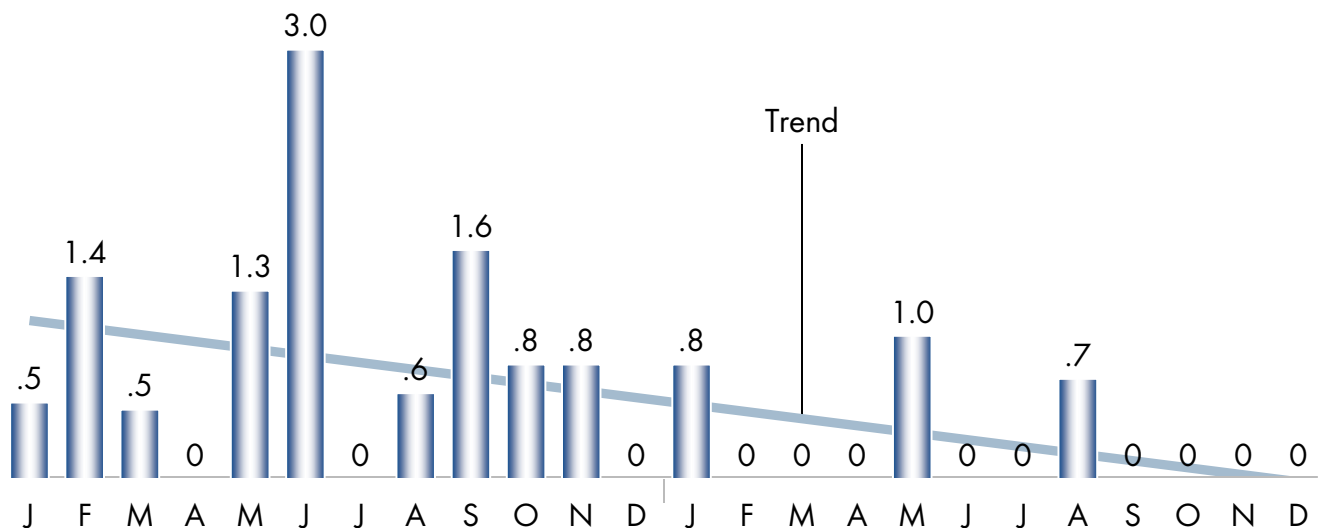
Inpatient Care

Surgical Site Infections

At Castle Medical Center, we understand the importance of following evidence-based practice to reduce surgical site infections. Proper selection and timing of antibiotics, the use of chlorhexidine prep, proper hair removal, and maintaining proper body temperature have all contributed to our low infection rates.

The chart below shows class-1 surgical wounds that are reported within sixty days of surgery. As you can see, our performance in this area has improved considerably over the last twenty-four months. During 2010, out of a total of 1,404 surgeries performed in Castle's operating room, only three resulted in surgical site infections, for an annual rate of 0.2%.

Surgical Site Infections
per 100 Surgeries
January 2009 to December 2010



Inpatient Care

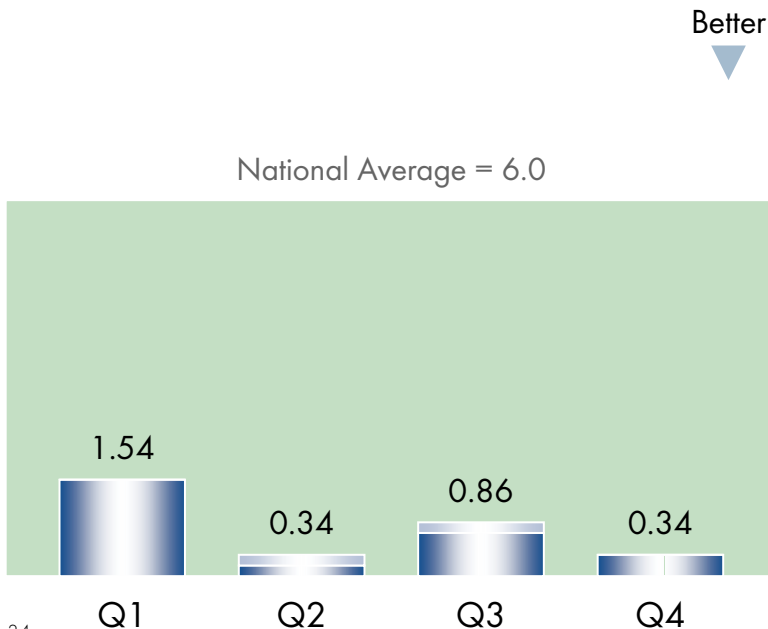
Hospital-Acquired Pressure Ulcers

Pressure ulcers can lead to patient discomfort, increased length of hospitalization, and other more serious complications. Our goal at Castle is to eliminate all hospital-acquired pressure ulcers.

Castle attributes the improvement we saw last year in the prevention of pressure ulcers to the following:

- The evaluation and upgrading of new skin care products, including underpads to prevent skin shearing

Hospital-Acquired Pressure Ulcers per 1,000 Patient Days 1st to 4th Quarter 2010



- Education of associates on new products and pressure-ulcer prevention strategies
- Weekly wound-care patient rounds to ensure that patients are receiving the best care possible.

Pressure ulcers can have four stages:

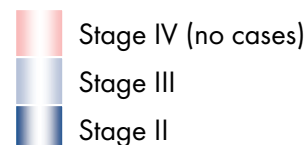
Stage I: Intact skin with slight redness

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.

In 2010, none of our inpatients acquired pressure ulcers that could be classified as Stage IV.



Inpatient Care

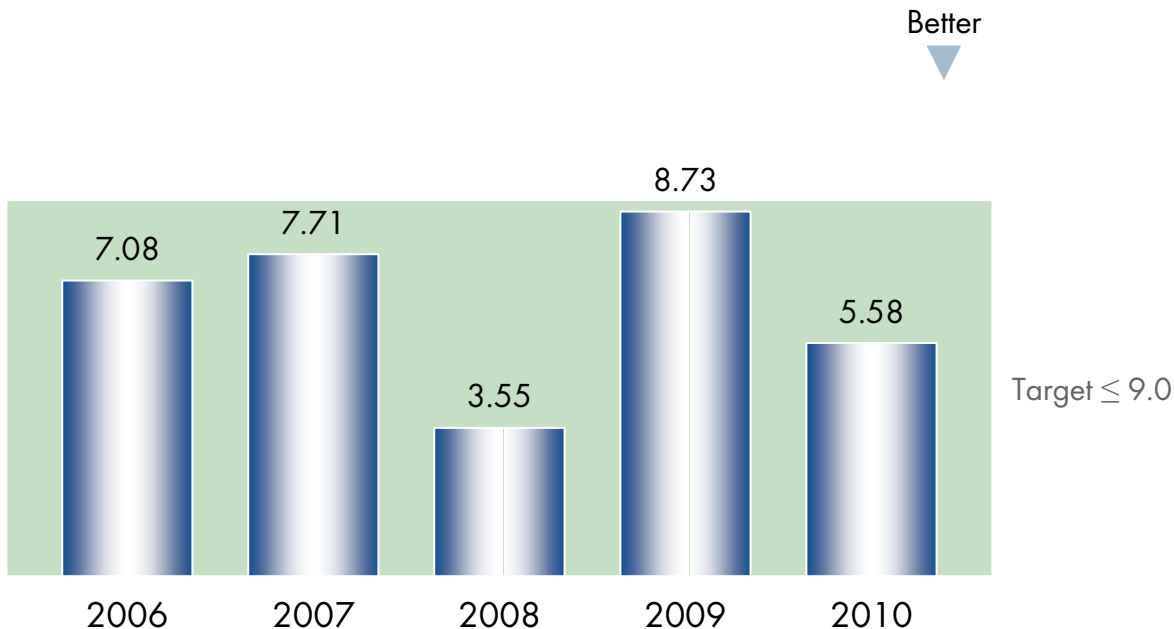
Use of Restraints in Behavioral Health Services

Castle's Behavioral Health Services reduced the use of restraints and seclusion by 36% in 2010 using the Crisis Prevention, Management, and Resolution (CPMR) training program. This program emphasizes de-escalation methods in order to reduce patient aggression that might otherwise lead ultimately to restraint or seclusion. Associates of Castle's Behavioral Health Services, along with those of our Emergency and Security Departments, participate in the

eleven-hour CPMR training to support Castle's ongoing commitment to reducing and eliminating the use of restraints and seclusion.

Additional strategies in this effort include other educational opportunities such as Castle's Annual Nursing Skills Fair, the annual educational update completed by all associates, information in the associate news bulletin, the *Weekly Huddle*, and ongoing review of our progress in this effort at departmental staff meetings.

Use of Restraints in Behavioral Health per 1,000 Patient Days Years 2006 to 2010

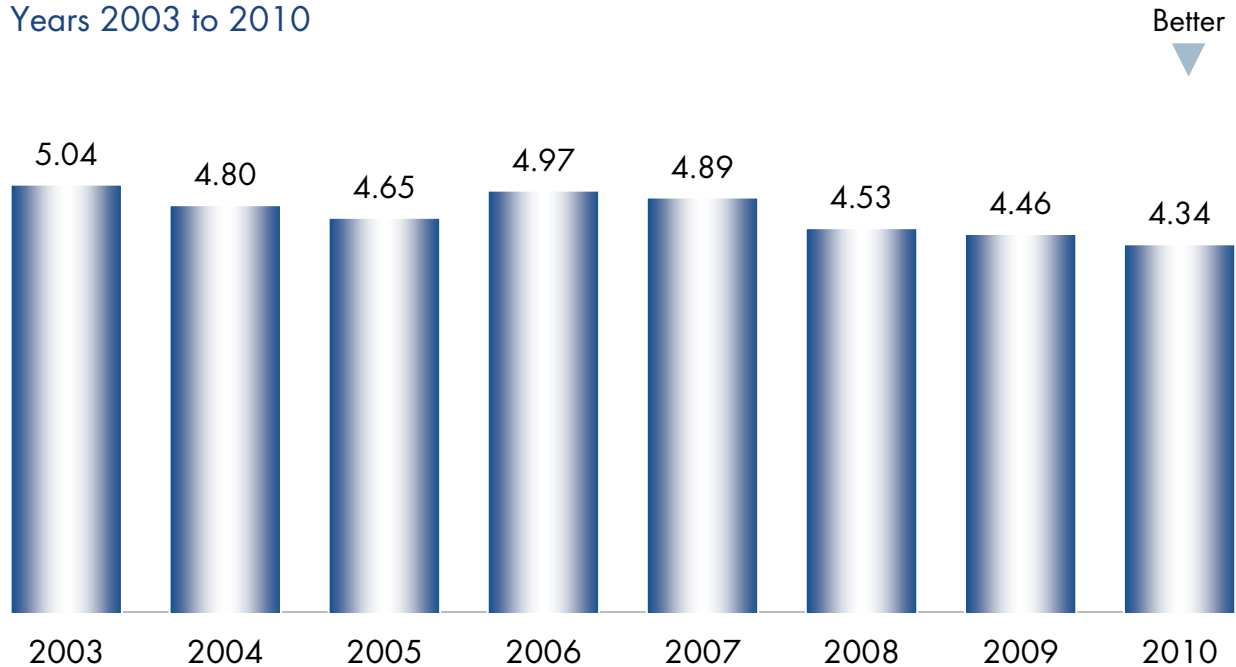


Inpatient Care

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 as soon as it is appropriate. Efforts have also been made to build relationships with community-based facilities in order to expedite long-term care placements when required, so ongoing care could be provided to discharged patients.

Average Acute Length of Stay
Years 2003 to 2010



Emergency Care

Christmas was almost upon us. The community Christmas tree in front of the hospital shone bright with lights, and the hospital staff was filled with Christmas joy.

At the same time, three small children were waiting beside the road. Their mother and father had left them there, unable to handle the responsibilities of parenthood any longer. The police were called, and the children were safe. Case workers from the Hawai'i state government picked up the children – two small girls and an eleven-month old boy – and brought them to Castle Medical Center.

The hospital chaplain came to the Emergency Department and asked the children if they were hungry. Both girls quickly responded, "Yes!" He soon returned with two grilled-cheese sandwiches and French fries. The girls quickly began eating the sandwiches and fries. The eleven-month-old was on his second bottle of milk when he noticed the sandwich. He also wanted some small bites fed to him.

With their hunger now satisfied, each of the little girls was given a brand new Barbie doll by the Emergency Department staff. The little boy was given a stuffed teddy bear. The toys had been donated to the hospital to brighten the season for our smallest patients.

The children left with the state case worker – fed, loved, laughing, and holding what was left of the grilled cheese sandwiches that would not be left behind.

– Patricia Boehm, L.S.W., social worker

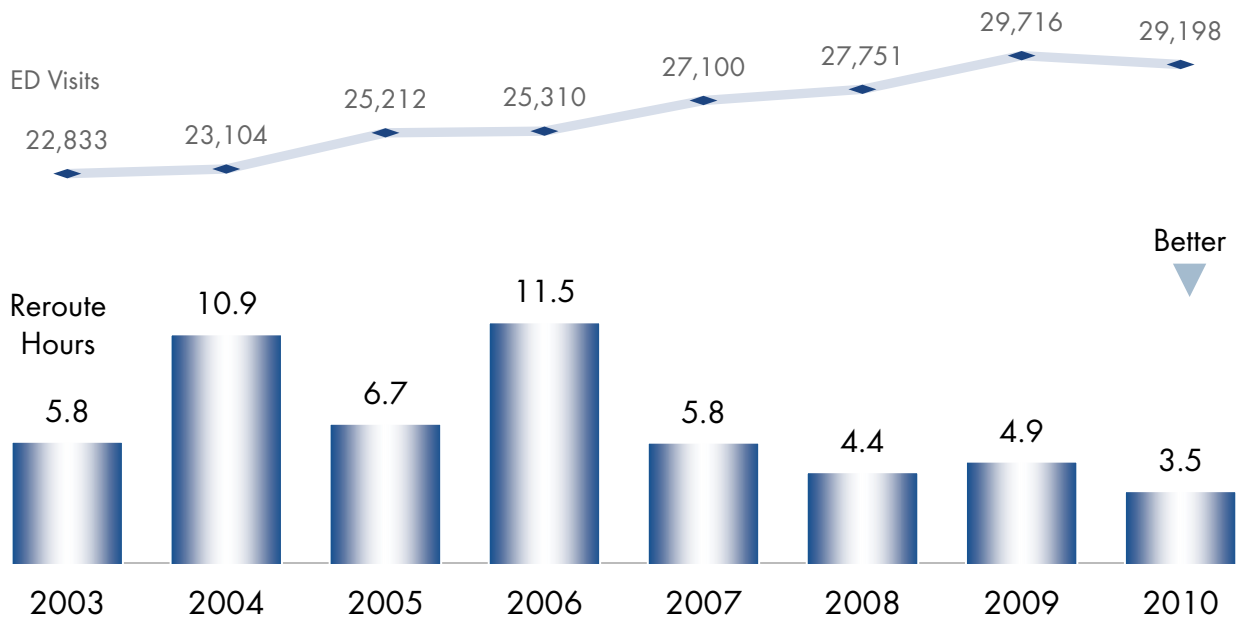
Emergency Care

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.

Plans are underway to expand the Emergency Department in 2012 by annexing adjacent space to keep up with increasing numbers of patients.

Reroute Hours per 1,000 ED Visits Years 2003 to 2010

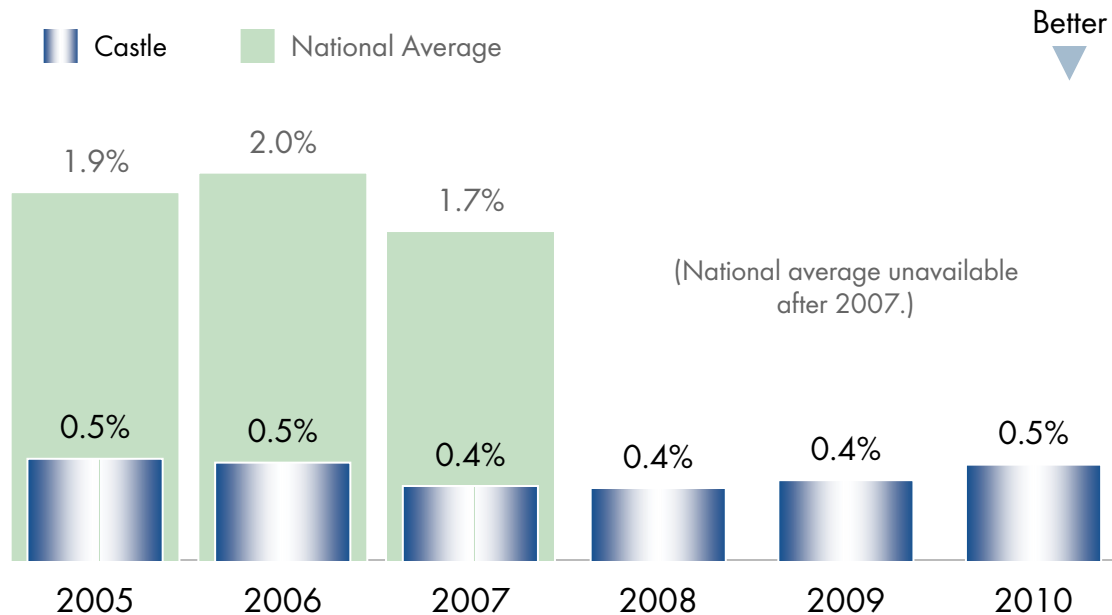


Emergency Care

Patients Left Without Being Seen

Nationally, about 1.7% of emergency patients leave an emergency facility without being seen, frequently due to long wait times. Even though Castle's patient volume has grown over the years, only 0.5% of patients left the Emergency Department (ED) in 2010 without being seen. Castle attributes this success to efforts to expedite and maintain patient flow.

ED Patients Left Without Being Seen Years 2005 to 2010



Emergency Care

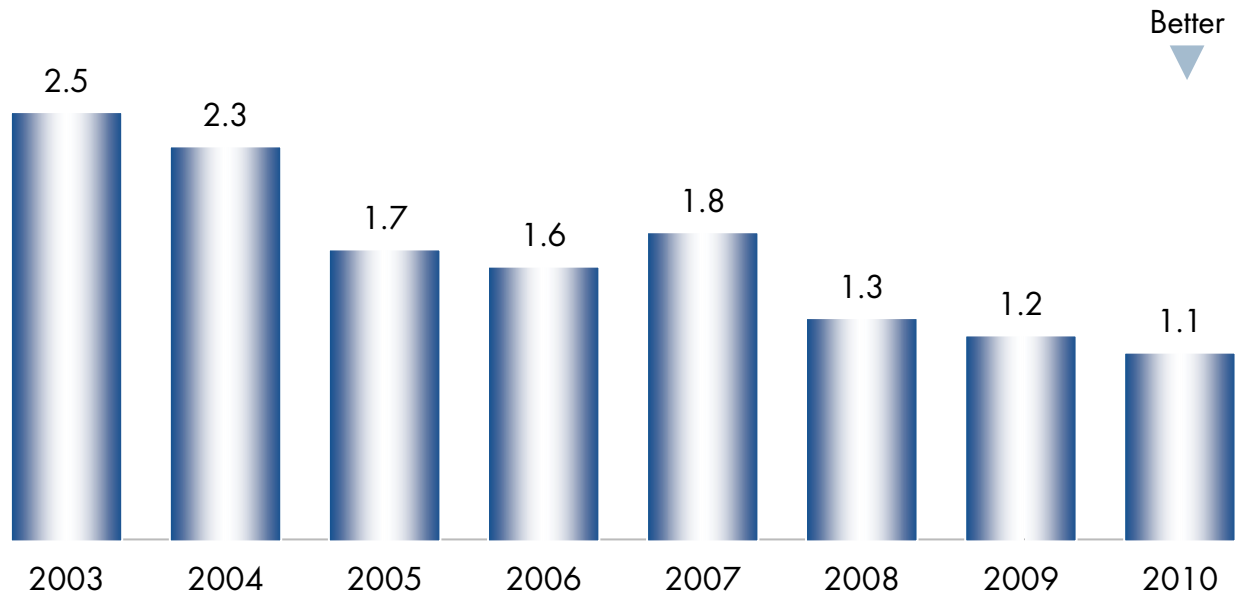
Use of Restraints in the Emergency Department (ED)

Over the past eight years, Castle has seen a progressive reduction in the use of restraints in the Emergency Department. Accomplishing this has been a high priority.

Interventions implemented over the past several years that were designed to achieve this reduction include:

- Assignment of security personnel who are dedicated to monitoring behavioral health patients in the ED
- Provision of mandatory education for associates in the practices of non-violent intervention (CPMR)
- Provision of feedback to staff members through the distribution of performance data related to restraint use.

Restraint Events per 1,000 ED Visits Years 2003 to 2010



Home Care



I would like to convey my appreciation to your Home Care staff following my knee replacement surgery. The members of your staff were very professional and knowledgeable, and they always arrived at my home on time. I received excellent teaching regarding signs of infection and how to prevent falling. Your physical therapist taught me very important exercises and provided me with lots of encouragement and feedback.

Based on this great care, I was well on my way to being functional when I started my rehabilitation program at your outpatient clinic in Kāneʻohe.

– An appreciative patient

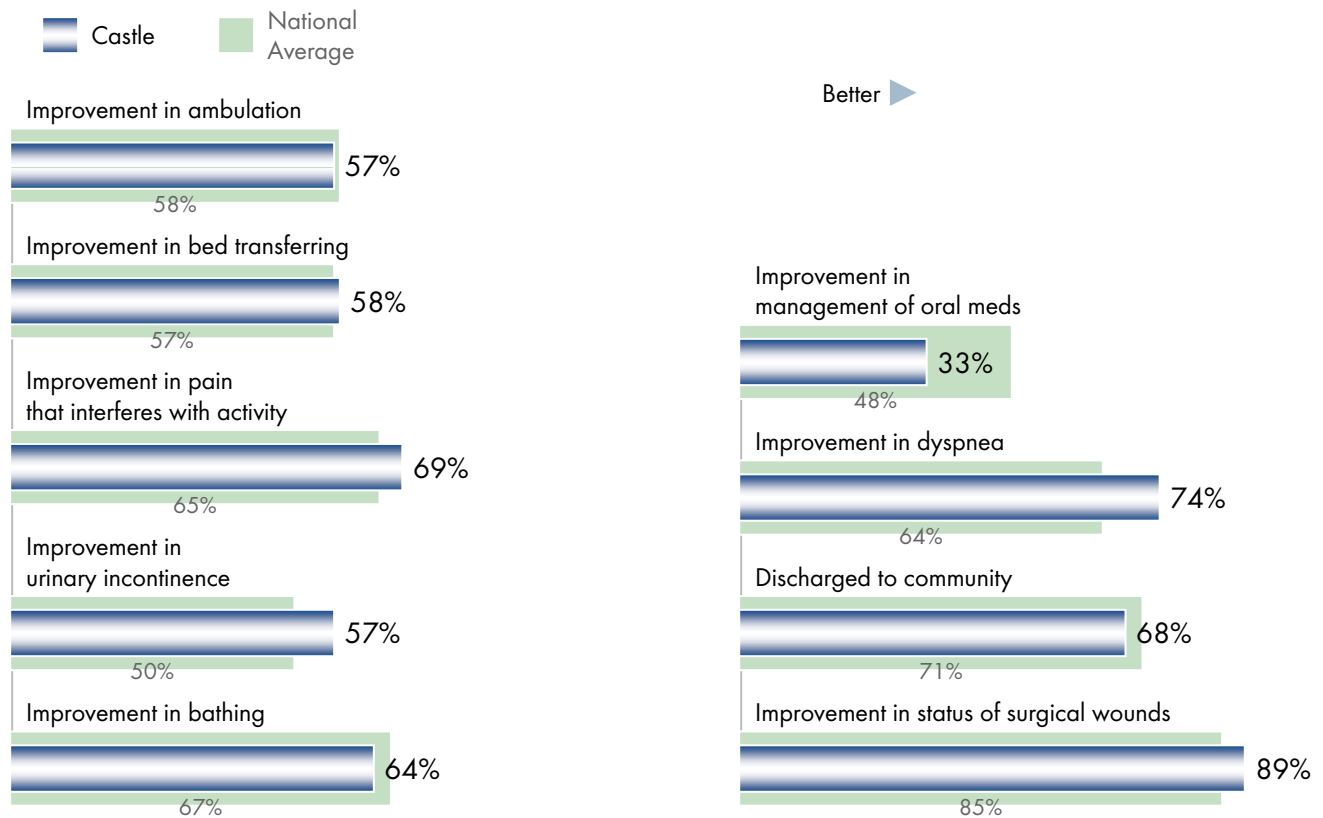
I was a patient in Castle’s Home Care program and received great wound care treatment. My nurse was unperturbed by the general chaos that surrounds my home, and worked around it. She responded to my calls immediately, and answered any and all of my questions.

Because of the great care that I received, I was able to return to work within the estimated time off.

– An impressed patient

Home Care

Home Care Positive Clinical Outcomes Year 2010



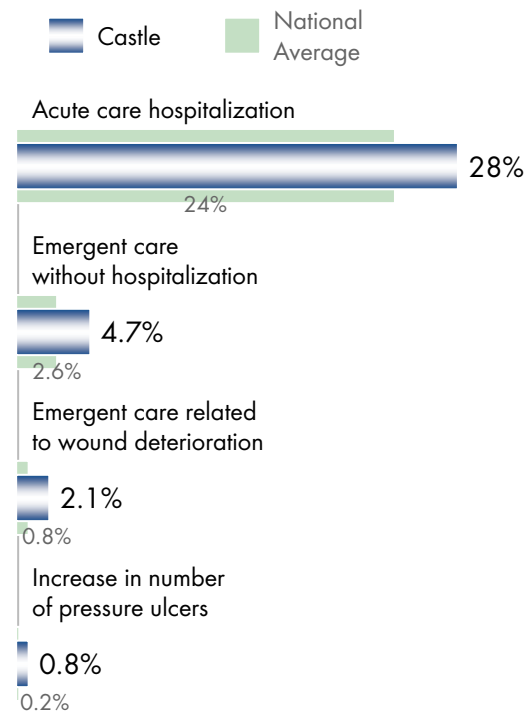
Home Care

Clinical Outcomes

The measures shown in the charts on these two pages have been chosen by the Centers for Medicare and Medicaid Services (CMS) to be included on their "Home Care Compare" Web site, in order to help improve home health care and to provide information to consumers that might help them make informed decisions about their care.

In 2011, Castle Home Care will focus improvement efforts on the management of oral medications and on reducing the frequency of patients' needing emergency care or hospitalization.

Home Care Negative Clinical Outcomes Year 2010



← Better

Advancements and Innovations



Computerized Provider Order Entry

In October of 2010, Castle Medical Center became the first hospital in the Adventist Health system to implement computerized provider order entry (CPOE). CPOE is a system of electronic medical records (EMRs) that allows physicians and other health care providers to enter medical orders and to manage patient care on-line.

Electronic medical records enhance patient safety and facilitate the practice of evidence-based medicine. In addition, the implementation of CPOE brings the hospital in compliance with the Patient Protection and Affordable Care Act (PPACA), which requires health care facilities to move toward complete EMRs in a way that is of benefit to both patients and health care providers.

Advancements and Innovations



Picture Archiving and Communications System

Castle Medical Center now offers Windward O'ahu the latest in health care technology with its new, state-of-the-art patient record system, generally known as a picture archiving and communications system, or PACS. Castle recently acquired this innovative system, called Centricity®, from GE Healthcare. This advanced digital technology replaces film and creates images – such as those from X-rays, CT, or MRI exams – directly on electronic plates. Image files are then stored on magnetic disks and can be retrieved on command and viewed digitally, helping physicians to make decisions and begin patient treatment much more quickly. The new technology also includes electronic tools that assist in detailed analysis.

Digitally acquiring and storing images allows clinicians to access and view them on any PC or workstation on our network. Castle will also have a Web solution that will allow clinicians to view these images remotely from their office or home.

With PACS, health care providers no longer need to chase down films or records. The CT or MR image they need is just a mouse click away, helping them to provide better care for their patients. PACS significantly improves workflow and productivity, and expedites and enhances patient care.

Advancements and Innovations

Digital Upgrade for Mammography Services

Mammography at Castle has been raised to a new level of excellence, thanks to the arrival of the latest digital mammography technology. The high resolution of the new digital images make it easier for radiologists to detect subtle differences between normal and abnormal tissue, years before these changes can be felt by a woman or her doctor. In addition, ergonomic design of the screening equipment makes mammography more “friendly” for patients and technologists, improving both comfort and image accuracy, while keeping the exposure to radiation at a minimum. The machine’s intuitive operations enable faster, more efficient exams, while its automatic exposure control selects the optimal level of exposure based on measurements of breast density.



Advancements and Innovations

Therapeutic Hypothermia for Cardiac Arrest

In 2010, Castle Medical Center joined a growing number of hospitals across the nation that use a special body-cooling therapy called therapeutic hypothermia. This therapy can prevent brain injury to patients who have suffered a sudden cardiac arrest.

Minutes after the heart stops beating, the brain begins to die from lack of oxygen. Manual chest compressions can keep some blood flowing, but unless the heart is restarted quickly, the patient will not survive. When circulation is restored, however, inflammation and other reactions usually cause permanent neurological damage. The new therapy at Castle utilizes a cooling system that allows insertion of a cooling catheter into a large vein in the body. A machine is then able to cool the body very safely and precisely to an appropriate temperature to prevent injury to the brain. The benefit of the cooling system over other effective methods, such as infusing cold fluids and applying ice packs, is the ability to control temperature exactly.

Christopher Len, R.N., Laura Baker, R.N., Erik Anderson, R.N., and Maile Hirasuna, R.N., with the Alsius Thermoguard unit.

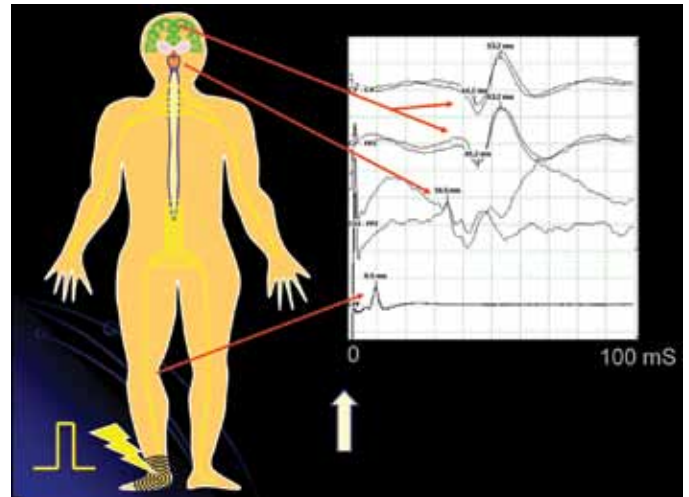


Advancements and Innovations

Intra-Operative Neurophysiological Monitoring

Castle Medical Center now offers Hawai'i's patients and surgeons the first intra-operative neurophysiological monitoring (IONM) that is supervised and monitored live by an on-site physician specializing in neurophysiology. Surgeons, anesthesiologists, and neurophysiologists work together during surgery using IONM to gain real-time assessment of neurological function involving the brain, spinal cord, and related nerve structures by using neurophysiologic signals, such as EMG and EEG.

IONM has emerged as an important tool in preventing neurological deficits and improving surgical outcomes, and is becoming the standard of care. The American Academy of Neurology has recognized IONM as an effective and essential element for preventing complications and for identifying neural structures during complex surgical procedures. It has been proven to reduce the incidence of surgically-induced neurological deficits by over 50%, and greatly improves surgical outcomes.



Advancements and Innovations

Community Clinical Oncology Program

Castle Medical Center is growing, and that growth includes our participation in medical research. Most recently, Castle joined the Community Clinical Oncology Program (CCOP) at the University of Hawai'i's Cancer Research Center of Hawai'i.

This program gives patients the opportunity to participate in more than fifty clinical trials being conducted in Hawai'i for the prevention and treatment of a broad range of cancers. Our patients are thereby provided with more choices and greater access to state-of-the-art therapies and medications than otherwise would be available without their traveling to participate in clinical studies on the Mainland.



Cancer Research Center of Hawai'i

UNIVERSITY OF HAWAI'I

Advancements and Innovations

Palliative Care Program

Palliative care, an interdisciplinary medical specialty, is becoming more widely practiced in the United States as hospitals seek to improve the quality of life for severely ill patients throughout the duration of an illness, regardless of their prognosis.

Palliative services can begin at any stage of a long-term, life-threatening illness, responding to a patient's needs on multiple levels, and often in conjunction with appropriate curative treatments. In addition to managing pain and symptom distress, Castle's palliative care physician works with patients, primary care physicians, and families to coordinate often complex and difficult care options and to provide practical and emotional support. Such care can help reduce long, costly hospital stays and redundant, often futile medical interventions that may only prolong suffering.

Patient-centered palliative care seeks to find a balance in managing and treating chronic illness so that patients and their families have the best possible experience over the long term.



Advancements and Innovations



Safe Patient Handling with the HandyTube

The Safe Patient Handling Program at Castle introduced a new device in 2010, called the HandyTube, that makes moving patients up in bed safer and easier.

The HandyTube is a slippery fabric sleeve designed to reduce friction between patients' bodies and bed linens. When used properly, the effort required to move a patient in bed is significantly reduced, and patients are protected from injuries like skin tears and contusions.

The device also promotes patient self-mobility by making it easier for patients to participate in their own repositioning in bed.



CASTLE LEADERSHIP INSTITUTE

Castle Leadership Institute

Castle Medical Center has set a goal of creating a great place for associates to work and physicians to practice medicine. To assist in nurturing leadership skills within the hospital's entire management team, Castle has engaged in a coaching partnership with Studer Group, a top-tier leadership development company dedicated to health care, to form the Castle Leadership Institute.

The Castle Leadership Institute is designed to refocus leadership on why they chose health care as a profession, to help create better leaders, to create consistency across our organization, and to put in systems of accountability to accomplish operational plans.



Advancements and Innovations



In Sickness & In Health

In January of 2010, Castle began a partnership with statewide television station KHON2 News to produce and broadcast weekly reports in which Castle physicians and other health care professionals are interviewed about an array of health topics relevant to Hawai'i's communities.

The weekly news segment, entitled "In Sickness & In Health," assures residents of Hawai'i that Castle Medical Center is there to help them when they're sick, and can help them remain healthy as well. Through wellness programs, preventive medicine, and professional tips, Castle and KHON2 will try to help our communities live a healthier and a more balanced life.



Advancements and Innovations



Hello Health!

For Castle Medical Center, providing compassion and a gentle touch comes with the territory. However, some acts of love and kindness from employees aren't aimed at patients, but towards each other. The hospital's Hello Health program offers hope, information, and encouragement to employees who are serious about changing their lifestyle and achieving a healthier weight. Hello Health was started by case manager Jean Look, R.N., and Director of Nutritional Services Ruby Hayasaka, R.D., who each lost more than 100 pounds through natural methods – no supplements, medication, or surgery. Both of these associates wanted to share what they had learned and offer hope and support to other associates.

Weekly meetings have included exercise with guest trainers, education with guest speakers, and meetings that close with members sharing their goals, victories, and challenges. Over the past six months, Hello Health members have experienced healthy weight loss, increased energy, decreased stress, and happier attitudes. Most remarkable is that the enthusiasm has spread from the associates participating in the program to everyone in the organization.

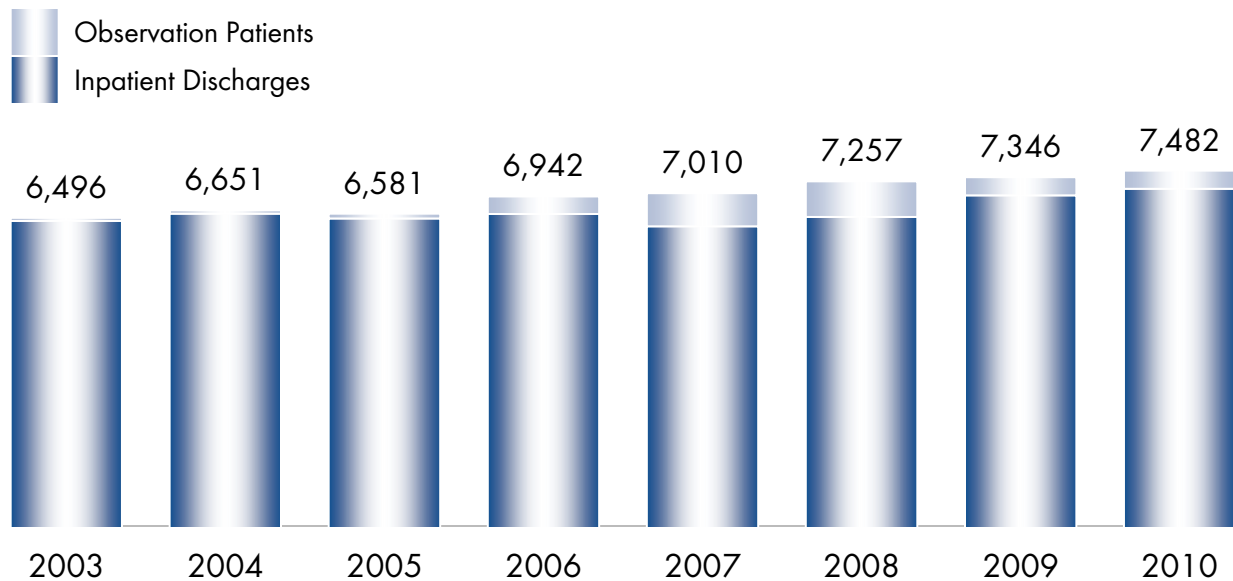
"Sometimes the things that suffer in our busy lives have to do with personal health," said Barbara Penniall, director of Emergency Services at the hospital. "The Hello Health group is helping me set health as a priority. I schedule an appointment on my calendar to protect this time for me!"

Volumes

Inpatient Volume

In 2010, Castle Medical Center had the highest number of inpatient discharges in our history. Inpatient volumes continued to grow throughout the year.

Inpatient Volume Years 2003 to 2010



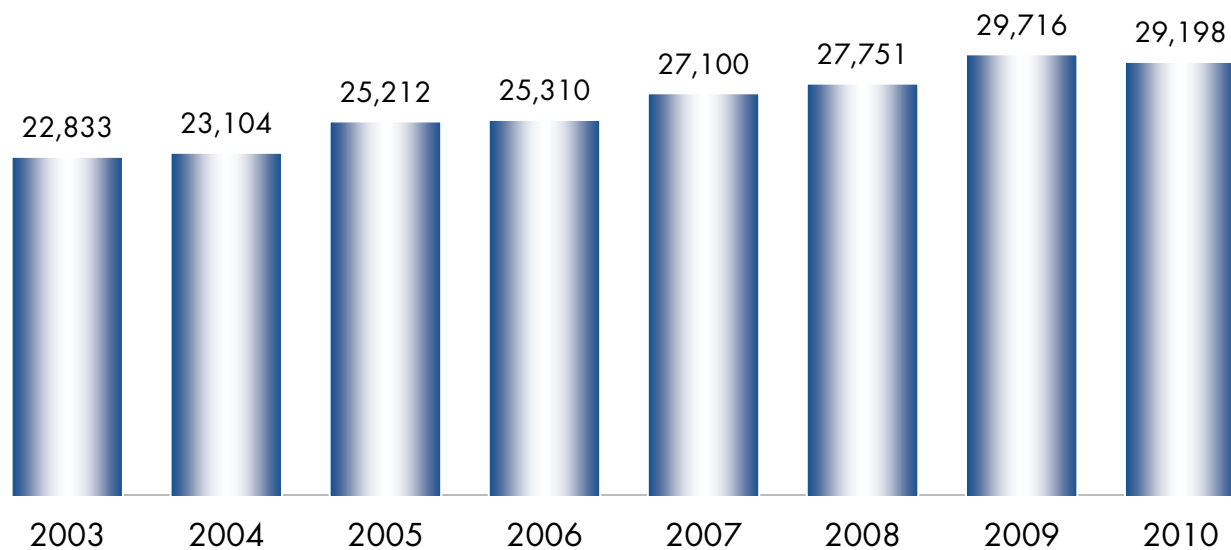
Volumes

Emergency Department Visits

Emergency Department visits dipped slightly in 2010; however, our volumes during the last three months of the year were the highest the hospital has ever experienced.

Plans have been approved to expand and remodel the department in 2012 in anticipation of future growth.

Emergency Department Visits Years 2003 to 2010

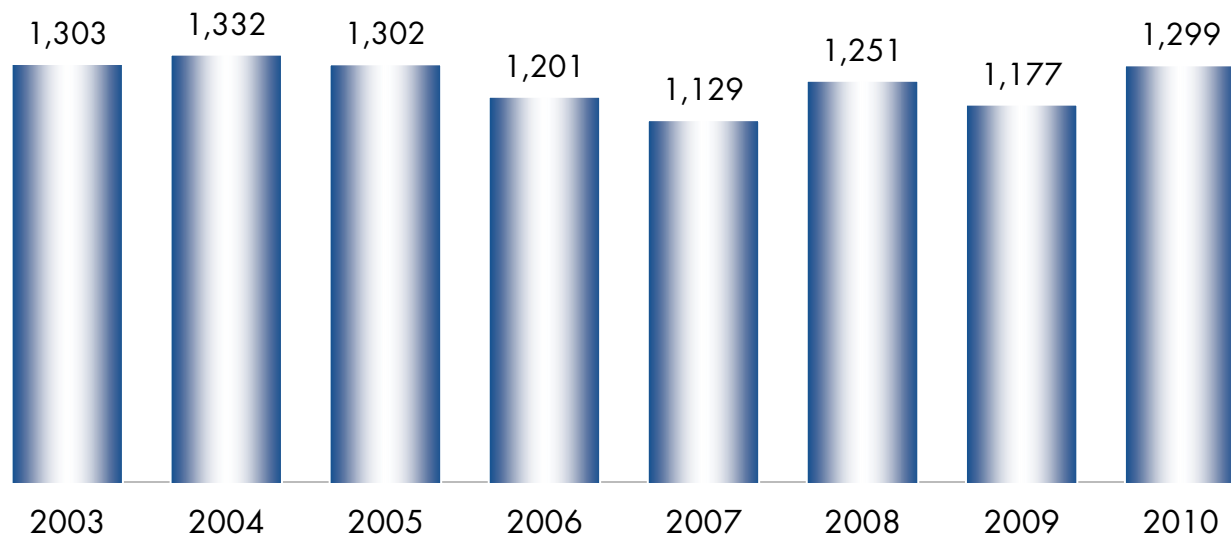


Volumes

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 its community. Patient volumes in 2010 rose to the highest level in five years.

Behavioral Health Discharges
Years 2003 to 2010

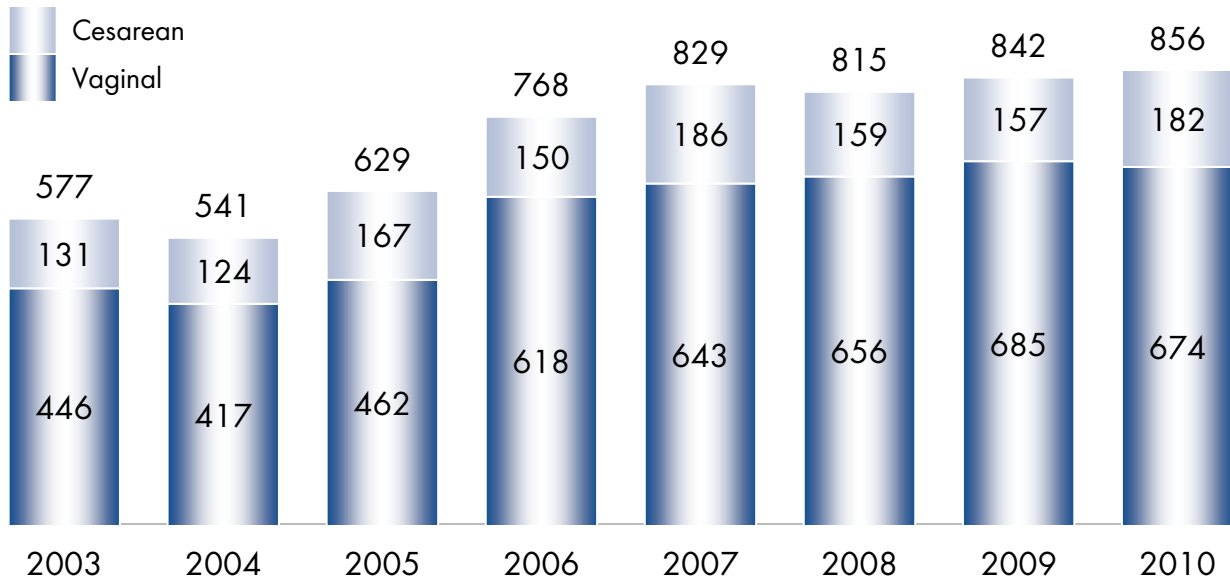


Volumes

Deliveries for Vaginal and Cesarean Section

More deliveries were performed at Castle Medical Center in 2010 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.

Vaginal and Cesarean Births Years 2003 to 2010



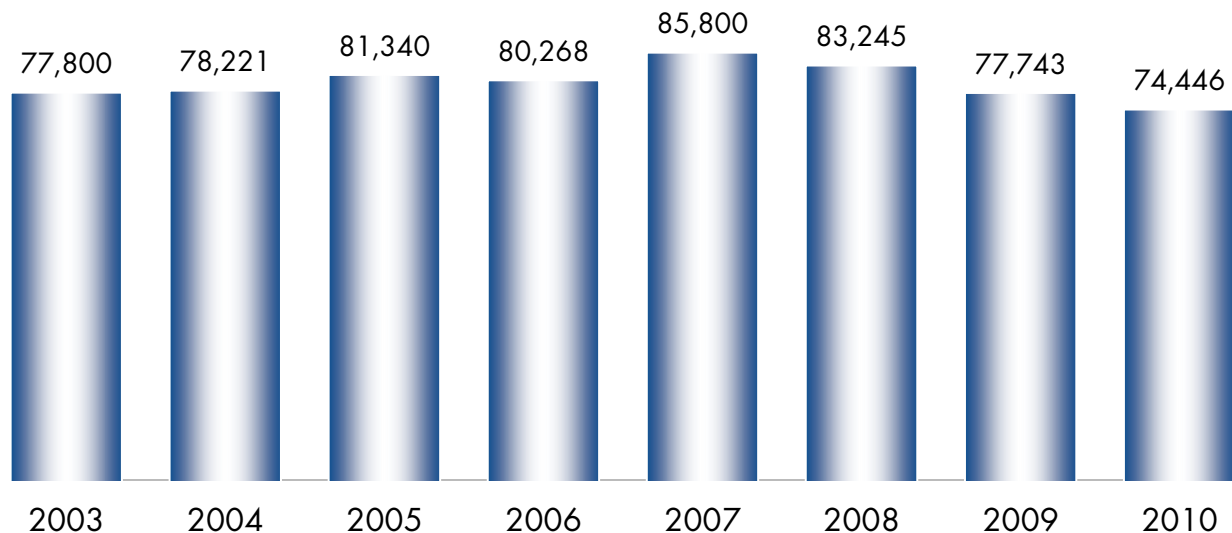
Volumes

Outpatient Visits

The chart below represents the number of outpatient visits to the Outpatient Clinic, Outpatient Surgery, Imaging, Cardiopulmonary, Cardiac Cath, Angiography, Laboratory, Rehabilitation, Wellness and Lifestyle Medicine, and Home Care.

Various factors contributed to the drop in outpatient visits over the last two years, including the shift in surgical procedures from the hospital operating room to the Windward Surgery Center, an independent ambulatory surgery facility founded as a joint venture between Castle and fifteen Windward O'ahu physicians in 2009.

Outpatient Visits (excluding Emergency)
Years 2003 to 2010



Volumes

Wellness and Lifestyle Medicine Center

During 2010, the Castle Wellness and Lifestyle Medicine Center provided inspiration and tools to help participants build a healthy body, mind, and spirit through an array of programs:

- Over 3,300 people from our community participated in the center's health and wellness outreach programs at 89 events.
- 483 patients in the hospital received bedside tobacco treatment services in which 55% expressed a desire to stop smoking. Post-discharge support was offered via the phone to provide coaching to achieve a tobacco-free lifestyle.
- 73 people participated in outpatient individual and group stop smoking programs. Of those participants tracked for follow-up, 87% quit by the end of the program, 64% were tobacco-free at three months, and 37% stayed tobacco-free after six months.
- Twelve different types of fitness classes were provided to 120 participants, including the launch of the new Mom and Baby Fitness Class.
- Castle's Individualized Weight Management Program and its Take Shape for life (Medifast) Program had fifty participants.
- Castle now offers seated massages provided by staff members who are licensed massage therapists. Over 175 people received massages within the first fifty days of the service's operation.

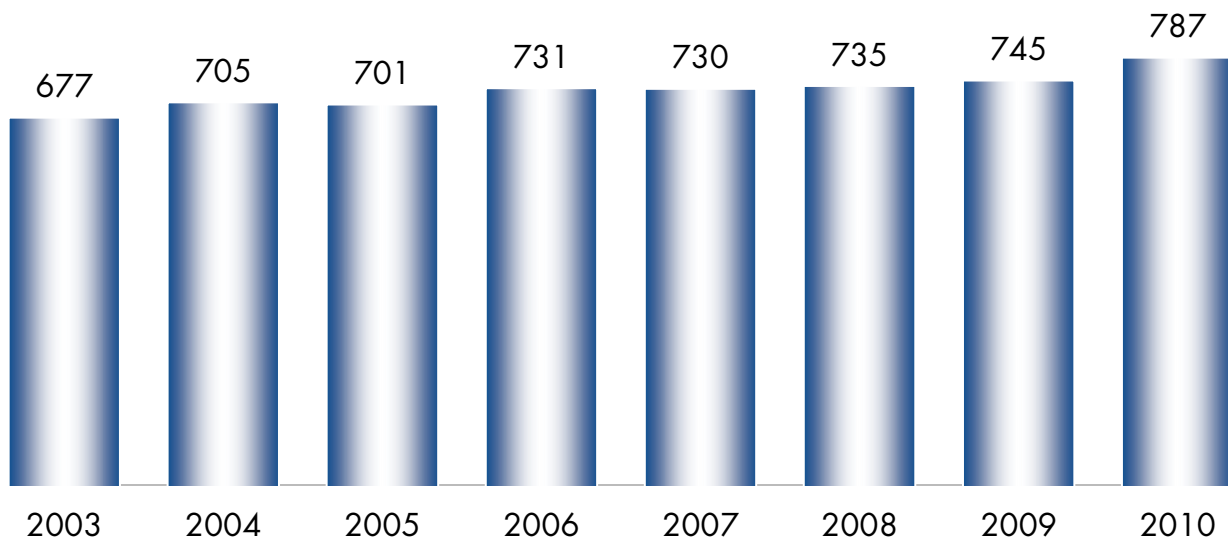


Staffing

Total Hospital Full-Time Equivalents (FTEs)

Growth in Castle's FTEs mirrors growth in patient volume over time. Castle Medical Center is recognized as the largest non-military employer on Windward O'ahu.

Total Full-Time Equivalents (FTEs)
Years 2003 to 2010



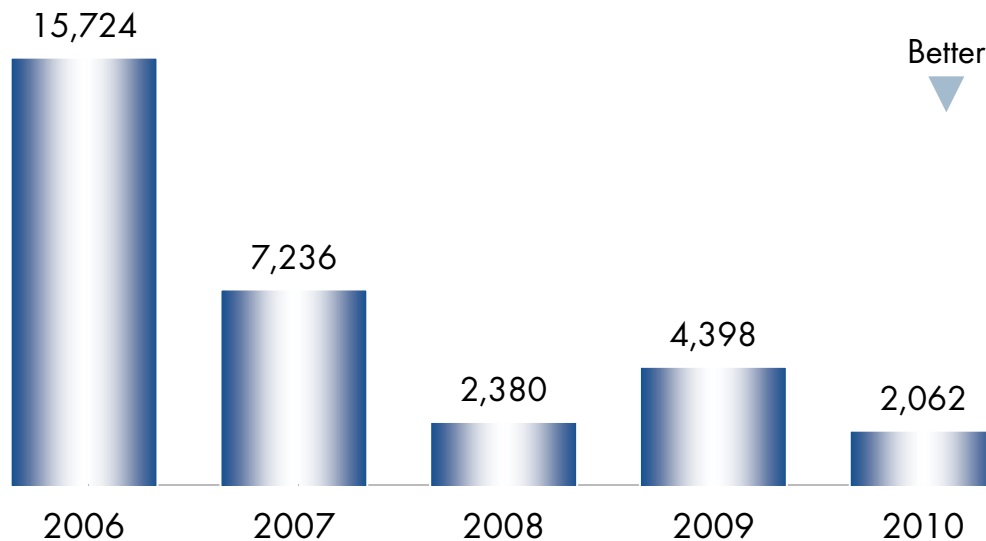
Staffing

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 2010, the use of agency staffing dropped to the lowest level ever, 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.

Daily Agency Hours
Years 2006 to 2010



Quality Improvement Goals for 2010 and Their Results

Goal

Results

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

- Heart failure (HF)
- Acute myocardial infarction (AMI)
- Community-acquired pneumonia (CAP)
- Surgical Care Improvement Project (SCIP)
- Stroke.

Considerable improvement achieved in targeted guidelines. Efforts to improve all indicators continue.

Improve patient satisfaction for:

- Inpatient
- Outpatient surgery
- Emergency
- Continuity of care.

Successfully improved satisfaction in the Birth Center, and improved inpatient satisfaction with spiritual care. Efforts to improve all indicators continue.

Improve Home Care clinical outcomes.

Considerable improvement achieved in targeted areas, such as surgical wound improvement and patients' ability to walk and move around. Efforts to improve clinical outcomes for Home Care patients continue with the implementation of new outcome measures from the Centers for Medicare and Medicaid Services (CMS).

Reduce the use of restraints in Behavioral Health Services.

Successfully reduced restraints to 5.58 per 1,000 patient days – well below our target of 9.0 per 1,000 patient days.

Implement computerized physician order entry (CPOE).

Successfully implemented.

Reduce the incidence of pressure ulcers classified as Stage II and above.

Successfully reduced the incidence of pressure ulcers for the second year in a row.

Eliminate catheter-associated urinary tract infections (CAUTIs).

Successfully reduced the incidence of catheter-associated urinary tract infections for the second year in a row.

Goals for 2011

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

- Heart failure
- Acute myocardial infarction
- Community-acquired pneumonia
- Surgical Care Improvement Project
- Stroke.

Improve patient satisfaction for:

- Inpatient
- Outpatient surgery
- Emergency.

Sustain the hospital's very low numbers of:

- Patient falls
- Catheter-associated urinary tract infections
- Hospital-acquired pressure ulcers.

Improve Home Care clinical outcomes, especially by:

- Improving the management of oral medications
- Reducing the frequency of patients' needing emergency care or hospitalization.