

# Ambulance Service

A high-quality mobile healthcare service providing access to effective care for the people of Qatar



## Technology to improve fleet management

In September 2016, the Ambulance Service went live with a state-of-the-art information technology system aimed at enhancing the way in which the service manages its non-emergency calls. The new technology, the CareMonX Patient Transport Services Computer Aided Dispatch (CAD) and CareMonX Mobile Data Terminal systems, manages all call-taking, triaging and dispatching activities for scheduled services involving patient transport and Mobile Healthcare Service home visits throughout Qatar. With the go-live of the CAD system, the service is able to track ambulance units more accurately, allowing better management of capacity in real time.

## New patient transport vehicles

The Ambulance Service introduced 20 new high-tech patient transport vehicles as part of its non-emergency fleet. The new vehicles provide patients with a more comfortable and pleasant experience as well as advancing the quality of medical care that ambulance crews are able to offer. Ensuring the highest level of patient comfort was central to the design of the vehicles.

Wide windows with lower frosting offer patients an enhanced outside view, fridges to accommodate water are installed – especially beneficial for dialysis patients – while a climate-controlled passenger compartment, USB charging points and WiFi hot spots all enhance the patient experience. As well as improving patients' comfort, the new vehicles are fitted with state-of-the-art medical equipment, including multiple oxygen sources, and have the ability to transfer two patients together.

## Electronic patient record

An electronic patient clinical record has been introduced to the Ambulance Service to improve the way in which patient information is communicated between clinical teams. The electronic patient clinical record enables clinical information about the patient's condition to be sent through by our paramedics to the hospital receiving team while the patient is still being transported in the ambulance. Then, on arrival at the hospital, the receiving nurse is able to scan the barcode on the electronic patient clinical record and the patient's data is automatically added to the Clinical Information System. The end result of these new technologies is more efficient and effective service for our patients.

## Patient Recovery Center

In 2016, the Ambulance Service took over the management of the Patient Recovery Center at Bayt Al Dhiyafah in Doha. The center has 60 beds distributed across 20 shared rooms and provides an important service for discharged patients who no longer require acute medical intervention, but do need continuity of care and additional recovery time before returning home. Within the center a team of trained nurses is available 24 hours a day to care for patients and to deal with any queries or concerns which may arise. A daily consultant-led ward round is completed each morning by a Mobile Healthcare Service Consultant, along with the nursing team. The Patient Recovery Center provides a vital service for Hamad's hospitals, enabling them to use available beds in the center to free up space in inpatient wards.

## Nesma'ak Patient Contact Center

The Nesma'ak Patient Contact Center, operated by the Ambulance Service, provides two separate service lines. The first is the Referral Booking Management System, the patient's initial point of entry into Hamad's healthcare system. The system handled 422,065 new patient referrals and processed 700,064 calls from patients, family and staff throughout 2016. The Hamad Patient Contact Center is the secondary unit, providing patients access to Hamad's services by scheduling appointments in the outpatient departments.



JCI ACCREDITED IN 2011  
REACCREDITED IN 2014



EUROPEAN AEROMEDICAL INSTITUTE  
ACCREDITED IN 2014



INTERNATIONAL ACADEMY OF EMERGENCY DISPATCH  
ACCREDITED IN 2014

## خدمة الإسعاف Ambulance Service

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation



Our Ambulance Service introduced an electronic patient clinical record to improve the way in which patient information is communicated between clinical teams.

 Ambulance Service

 Healthcare Coordination Service

 Mobile Healthcare Service



**Nesma'ak Patient Contact Center activity 2016**

New patient referrals managed:	422,065
Calls processed:	700,064
SMS appointment reminders sent:	1,500,000+

**National Health Strategy response targets**

	2016
Within 10 minutes for 75% of calls in urban areas (Doha)	95.21%
Within 15 minutes for 95% of calls in urban areas (Doha)	99.55%
Within 15 minutes for 75% of calls in rural areas (Outside Doha)	98.32%
Within 20 minutes for 95% of calls in rural areas (Outside Doha)	99.64%

**Call volumes**

2016: 239,782  
2015: 210,298

**14%** 



# Hamad General Hospital

One of the leading tertiary hospitals in the region, offering highly specialized care



## Expanded Bone and Joint Center

The upgraded Bone and Joint Center was officially opened following completion of an extensive refurbishment and expansion project. The enhanced orthopedic specialist facility now provides a dramatic increase in capacity for patient diagnostics and treatment. The center also conveniently brings together services in an additional 4,500 square meters of space that includes 19 new treatment rooms, pain management and anesthesiologist services, a physiotherapy room and multi-purpose room for clinical observations. New services include an expanded radiology department with specialized CT, MRI and ultrasound capabilities.

## Neuroangiography Suite opened

A state-of-the-art Neuroangiography Suite has been opened at Hamad General Hospital, providing advanced treatment technology for patients with serious blood vessel disorders in the brain and spine. Patients with acute stroke, tumors, vascular malformations and brain aneurysms, as well as children with developmental disorders in their blood vessels, are among those benefiting from the cutting-edge technology in the new facility. The Neuroangiography Suite is the first in Qatar to offer bi-plane angiography, CT imaging and perfusion imaging of the brain. This complex imaging system results in highly detailed three-dimensional views of blood vessels.

## Prime Minister inaugurates surgical services facility

H.E. Sheikh Abdullah Bin Nasser Bin Khalifa Al Thani, the Prime Minister and Minister of the Interior, officially inaugurated the new leading-edge surgical services facility at Hamad General Hospital in June 2016. The opening of the facility significantly expands our surgical services capacity and provides a bespoke complex in which our expert surgical teams can treat patients using the most technologically advanced equipment. The new 10,000 square meter development features 20 ultramodern surgical theaters, a 19-bed Trauma Intensive Care Unit, a 15-bed Surgical Intensive Care Unit and three hybrid operating rooms that provide state-of-the-art real-time imaging through CT, MRI, Brain Lab and Artis Zeego imaging technology.

## Laboratory automation system

An advanced new Laboratory Automation System that specializes in handling and analyzing large volume specimens has been introduced. Capable of accommodating up to 96,000 tests a day, the computerized control system allows greater functionality such as quality control monitoring, the auto verification of results and the ability to collect data for further improvements. The implementation of the new automated system improves efficiencies, reduces turnaround times for tests to be returned, and more importantly, ensures that patient safety is maintained.

## Hi-tech pharmacy robot system

Two state-of-the-art pharmacy 'robots', part of the MACH 4 Omnicell system, the biggest of its kind in the region, have been installed to significantly reduce the amount of time our patients spend waiting for their medications in the pharmacy. The new robotic pharmacy system is able to dispense 1,200 medications each hour and will enable our highly trained pharmacists to spend more one-on-one time with each patient. The new system has the capacity to not only dispense the medications in a more timely manner, but also has a special section for 'fast-moving medications' for conditions like diabetes and blood pressure which can be dispensed quickly.

## Doha International Academy for Organ Donation

The world's first international academy for organ donation was launched at the Doha International Forum for Organ Donation, organized by our Qatar Organ Donation Center. The Academy will become a hub for resources and training materials necessary to assist other countries to establish their own programs. The upcoming facility was launched under the umbrella of Hamad and will utilize the expertise of distinguished international faculty to promote education and research in organ donation in Qatar and internationally. The Academy will have a wider impact on the region by being a hub for collaborative research, education and training in the field of organ donation.




JCI ACCREDITED IN 2006  
REACCREDITED IN 2009, 2012 AND 2016

مستشفى حمد العام  
Hamad General Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation




The opening of the new surgical services facility provides an expanded facility in which our expert surgical teams can treat patients using the most technologically advanced equipment.

-  Date of opening: 1982

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-  Location: Doha


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-  Bed capacity: 600

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-  Areas of specialty include: Trauma, Emergency Medicine, Pediatrics, Critical Care, Specialized Surgery, Specialized Medicine, Laboratory Medicine and Radiology

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-  Tertiary Hospitals Group



**Outpatient visits**

2016: 539,070  
2015: 558,612

**3.5%** 



**Total admitted patients**

2016: 134,508  
2015: 144,987

**7.2%** 



**Emergency Department visits**

2016: 441,942  
2015: 461,269

**4.2%** 



# Women's Hospital

Providing specialized care for women and newborn babies



## Advanced glucose-monitoring technology

The diabetes clinic at Women's Hospital introduced the FreeStyle Libre Flash Glucose Monitoring system for their patients suffering from type 1, type 2 and gestational diabetes. The unique user-friendly technology allows women to scan, instead of prick, their finger for glucose readings. The digital system is especially helpful for those who are hyperglycemic and test their blood glucose frequently. The small sensor automatically measures and continuously stores glucose readings day and night through a tiny glucose sensor worn under the skin and is connected to a water-resistant plastic on-body patch. Clinicians are utilizing the technology to empower patients to self-monitor their glucose readings in real time by regularly checking their results and adjusting their routine if needed. After 14 days of monitoring, patients meet with clinicians to download their extensive results and review the information together so they can formulate an action plan and best manage their diabetes. The system was also introduced at the National Diabetes Centers in Hamad General Hospital and Al Wakra Hospital.

## TeamSTEPPS skills training

In collaboration with the Hamad International Training Center, Women's Hospital conducted a series of hospital-wide training sessions to enhance patient care and safety by strengthening teamwork and inter-professional working among Hamad's hospital network. This is the first time a hospital in the region has carried out the training provided by the renowned TeamSTEPPS program, an evidence-based teamwork system that focuses on producing highly effective medical teams that optimize the use of information, people and resources to attain the best possible clinical outcomes for patients. In each session participants are taught four key competencies based on leadership, communications, situational monitoring and mutual support. As of the end of 2016, more than 800 clinicians from the hospital's nursing, obstetrics and gynecology and anesthesia teams, as well as the Neonatal Intensive Care Unit, had participated in the week-long training session held in the hospital's dedicated multi-purpose training room.

## Increasing patient safety for high-risk newborns

Women's Hospital has implemented an award-winning project to increase quality and safety in the Neonatal Intensive Care Unit by reducing late onset bloodstream infections, some of which can occur after 72 hours of life.

The project required teams to implement a series of initiatives such as establishing standardized approaches for peripheral intravenous (IV) line insertions, their maintenance and removal. In addition, the unit introduced a training program for nurses and a strict hand hygiene improvement initiative for both visitors and staff. Due to the combined initiatives, the Women's Hospital team has reduced the hospital-acquired infection rate in the Neonatal Intensive Care Unit by 17 percent amongst high-risk newborns.

## Expansion of outpatient services

Women's Hospital began offering hysteroscopy procedures in the Outpatient Department for suitable patients. As a result, these women will no longer need to be admitted for surgery, which will reduce their length of stay in the hospital. The 40-minute procedure is performed without anesthesia, allowing these patients to resume their normal daily activities quickly following the procedure. For Women's Hospital, offering hysteroscopy in the Outpatient Department has resulted in increased efficiencies in terms of bed capacity and decreased the number of patients waiting for surgery.




JCI ACCREDITED IN 2006  
REACCREDITED IN 2009, 2012 AND 2016

مستشفى النساء  
Women's Hospital


عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation




Women's Hospital introduced a new glucose-monitoring system for diabetic patients which allows patients to scan, instead of prick, their finger for glucose readings.

-  Date of opening: 1988


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-  Location: Doha


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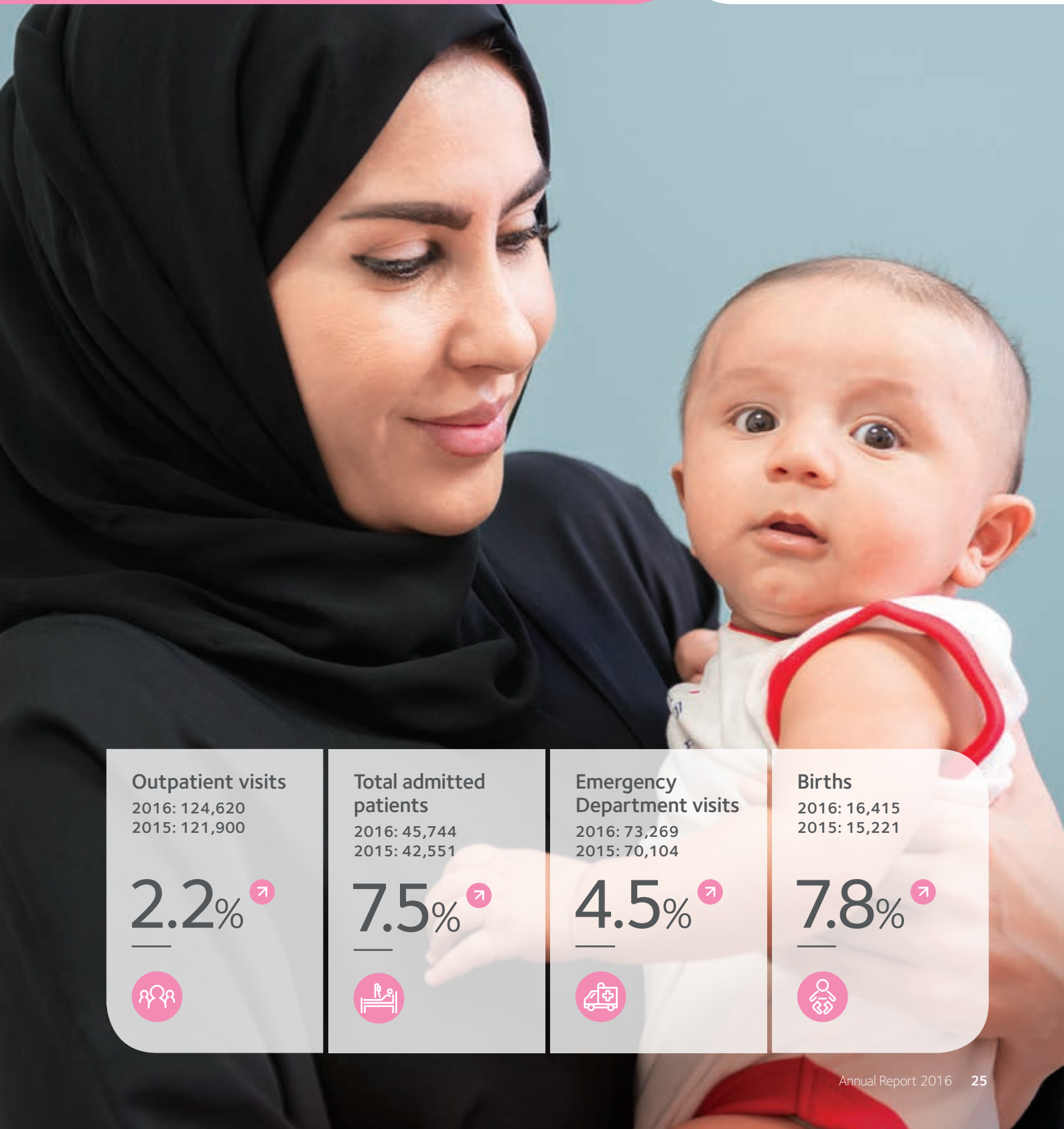
-  Bed capacity: 330

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-  Areas of specialty include:  
Obstetrics, Gynecology,  
Neonatal Care, IVF, Emergency  
Care and Newborn Screening


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-  Tertiary Hospitals Group



#### Outpatient visits

2016: 124,620  
2015: 121,900

2.2% 



#### Total admitted patients

2016: 45,744  
2015: 42,551

7.5% 



#### Emergency Department visits

2016: 73,269  
2015: 70,104

4.5% 



#### Births

2016: 16,415  
2015: 15,221

7.8% 



# National Center for Cancer Care and Research

Delivering advanced treatment and care for people with cancer and blood disease



## Pharmacy robot system

An automated pharmacy robot system, the i.v.STATION® ONCO, has been launched in the National Center for Cancer Care and Research. The automated robotic system is designed for compounding sterile intravenous cancer therapies. It represents an advanced approach to ensuring safe, accurate, efficient, cost-effective and ready-to-administer intravenous admixtures. This advanced technology fully automates compounding of chemotherapy and other hazardous drugs. Source vials are loaded and ready-to-administer patient-specific doses are prepared completely hands-free.

## Additional Clinical Nurse Specialists

The Qatar National Cancer Strategy recommended that all patients with cancer have access to a specialist nurse with experience in their disease type, and outlined the need to move from an internationally recruited workforce to one that has been trained locally. The continued success of the local training – a collaborative effort between Hamad and the University of Calgary – Qatar, resulted in an additional five Masters in Nursing students graduating and returning to practice as Intern Clinical Nurse Specialists in February 2016. These graduates bring the total number of Clinical Nurse Specialists for cancer to 14.

## Vascular access services commenced

Cancer care is increasingly delivered to patients in an ambulatory setting. One of the enablers to this practice is for patients to have Central Venous Access Devices (CVADs) placed for the duration of their treatment. The placement of a CVAD requires a minor surgical procedure, and once placed, the patient can have blood extraction and infusions through the device, reducing the potential trauma to patients' veins. Previously, patients requiring this procedure were admitted to NCCCR and transferred to Hamad General Hospital for the procedure before returning to NCCCR to be discharged. The team at NCCCR worked with the vascular surgery team to dedicate a theater list at NCCCR for CVAD placement, which removed the need for the patient to travel between the hospital sites. This initiative has resulted in a shorter length of stay for patients and improved patient safety and experience.



JCI ACCREDITED IN 2006  
REACCREDITED IN 2009, 2012 AND 2016

المركز الوطني  
لعلاج وأبحاث السرطان  
National Center for  
Cancer Care & Research

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation




An automated pharmacy robot system has been launched in the National Center for Cancer Care and Research. This advanced technology fully automates compounding of chemotherapy and other hazardous drugs.

-  Date of opening: 2004

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-  Location: Doha

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-  Bed capacity: 60

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-  Areas of specialty include:  
Medical Oncology, Radiotherapy,  
Chemotherapy, Pain Management  
and Specialist Laboratory Services

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-  Tertiary Hospitals Group



**Outpatient visits**

2016: 48,714  
2015: 41,052

**18.7%** 



**Total admitted patients**

2016: 15,417  
2015: 15,799

**2.4%** 





# Heart Hospital

A state-of-the-art center for the treatment of adults with heart conditions



## Heart Failure Inpatient Unit opened

A dedicated Heart Failure Inpatient Unit opened at the Heart Hospital in September 2016, providing advanced clinical care via a multidisciplinary team to patients with heart failure. The unit consists of 20 beds and focuses on caring for patients with severe forms of heart failure who are candidates for advanced heart failure treatment, especially device therapy, such as cardiac resynchronization or mechanical circulatory support therapy. The opening of the unit means patients at the Heart Hospital benefit from a robust continuity of care model between outpatient and inpatient clinical services, provided by dedicated and experienced multidisciplinary teams within Heart Failure Inpatient and Outpatient Units.

## Cardiac PET Perfusion Imaging

The Heart Hospital has introduced the PET Myocardial Perfusion imaging test with the support of the National Center for Cancer Care and Research's PET Center for Diagnosis and Research. The procedure evaluates blood flow and Coronary Flow Reserve (CFR) through the heart. Advantages of cardiac PET Perfusion Imaging over standard imaging procedures are improved efficiency, lower patient radiation exposure and improved image resolution.

## Heart health campaign

Heart Hospital, in conjunction with the Corporate Communications Department, launched a public heart health campaign aimed at reducing the impact of heart-related illnesses in Qatar. The heart health campaign encourages people to live a healthier lifestyle and recognize the conditions that can make them more susceptible to heart problems. The campaign messaging also aimed to raise awareness of the signs and symptoms of a heart attack so that people are able to quickly seek help. The campaign featured radio and television commercials, advertising in newspapers, print media and online, and campaign messaging in shopping malls.

## Coronary Intensive Care Unit quality and safety initiatives

A quality and safety initiative at Heart Hospital successfully reduced the rate of Catheter Associated Urinary Tract Infection by more than 70 percent within the Coronary Intensive Care Unit. The unit created a task force to address the issue and develop an action plan. Automatic stop orders were established for urinary catheters, meaning urinary catheters are automatically removed from patients after 48 hours unless the doctor specifies otherwise. Other steps to reduce CAUTI included the use of alternative types of catheter which reduce the risk of infection, and heightened focus on hand hygiene. Training for existing staff and orientation programs for new resident doctors ensured all staff were aware of the plans in place to reduce CAUTI. Additionally, nurses were recognized for their actions in initiating the early removal of catheters when appropriate.




JCI ACCREDITED IN 2014  
REACCREDITED IN 2016

مستشفى القلب  
Heart Hospital


عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation




The opening of the Heart Failure Inpatient Unit means patients benefit from a robust continuity of care model between outpatient and inpatient clinical services, provided by dedicated and experienced multidisciplinary teams within the Heart Failure Inpatient and Outpatient Units.

-  Date of opening: 2011


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-  Location: Doha


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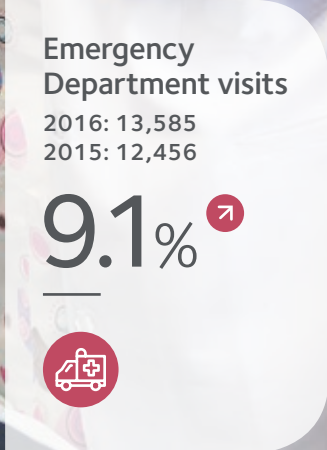
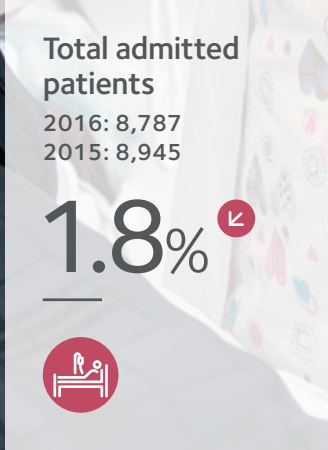
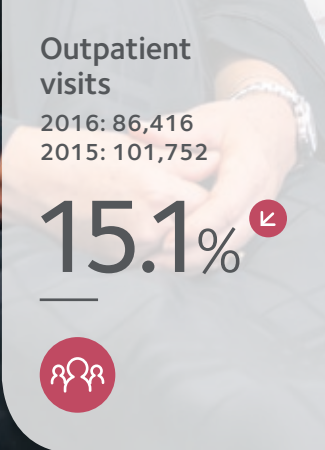
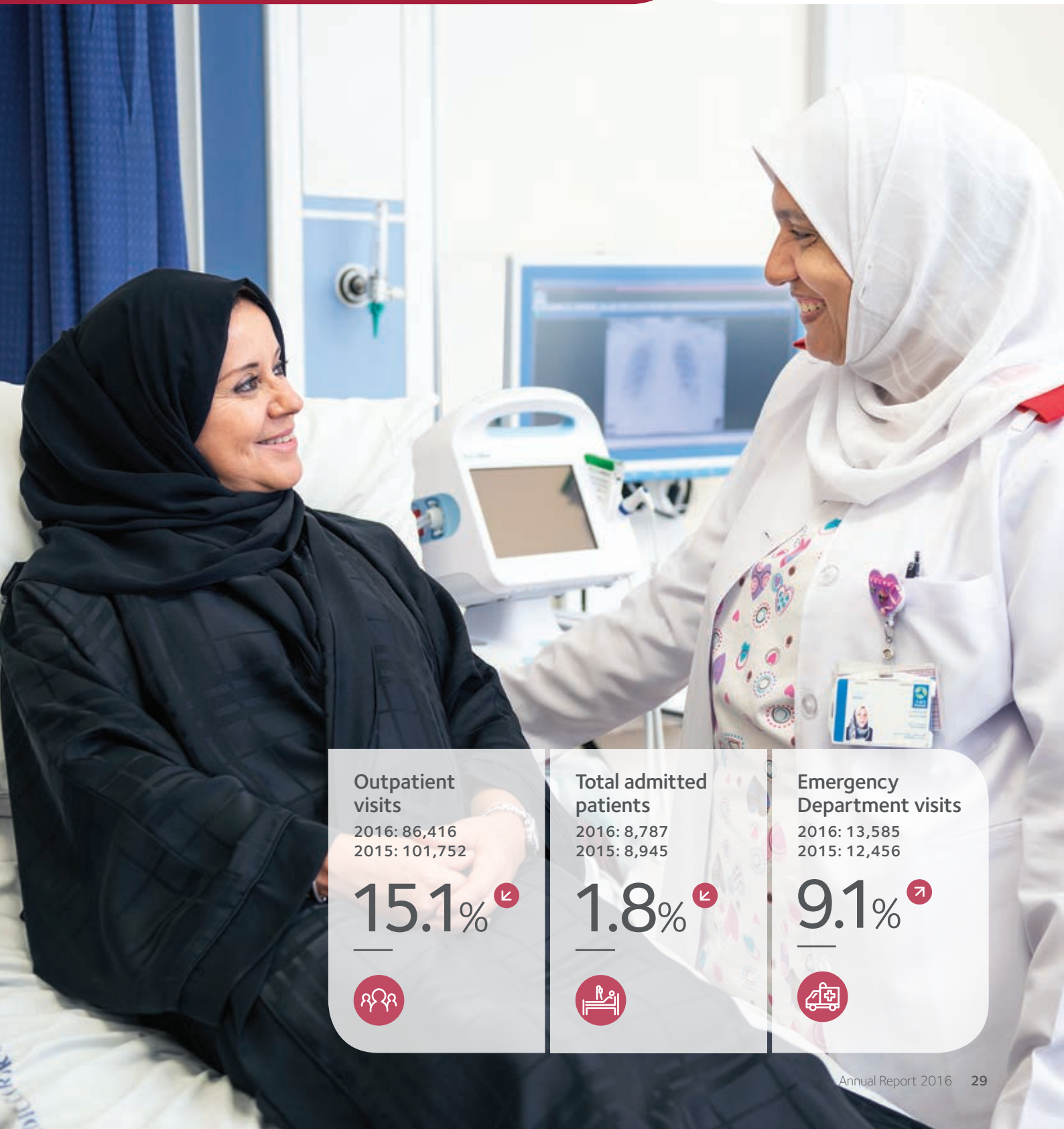
-  Bed capacity: 116

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-  Areas of specialty include: Interventional Cardiology, Electrophysiology, Cardiothoracic Surgery, Cardiovascular Imaging, Heart Failure, Cardiac and Cardiothoracic Intensive Care and Emergency Cardiology

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-  Tertiary Hospitals Group



# Communicable Disease Center

Leading the way in the care, prevention and research of communicable diseases



## Official opening of the Communicable Disease Center

His Excellency Sheikh Abdullah Bin Nasser Bin Khalifa Al Thani, the Prime Minister and Minister of Interior, officially opened the region's first Communicable Disease Center in November 2016. Dedicated to the diagnosis, treatment and prevention of infectious diseases as well as education and research, the Center has a focus on tuberculosis (TB), respiratory diseases and other infectious diseases including leprosy, Middle East Respiratory Syndrome (MERS), influenza, measles, hepatitis and Human Immunodeficiency Virus, among other emerging and re-emerging infections.

The purpose-built facility features 65 single bedrooms, all with negative pressure and 100 percent fresh air exchange, each with the capacity to be converted into isolation units in case of serious pandemics. The Center offers comprehensive inpatient services for infectious disease patients who need hospitalization, and also houses outpatient clinics providing services which include pre-marital counseling and education for those with infectious diseases.

The role of the Communicable Disease Center is not just to provide treatment and care but to work with the Ministry of Public Health and other stakeholders to reduce the impact of communicable diseases on the population. The Center aims to promote awareness and education, with the goal of preventing and combating various infectious diseases at the national level.

## Tuberculosis Laboratory

The Communicable Disease Center is home to the National TB Control Program and the TB Laboratory. This state-of-the-art laboratory provides all public and private health sectors with TB diagnostics and leadership on a national level.

## Research and education

The Communicable Disease Center provides a stimulating academic environment to support education and research for the purpose of enhancing care for people living with communicable diseases. The Center is committed to the training of medical students, residents, fellows and other clinical professionals, including nurses, and lead researchers in the field of infectious diseases.

## مركز الأمراض الإنتقالية Communicable Disease Center

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation



The new Communicable Disease Center is dedicated to the diagnosis, treatment and prevention of infectious diseases as well as education and research. The Center has a focus on tuberculosis, respiratory diseases and other infectious diseases.

-  Date of opening: 2016
-  Location: Doha
-  Bed capacity: 65
-  Areas of specialty include: Clinical Imaging, Dietetics, Pharmacy, Laboratory, Social Services
-  Tertiary Hospitals Group

