



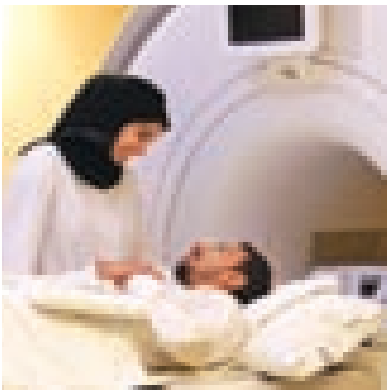
مؤسسة حمد الطبية  
Hamad Medical Corporation

صحة • تعليم • بحوث  
HEALTH • EDUCATION • RESEARCH

# Annual Report 2010/11

Putting the patient first

Hamad Medical Corporation Annual Report 2010/11



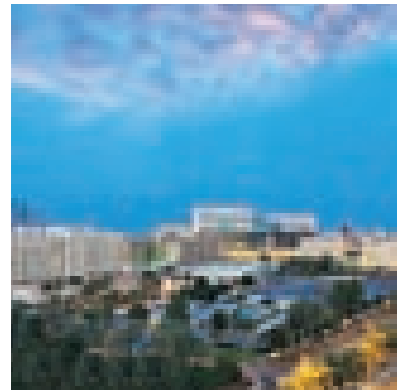
Transforming  
Cancer  
Services



New Alliance  
with Partners  
HealthCare System



Two Prestigious  
Awards at Arab  
Health 2011



QR1.9 bn Deal  
with Ashghal  
and Hyundai





**His Highness**  
**Sheikh Hamad Bin Khalifa Al-Thani**  
Emir of the State of Qatar



**His Highness**  
**Sheikh Tamim Bin Hamad Al-Thani**  
Heir Apparent

# MANAGING DIRECTOR'S FOREWORD

Working in a caring profession that exists to help others and serve our community is a privilege for all of us at Hamad Medical Corporation, especially in an environment such as Qatar where our leadership has demonstrated profound commitment to creating a healthcare system that is rooted in excellence.

We are privileged to be working in a country where health and education are viewed as founding pillars of our society. We thank our Emir His Highness Sheikh Hamad Bin Khalifa Al-Thani for his vision for the State of Qatar, and for his noble and compassionate leadership which has installed humanitarian values in all its citizens, with Hamad Medical Corporation playing a significant role in the support of relief and international healthcare support for countries in need of assistance.

We are immensely grateful to Sheikh Tamim bin Hamad Al-Thani, Heir Apparent and Chairperson of the Supreme Council of Health, and to Her Highness Sheikha Moza bint Nasser, Vice Chairperson of the Supreme Council of Health, for their vision, leadership and support. We are also thankful to His Excellency Abdulla bin Khalid Al-Qahtani, Secretary General of the Supreme Council of Health and Minister of Health.

Under the leadership of the Supreme Council of Health, Hamad Medical Corporation and its member organizations are committed to continuous development of their services to meet the evolving needs of our society through sustainable and national capacity building approaches that bring world-class healthcare to the people of Qatar.

The past year has seen Hamad Medical Corporation make excellent progress towards achieving our vision to be an internationally recognized integrated healthcare system, playing a central role in the sustainability of health in Qatar, and in our quest to be acclaimed for excellence in healthcare, education and research.

In Qatar, some of our most pressing health concerns are:

#### Trauma injuries (road and work)

– In response, Hamad Medical Corporation has established a trauma surgery program that is undergoing accreditation from the American College of Surgeons and has been identified by the World Health Organization in its publication 'Strengthening care for the injured: Success stories and lessons learned from around the world – 2010' as a model for others to follow.

#### Diabetes, obesity, and metabolic syndrome

– Changes in lifestyle trends have caused an increase in obesity, in turn leading to increased levels of type-2 diabetes and metabolic conditions. Hamad Medical Corporation has one of the largest and best-established diabetes and endocrine diseases units in the region, helping manage these problems in a patient-focused manner and working towards developing a well-rounded diabetes center in Hamad General Hospital.

#### Cardiovascular diseases and hypertension

– There has also been an increase in cardiovascular diseases, especially in affluent GCC countries. Our new Heart Hospital will provide a state-of-the-art medical cardiac and cardiothoracic facility intended to integrate all cardiothoracic medical and surgical services in one facility. In addition, the collaborative research program between the Heart Hospital, Qatar Foundation and the Advanced Cardiovascular Network (QAL) to establish and operate the Qatar Cardiovascular Research Center will shed more light on the causes and trends in cardiovascular diseases in Qatar.

#### Respiratory conditions

– Dusty weather conditions contribute to the high incidence of respiratory illnesses and Hamad Medical Corporation has placed special attention on respiratory services and research, especially in pediatric care.

#### Chronic illnesses and long-term care

– The new Skilled Nursing facility, residential care complexes and home care programs provide specialist multi-disciplinary nursing care, including rehabilitative services, social services and personal care to adult residents who are long-term dependent or partially dependent.

#### Children with special needs

– We are continuously ensuring that children with special needs are cared for in the most suitable environments. The new Al Maha Children's Rehabilitation Unit provides a multi-disciplinary approach to caring for children with special needs. This specialized unit is designed to provide a more child-friendly and comforting environment for long-term patients through a multidisciplinary approach. This unit has enabled us to transfer chronic ventilated children to more homely surroundings.


In addressing those problems, Hamad Medical Corporation has distinguishing characteristics that set us apart from other public health providers in our region. We are still the only healthcare organization outside the United States to have all its hospitals receive Joint Commission International re-accreditation simultaneously, and we are leading the way in working to become an academic health system that integrates research with the implementation of best practices for continued quality enhancements.

Looking back on 2010, Hamad Medical Corporation recorded several major achievements in our primary focus areas of healthcare, education and research:

#### Healthcare

Hamad Medical Corporation has worked closely with the Supreme Council of Health to achieve the healthcare goals of the 2030 Vision for Qatar, as formulated by our Emir, HH Sheikh Hamad Bin Khalifa Al-Thani. We are committed to the National Health Strategy and the National Cancer Plan that is one of its primary initiatives. In this respect, Hamad Medical Corporation has established a Transformation Program for cancer care that will initially seek to drive improvement in four cancer specialties.

Our agreement with Partners HealthCare System (PHS) links us to the largest integrated academic healthcare services organization in the United States. PHS is assisting and advising Hamad Medical Corporation on decentralization, so that decision-making is devolved to bring responsibilities closer to the delivery of clinical care.



Hamad Medical Corporation has distinguishing characteristics that set us apart from any other public health providers in the region. We are still the only healthcare organization outside the United States to receive simultaneous Joint Commission International re-accreditation for all its hospitals.

# MANAGING DIRECTOR'S FOREWORD

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A common issue for any country with a relatively small population is ensuring that clinical staff maintain and enhance their expertise. Physicians and nurses may not have the opportunity to see a wide variety of cases and Hamad Medical Corporation has therefore partnered with world-leading institutions to encourage skills and knowledge transfer. These include the Toronto Sick Kids Hospital, Partners Health, Heidelberg University Hospital and Asia Australia Mental Health Group.

We have also actively pursued leading medical technology to benefit patients. For example, Al Amal Hospital is the first in the world to install GE Healthcare's premium MRI system with radiation oncology options and our Robotics Surgery Center is the most active in the Middle East.

The quality of healthcare provided by Hamad Medical Corporation was reflected in the 2010 Arab Health Awards. All five of our hospitals were shortlisted for excellence, with Rumailah Hospital receiving the Sultan Bin Abdulaziz Humanitarian City Award for Excellence in Rehabilitation Services and Human Resources receiving the Human Resources Development Award for its project on achieving and sustaining physician excellence.

## Education

Although Hamad Medical Corporation is already engaged in medical and healthcare education, as well as clinical research projects, our hospitals are keenly focused on becoming fully-fledged teaching hospitals. We continue to implement processes that encourage more evidence-based medicine, so that sustainable solutions are delivered for public health challenges.

The number of medical students from Weill Cornell Medical College-Qatar (WCMC-Q) who receive their clinical education at Hamad Medical Corporation increases yearly, with 125 students from first to fourth year participating during 2010. More than 180 Hamad Medical Corporation consultants and specialists holding WCMC-Q Clinical Faculty appointments have participated in teaching.

## Research

We continue to grow our research activities and our commitment to research. Qatar National Research Fund has endowed Hamad Medical Corporation with more than \$6.5 million for specific clinical research projects that will benefit the health and wellbeing of Qatar. In addition to seeking external research funds, Hamad Medical Corporation promotes in-house research projects. For the first time in Hamad Medical Corporation's history we have established an internal research grant program whereby doctors and nurses can submit applications for these grants. In the inaugural year, 38 applications were received. We are also investing in developing a strong translational research foundation working with our academic partners, especially Cornell Medical College in Qatar, and are planning a translational research building within Medical City.

## The future

Looking ahead, Hamad Medical Corporation will continue to work closely with the Supreme Council of Health to ensure the planned growth and development of its services are in line with the forecast healthcare needs of the country. While Qatar's government is generous in its funding of the healthcare sector, greater demand for accountability and results-oriented investments means that closer attention will be given to improved efficiency in patient care, including case management and bed capacity management.

We have embarked on a new initiative to transform Hamad Medical Corporation into an academic health system. Our vision is to become a true academic healthcare system that supports the pursuit of new discoveries through research that can be put to practical application and improve patient outcomes. As an Academic Health System, Hamad Medical Corporation's goal will be to improve patient care by translating basic and clinical research into ideas and services, so that new medical advances are integrated into everyday medical practice.

Working closely with our academic partners, we have set a five year target of transforming our system into an academic health system and therefore raise the quality of healthcare not only in Qatar, but in the Middle East as a whole.

Next year we will be witnessing the opening of a number of new services and facilities, the largest of which is the Al Wakra Hospital, a general community hospital to serve the Al Wakra area and its neighboring communities. We are well on our way to delivering one of the biggest and most ambitious master facility plans ever seen in international healthcare by building and equipping three state-of-the-art hospitals and a research center at Hamad Medical City. By 2013, a Women's Hospital, a Minimally Invasive Day Surgery Center, a Rehabilitation Hospital and a Translational Research building will be delivered that will introduce new services and significantly increase the capacity of our health care system. This will enable us to better serve the people of Qatar and meet the needs of our growing population.

Hamad Medical Corporation was honored to play a key role in supporting Qatar's successful bid to host the FIFA World Cup in 2022. We are confident that the healthcare sector will be able to meet the considerable demands of such a significant sporting event.

Last, but not least, I would like to thank Hamad Medical Corporation's dedicated staff for their commitment to our patients and our vision of excellence. I am confident that Hamad Medical Corporation will continue this positive progression over the years to come.

**Hanan Mohamed Al-Kuwari PhD**  
Managing Director



Hamad Medical Corporation's approach and quality were recognized in the 2010 Arab Health Awards. All five of our hospitals were shortlisted for excellence, with Rumailah Hospital receiving the Sultan Bin Abdulaziz Humanitarian City Award for Excellence in Rehabilitation Services.



# 2010 HIGHLIGHTS

## Hamad Medical Corporation Wins Two Prestigious Awards at Arab Health 2011

The annual Arab Health Innovation & Achievement awards in Dubai are designed to showcase excellence in healthcare in the region. Hamad Medical Corporation earned the Sultan Bin Abdulaziz Humanitarian City Award for Excellence in Rehabilitation Services. Hamad Medical Corporation also won the Human Resource Development Award for its project on achieving and sustaining physician excellence.



## Transforming Cancer Services

Work has begun on a five-year plan to build on the improvements in the detection, prevention and treatment of cancer. The aim is to merge existing cancer programs into a national strategy.



## Rumailah Skilled Nursing Facility Raises Care Standards

The facility offers skilled nursing care, rehabilitative services, social services and personal care to residents who are long-term dependent or partially dependent. The facility endeavors to provide a home-like surrounding, with care structured to their needs and preferences.



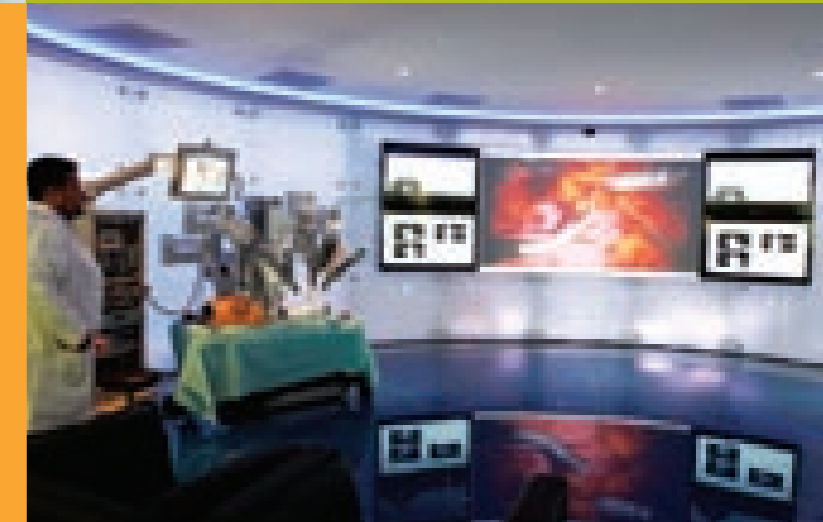
## New Alliance with Partners HealthCare System

Harvard-based PHS will design and implement a system-wide quality and performance improvement program to increase patient safety, reduce medical errors and improve efficiency.



## Robotic Surgery Training Program

Qatar Robotic Surgery Center (QRSC) and Hamad Medical Corporation are collaborating to drive clinical uptake of robotic surgery in the region and into the development of new clinical procedures. The state-of-the-art multi-specialty surgical center focuses on new technologies.



## QR 1.9 Billion Deal Signed with Ashghal and Hyundai

The deal with Qatar's Public Works Authority (Ashghal) covers equipping and furnishing of three state-of-the-art hospitals and a research center at Hamad Medical City.



## Enhancing the Patient Experience

True to its commitment as a 'patient-centric' organization Hamad Medical Corporation has taken significant measures to improve the patient care environment. This includes refurbishing public places and the improvement in catering and valet services.

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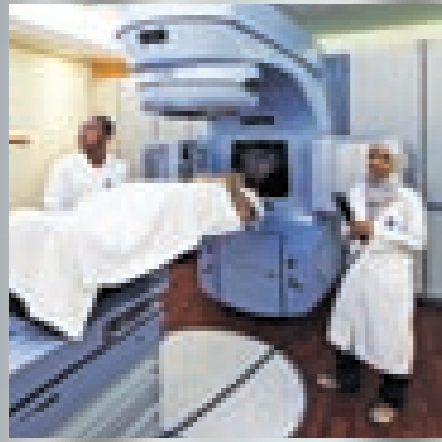
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OUR VISION IS TO BE AN INTERNATIONALLY RECOGNIZED INTEGRATED HEALTHCARE SYSTEM, ACCLAIMED FOR EXCELLENCE IN HEALTHCARE, EDUCATION AND RESEARCH, AND TO PLAY A PREMIER ROLE IN THE SUSTAINABILITY OF HEALTH IN QATAR.





# HAMAD MEDICAL CORPORATION PROFILE

Hamad Medical Corporation is the premier non-profit healthcare provider in Qatar. It was established by Emiri decree in 1979 and reports to the Supreme Council of Health. At the current time, its portfolio includes five hospitals and a comprehensive ambulance service. Its well-known hospitals that are an integral part of the community they serve are: Rumailah Hospital, Hamad General Hospital, Women's Hospital, Al Amal Hospital and Al Khor Hospital.

Since its establishment, Hamad Medical Corporation has rapidly developed medical facilities capable of providing state-of-the-art diagnosis and treatment of diseases that previously could only be managed in overseas medical institutions.

Hamad Medical Corporation aspires to realize its ambitious vision of being an internationally recognized center of excellence in the provision of healthcare. It prides itself in providing quality and cost-efficient healthcare for all patients regardless of nationality, in line with the State of Qatar's pledge of 'Health for All'. To that end, the Corporation has implemented an aggressive policy of continuous improvement of all management systems and patient care protocols. Hamad Medical Corporation's ethos is based on three key pillars, Health, Education and Research, which is reflected in its new logo.

Hamad Medical Corporation is committed to providing high-quality healthcare that is safe, reliable and accessible. It is committed to the training and education of its healthcare professionals and to clinical research that develops evidence-based medicine.



# HAMAD MEDICAL CORPORATION PROFILE

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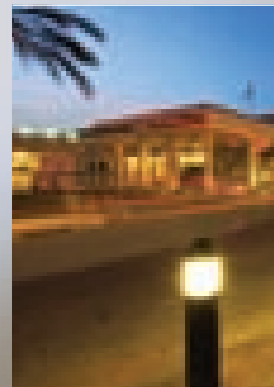


## مستشفى حمد العام Hamad General Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation

**Services**  
Trauma  
Emergency Medicine  
Critical Care  
Specialized Surgery  
Specialized Medicine  
Pediatrics  
Laboratory Medicine  
Diagnostic Imaging  
Adult Rehabilitation

Specialty beds		Occupancy
Adult	443	96%
Pediatrics	102	88%
Critical Care	58	88%
<b>Total</b>	<b>603</b>	



## مستشفى الرميلة Rumailah Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation

**Services**  
Adult Rehabilitation  
Children's  
Rehabilitation  
Burns & Plastics  
Dentistry  
General Surgery  
General Medicine  
Mental Health  
Residential Care

Specialty beds		Occupancy
Adult Acute	92	67%
Adult Long term	222	95%
Pediatrics	28	81%
High Dependency	3	89%
Skilled Nursing	80	97%
Interim Care	12	60%
Qatar Foundation	16	100%
Mental Health (residential)	16	87%
Mental Health	75	87%
<b>Total</b>	<b>544</b>	

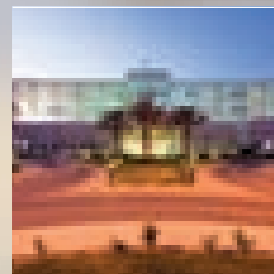


## مستشفى النساء Women's Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation

**Services**  
Obstetrics  
Gynecology  
Neonatal Care  
Emergency Care  
Newborn Screening

Specialty beds		Occupancy
Adult (inc HDU)	248	72%
NICU	71	99%
<b>Total</b>	<b>319</b>	

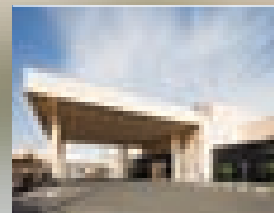


## مستشفى الخور Al Khor Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation

**Services**  
General Medicine  
General Surgery  
Emergency Medicine  
Critical Care  
Pediatrics  
Obstetrics  
Neonatal care

Specialty beds		Occupancy
Adult	85	77%
Pediatrics	10	59%
Critical Care	10	71%
NICU	10	24%
<b>Total</b>	<b>115</b>	

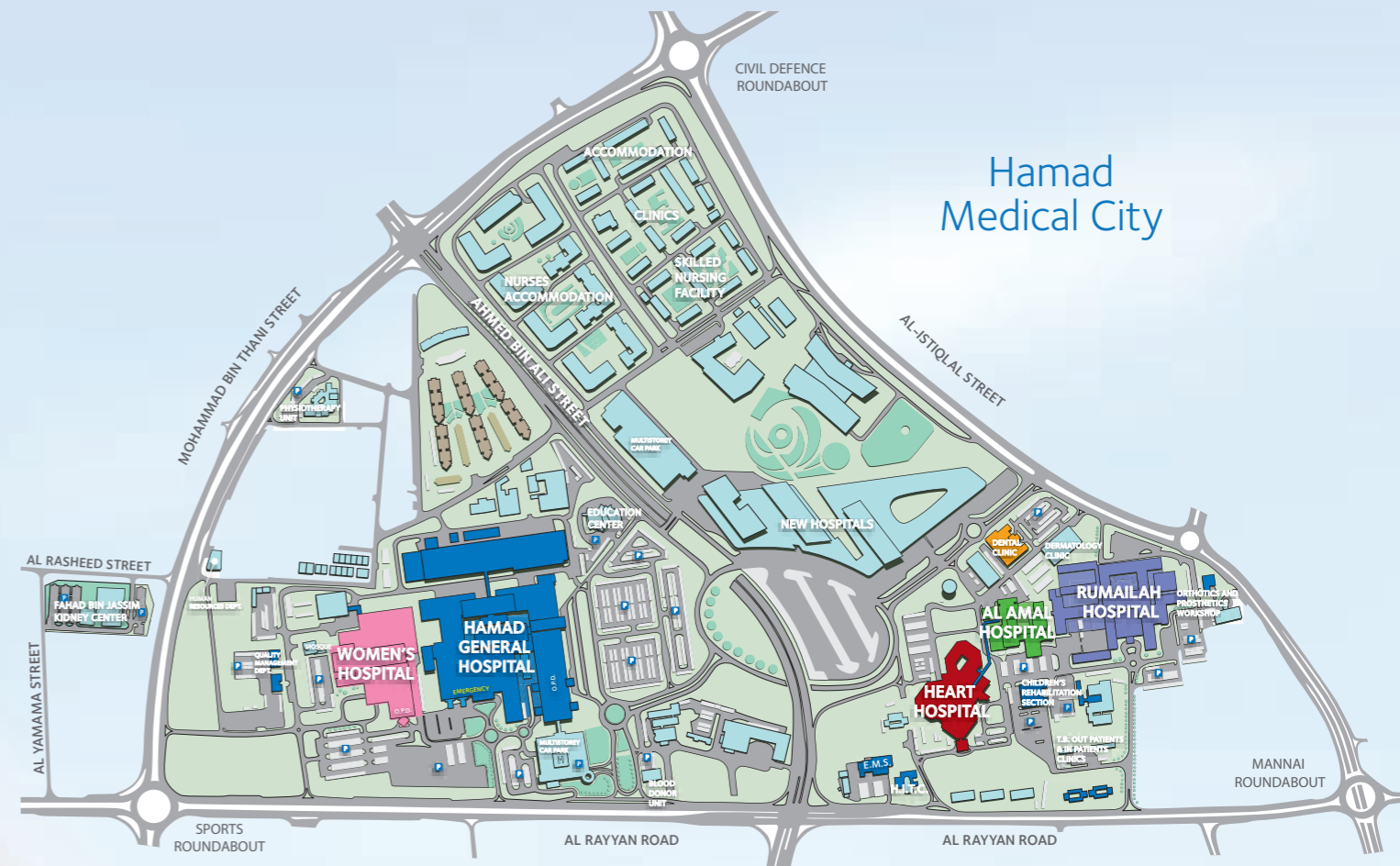


## مستشفى الأمل Al Amal Hospital

عضو في مؤسسة حمد الطبية  
A Member of Hamad Medical Corporation

**Services**  
Medical Oncology  
Clinical Oncology  
Chemotherapy  
Pain Management  
Specialist Laboratory

Specialty beds		Occupancy
Adult	46	93%
<b>Total</b>	<b>46</b>	



### 2010 Developments

Rumailah Hospital changed its bed configuration with the move to more community-based care. The total number of beds reduced from 603 to 544, with the significant changes being:

- The Skilled Nursing Facility opened in May with a phased opening, culminating in a full complement of 80 beds by November 2010. The majority of elderly patients previously at Qatar Foundation were transferred to the new Skilled Nursing Facility.
- A new anesthetic on-call room was created following the transfer of ventilated children from Hamad General Hospital. Two pediatric beds were lost in the process.
- An acute ward re-opened in Mental Health, which increased the beds from 60 to 75 in December 2010.
- Ward areas were temporarily closed for new service redevelopments and upgrading.

Overall, activity in 2010 showed changes as a result of service re-design and new models of care. Day case surgeries increased marginally (oncology day cases excluded) and they are predicted to rise further in 2011 as additional theater capacity becomes available at both Hamad General Hospital and Rumailah Hospital. Conversely, inpatient surgery has decreased and this trend is expected to continue as Hamad Medical Corporation moves forward to meet the international benchmark for day surgery procedures.

Adult Emergency attendances increased in 2010. This will need to be monitored carefully during 2011 due to the proposed impact of the new Primary Healthcare initiatives with Laborers Clinics. The number of deliveries increased by 6%, from 15,975 in 2009 to 16,950 in 2010. This will also need to be monitored closely.

Ambulance Services vehicles responded to over 54,865 Priority 1 and 2 callouts, in addition to the patient transport services provided to and from Hamad Medical Corporation.

Ambulance Services continues to provide emergency cover for special events across Qatar, and the number of LifeFlight helicopter calls responded to increased from 660 in 2009 to 1,197 in 2010.

Home Health Care Services also had a busy year, after being formally launched in 2009, with an increase in their number of visits from 9,000 to 14,055.

### Summary of Activity

Activity	2010
Beds	1,627
Physicians	1,802
Nurses	5,083
Inpatient admissions	104,834
Outpatient visits	776,383
Deliveries	16,950
Inpatient surgeries	24,218
Day case surgeries	10,045
Cancer day cases	6,141
Emergency attendances	698,073

# HAMAD MEDICAL CORPORATION PROFILE

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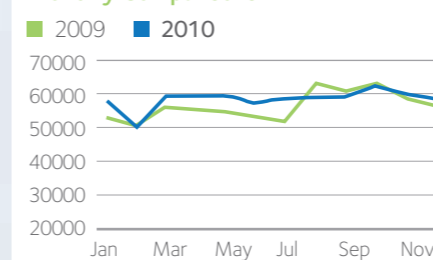


## Hamad Medical Corporation Hospital Activities

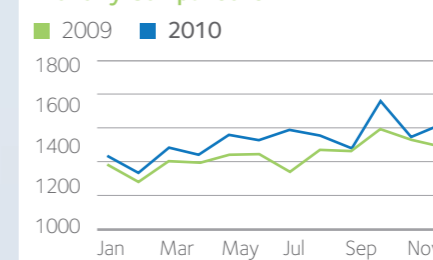
	Inpatient Surgeries	Outpatient Visits*	Day Case Surgeries	Emergency Attendances	Deliveries
<b>2010</b>					
Hamad General Hospital	13,273	378,184	4,690	519,411	-
Rumailah Hospital	2,857	208,960	4,008	-	-
Women's Hospital	5,249	117,516	241	51,937	16,213
Al Khor Hospital	2,869	57,101	1,106	126,725	737
Al Amal Hospital	-	14,622	6,141 **	-	-
<b>Total</b>	<b>24,248</b>	<b>776,383</b>	<b>10,045 ***</b>	<b>698,073</b>	<b>16,950</b>
2009	25,319	792,759	9,952	672,121	15,975
<b>Percentage change</b>	<b>-4.4%</b>	<b>-2.1%</b>	<b>0.9%</b>	<b>3.7%</b>	<b>5.8%</b>

\* Booked and walk-in patients seeing a physician, \*\* Oncology and cancer day cases, \*\*\* Excluding oncology and cancer day cases

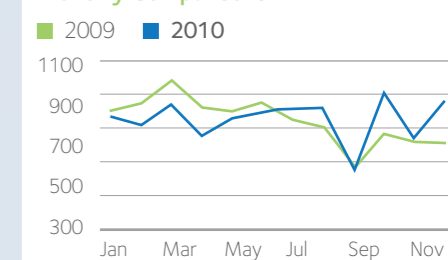
### Emergency Visits – 2010/09 Monthly Comparisons



### Deliveries – 2010/09 Monthly Comparisons



### Day Case Surgeries – 2010/09 Monthly Comparisons



## Ambulance Services and Home Health Care Activity

Ambulance Services	Priority 1	Priority 2	LifeFlight
	18,017	36,848	1,197
Home Health Care	Services	Number of visits	
	Home Nursing Services	15,848	
	Therapists Support		
	Respiratory Care		
	Wound Care		



# HEALTHCARE SYSTEM

Creating an integrated healthcare  
system to serve the nation



## OPERATIONAL REVIEW

“NEW TECHNOLOGIES ARE AT THE FOREFRONT OF HAMAD MEDICAL CORPORATION’S VISION OF IMPROVING PERFORMANCE AND PROVIDING HIGH-QUALITY CARE. PICTURE ARCHIVING AND COMMUNICATION SYSTEM (PACS) AND RADIOLOGY INFORMATION SYSTEM (RIS) WILL BE A CORPORATION-WIDE MEDICAL IMAGING SYSTEM PROVIDING AUTHORIZED CLINICIANS WITH RAPID ACCESS TO PATIENTS’ ELECTRONIC X-RAY IMAGES.”

### World-class Healthcare Services

#### Decentralization of Care Delivery

One of the major themes of last year’s Annual Report was improving effectiveness and efficiency through advancing decentralization at Hamad Medical Corporation. Throughout 2010, Hamad Medical Corporation has accelerated the devolution of decision-making and responsibilities closer to the delivery of clinical care. To assist with this, Hamad Medical Corporation entered into an agreement with Partners HealthCare System (PHS).

PHS is the largest integrated academic healthcare services organization in the United States. Established in 1994 by an affiliation between Brigham and Women’s Hospital (BWH) and Massachusetts General Hospital (MGH) – the two largest teaching affiliate hospitals of the Harvard Medical School – PHS provides comprehensive medical services across a full continuum of healthcare that ranges from primary attention to major tertiary and quaternary regional referral centers.

The decentralization will be planned to achieve:

- Improved patient care and outcomes – the right care, in the right place, at the right time
- Decentralized and efficient management and empowerment of clinical leadership
- Closer alignment with international best practice
- Greater opportunities for innovation

These outcomes will be achieved over time by a program of change to ensure that:

- Hospitals and care delivery will be viewed as the center of the organization
- Hospitals will assume all operational accountability and responsibility to better meet patient care needs
- Corporate functions focus on strategic objectives, care integration and system performance
- System support functions focus on delivery of services that benefit from concentrated expertise and economies of scale

In April 2010, more than 60 members of the senior leadership team participated in discussion groups facilitated by Partners HealthCare, and in September members of the senior leadership of Hamad Medical Corporation Human Resources (HR) and Hamad Medical Corporation Finance leadership visited Boston; following which the departments began a joint project to coordinate fiscal and manpower management in the hospitals.

#### Improving Quality and Patient Safety

Hamad Medical Corporation and Partners HealthCare System (PHS) in September began a unique three-year international partnership to improve the care of patients at Hamad Medical Corporation. Drawing on its long quality-improvement journey, PHS will assist Hamad Medical Corporation in designing and implementing a system-wide quality and performance improvement program to increase patient safety, reduce medical errors, improve efficiency and ensure that patients experience uniform high-quality care across the system.

As part of its reporting systems, Hamad Medical Corporation encourages sentinel event reporting. A sentinel event is generally defined as a serious unanticipated event in a healthcare setting. When a sentinel event occurs, Risk Management (RM) and the Adverse Medical Outcomes Committee (AMOC) are required to conduct a thorough investigation and root cause analysis. The process, originally established in 2005, was enhanced in 2010 by the establishment of a multi-disciplinary committee which examines the factors that led to the event, identifying the patterns of event or system breakdowns and determining common factors. From January to September, 20 sentinel events were reported and carefully reviewed and investigated, leading to a full set of recommendations that would assist in improving care and patient safety.

#### New Technologies Streamline Imaging Services

New technologies are at the forefront of Hamad Medical Corporation’s vision of improving performance and providing high-quality care. Picture Archiving and Communication System (PACS) and Radiology Information System (RIS) will be a Corporation-wide medical imaging system providing authorized clinicians with rapid access to patients’ electronic x-ray images on wards and image-viewing stations across all Hamad Medical Corporation hospitals, regardless of the doctor’s hospital location or where the imaging took place.

The system will provide almost instantaneous access to digital x-ray images from Emergency Department patients, facilitating rapid assessment and treatment.



It will also enable Hamad Medical Corporation Radiology to coordinate patient appointments across all facilities. For outpatients in particular, this will provide a greater choice of locations and faster access to medical imaging services. The project has been a collaborative effort between the vendor and many departments and hospitals across Hamad Medical Corporation, and progressed well during 2010. The project is scheduled to be live in all radiology departments by early April and to be rolled out to all clinical departments from May, with the system available across Hamad Medical Corporation by the end of September 2011.

#### Hamad Medical Corporation Staff Embrace E-Learning

Health Information Systems (HIS) training has been at the cutting edge of e-learning initiatives and projects that the Supreme Council of Information and Communication Technology (ictQATAR) offers to working staff in government. Hamad Medical Corporation’s collaboration with ictQATAR spans a number of years and encompasses facilitating, promoting and building the confidence of staff in using e-learning as a vehicle that enables everyone to meet their aspirations for education and skills development.

Hamad Medical Corporation now has a progressive e-learning culture. It is ready to support any future corporate learning plans that could be integrated and adopted within an organizational framework, focusing on developing key skills in various areas of expertise.

Widespread adoption of e-learning by record-breaking numbers across the organization made 2010 an incredibly successful year in this respect.

Hamad Medical Corporation is currently leading other government organizations, with 984 registered users active on the Qatar National E-Learning Portal (QNEP) and 1,321 courses completed in 2010. The high ratio of activities usages to the number of learners reflects a strong commitment by Hamad Medical Corporation staff to learn the course content and acquire the real benefit that these courses provide.

Business targets set by ictQATAR for 2010 exceeded expectations. A special course bundle promotion was launched in early November that generated high interest and demand from more than 700 Hamad Medical Corporation staff.

‘E-Learning’ is quickly becoming the new buzzword. Interest is being fueled by word-of-mouth between staff members out of personal conviction that they received good instruction. The success of e-learning is not only measured by numbers and course completions, it also reflects the culture change occurring at Hamad Medical Corporation in the attitude and receptiveness of staff to technology, education and skills development.

In continuing to play a key role in supporting and promoting the vision of ‘Qatar’s National Digital Literacy’, Hamad Medical Corporation and HIS Training are in line for two awards as ‘best adoption organization’ and ‘best learning partner’. The awards are in appreciation of ongoing activities and efforts in managing the success of e-learning adoption, which is set to flourish further in 2011 and become a key player in shaping future training plans.

#### A New Fully-Digitalized Hospital

The new Heart Hospital will become fully digitalized – the first of its kind in Qatar – and will become the model for all future Hamad Medical Corporation healthcare developments.

#### Assisting Clinical Staff with Information

The Computerized/Physician Order Entry (CPOE) system has been developed in-house to enhance the quality of care, and benefits all health staff, who are now able to electronically view the patient health record over the intranet. The system, currently in the early phases of introduction, enables health staff to review, record and update patient allergies, diagnoses, procedures and vital signs.

#### Improving Management of Patient Records

Digitalized scanning of the physical patient files for cardiology will enable the physician to have instant access via an electronic viewer to their patients’ most updated medical records. This system will be available across Hamad Medical Corporation hospitals and Primary Health Centers and will also reduce file movement and patient waits.

#### More Efficient Electronic Ordering

Laboratory order management is expected to significantly improve the physician experience in electronic management of patient records and the checking of duplicate orders at the point of care when seeing the patient. Plans are being developed to further enhance the system by sending abnormal result alerts to physicians via SMS.

#### Simplifying Clinical Notes

Clinical notes functionality along with auto-text tags can be used by all health staff using clinical notes templates. The templates are user-definable, commonly or individually at various levels, namely hospital, department, or service. The functionality is already in use at limited locations with availability of discharge summary, medical report and operative notes.



## OPERATIONAL REVIEW

“SUCCESSFUL OUTCOMES OF THE WOMEN’S HOSPITAL OPD PROJECT INCLUDE A 90 PERCENT REDUCTION IN CONGESTION LEVELS AND THE NUMBER OF PATIENTS IN WAITING AREAS, A 70 PERCENT REDUCTION IN PATIENT WAITING TIMES, AND A 12 PERCENT REDUCTION IN THE NO-SHOW RATE.”

### Improving the Processes of Care

The Center for Healthcare Improvement (CHI) has worked throughout 2010 to improve current services by re-engineering systems and redesigning procedures and processes.

### Women’s Hospital Outpatient Department

This project was designed to optimize capacity and to redesign care delivery to reduce waiting times and congestion, thus improving the patient and staff experience in Women’s Hospital Outpatient Department (WH OPD). Its goals are to undertake end-to-end analysis and from there develop an efficient operational service that delivers a high-quality patient experience and excellent clinical care, safely and efficiently.

Two Booking Clinics were opened to accommodate all new obstetrics patients and improve availability of WH OPD appointments. The Booking Clinics have capacity to see 44 new obstetrics patients every day and see a monthly average of 820 patients.

To date, the project has seen the introduction of Hamad Medical Corporation’s first fixed-time appointment system and Telephone Appointment Booking Center to manage and coordinate projected appointments for patients.

Successful outcomes include a 90 percent reduction in congestion levels and the number of patients in waiting areas, a 70 percent reduction in patient waiting times, and a 12 percent reduction in the no-show rate.

WH OPD’s waiting area renovation has also been completed, creating a more attractive, convenient and comfortable environment.

### Hamad General Hospital Peri-Surgical System

This project is designed to reduce wait times and congestion, improve theater scheduling and utilization, and enhance the patient and staff experience in HGH. More than 100 staff members from all disciplines participated in a series of workshops held over the weekends aimed at defining existing problems and working together to find solutions. The workshops identified a series of 219 inter-related process and system improvements. This work was integrated into the case management program led by Hamad General Hospital, which is also targeting improving capacity within the hospital.

### Pharmacy Improvements

#### Hamad General Hospital

HGH Pharmacy services have implemented several initiatives to reduce the congestion problems experienced by HGH outpatients and enhance the quality of the services provided.

Pharmacy working hours have been extended from 7:00am until 5:30pm instead of the usual 7:00am-3:00pm. This enables patients to collect their medications on the same day as prescription and when the pharmacy is less busy.

#### Primary Health Centers

Pharmacies in the Primary Health Centers (PHCs) have been electronically connected to the HGH Pharmacy computer system. This allows patients to get refill medication from the health center nearest home. This program is already operational at three PHC pharmacies: Al Rayyan, Airport and Um Guaileena. Several new drugs for chronic diseases have been added to the formulary of PHCs, significantly reducing the number of chronic patients who visit OPD clinics and consequently reducing the pharmacy workload.

Pharmacy waiting time involves a lot of double-checking of complicated prescriptions for safety and accuracy. To minimize waiting time for patients with less complicated prescriptions, a ‘fast-track’ service has been introduced for those needing only one or two items.

#### Fahad Bin Jassim Kidney Center

The opening of the Fahad Bin Jassim Kidney Center (FBJKC) was an opportunity to open a new pharmacy, moving an important patient group to a specialized center where they enjoy direct service from a pharmacist in a professional environment. Opened in March, FBJ Pharmacy services about 350 patients (male and female) from 7:00am to 9:00 pm (Sunday to Thursday). Patients suffering from acute and chronic kidney disease, who need medication up to three times a week, no longer have to go to the general outpatient pharmacy at HGH.

#### Diabetic Clinic

A new satellite pharmacy for the Diabetic Clinics was opened in the HGH outpatient building as part of streamlining and rationalizing diabetic services. It opened in July and is dedicated to diabetic patients, serving about 150 patients every day between 7:00am and 3:00pm. This service has improved patient service as diabetic patients can now get their medications without delay and before leaving their clinic area. It is also benefiting other patient groups by reducing the workload, congestion and waiting times in the OPD Pharmacy.

## OPERATIONAL REVIEW

# “HAMAD MEDICAL CITY IS EMBARKING ON ONE OF THE BIGGEST AND MOST AMBITIOUS MASTER FACILITY PLANS EVER SEEN IN INTERNATIONAL HEALTHCARE.”

### Improving access to beds

Staff members from all disciplines contributed to the process of developing improvements, on the principle of capturing their collective creativity on critical business issues and translating ideas into action. The objectives were to increase the availability of beds, eliminate the need for newly delivered mothers to wait in the labor suite for a bed, and for discharged patients to leave the hospital on time – thus freeing beds and increasing patient safety.

The major solution was the creation of a Day Care Unit (DCU), covering gynecological surgery and obstetrics antenatal care – completed in early 2011. The Women’s Hospital has identified improving bed capacity as a key priority for 2011 and will continue to work to achieve this.

### Emergency Department Laboratory (HGH)

The aim of this initiative was to achieve better patient safety through the timely delivery of laboratory results to the Emergency Department (ED). During 2010, the Laboratory monitored the percentage of non-communicated potassium laboratory results which did not meet the 30-minute target time for result verification.

When monitoring first began, the ED team was performing poorly in communicating critical potassium values. The Quality team met staff in the laboratory to understand the causes and to set a benchmark for improvement.

Discussions between the Quality team and ED laboratory staff led to designing and implementing a process improvement plan in which it was agreed that a designated staff member would daily review the status of verified critical laboratory results. Education sessions were provided, with non-compliance to the 30-minute target highlighted in meetings and regular competency assessments for staff. The results to date have been very promising and regular audit and compliance monitoring is now part of the department’s work.

### Cytopathology

A key focus for the Cytopathology team was improving the quality and adequacy of Pap smear testing and achieving the international benchmark set by the American Society of Clinical Colposcopy & Pathology. Educational and training sessions on sampling were held and a policy for inadequate Pap smears was approved. An additional quality control measure was introduced ensuring all inadequate smears, which had been screened by a junior technologist, were re-screened as a quality control by the senior technologist.

These improvements in policy and procedure have saved many patients from having to provide a repeat sample. The section surpassed the international benchmark, reaching a score of zero percent, providing reassurance that there will be no missed diagnoses in pre-cancer and cancer in this type of specimen. This also reduced the number of calls from hospital doctors and PHC staff questioning inadequate results.

### Enhancing the Patient Experience

Initiatives to improve the patient experience have also been planned and implemented, including major interior redesign and upgrade of three of Hamad Medical Corporation’s older hospitals.

### Public Spaces

The patient care environment project entails full interior redesign and significant upgrade of the major public spaces of Hamad General, Women’s and Rumailah Hospitals such as entrances, lobbies, corridors and patient waiting areas, while also improving patient flow and system processes.

Plans have been prepared and approved for all specified external and internal public access areas in Hamad General, Women’s and Rumailah Hospitals to ensure that patient care is not affected during the renovations. Work on this project began in early 2011.

### Catering

The introduction of heated and cooled trolleys in Al Amal, Rumailah, and Women’s Hospitals means that food remains at its serving temperature and provides a more hygienic method of delivering food to the wards. Chinaware has also been introduced for food service trolleys at these hospitals.

A new eight-day menu cycle avoids meals being repeated on the same day every week, and new disposable trays present food items in a more appealing manner with disposable plastic cutlery being of a superior quality, look and feel.

Vending machines have been installed at 91 locations across Hamad Medical Corporation properties, and the opening of café/snack counters in the Fahad bin Jassim Kidney Center, Al Amal Hospital and the Psychiatric Department has helped manage the major renovation of the HGH Cafeteria.



### Valet Parking

Valet parking was introduced at Hamad General Hospital Outpatient Department in August 2010 and at Women’s Hospital in December. Valet parking helps control traffic in the OPD area as well as providing shorter walks for those with health problems. It is a greatly appreciated service that creates a lasting positive impression for patients, as well as their families and visitors.

### State-of-the-art Facilities and Resources Hamad Medical City

Hamad Medical Corporation Medical City is embarking on one of the biggest and most ambitious master facility plans ever seen in international healthcare.

Qatar’s Public Works Authority (Ashghal) and South Korea’s Hyundai Engineering & Construction Company have signed a QR1.9 billion deal for furnishing and equipping three state-of-the-art hospitals and a research center being built at Hamad Medical Corporation.

The whole complex will have a built up area of 216,000m<sup>2</sup> and more than 500 beds. Work began in early 2011, with handover scheduled for December, 2013.

The complex includes the Women’s Hospital with 190 single inpatient beds, 53 neonatal intensive care (NICU) beds, 60 examination rooms, more than 48 bassinets for newborn babies, 4 cesarean section and 3 obstetrics and gynecology operating theaters, 21 labor and delivery rooms, integrated management services for cesarean and accident emergency operations, triage rooms, ultrasound rooms, treatment rooms and emergency delivery rooms.

The Ambulatory & Minimally Invasive Surgery (AMIS) Hospital will have 14 surgical operating rooms equipped with all resuscitation requirements, 12 pre-operative care beds, 22 post-anesthesia care beds, 30 Stage II recovery beds, pre-admission testing, phlebotomy, gastrointestinal/endoscopy suite, clinics for podiatry, ENT/Audiology, Ophthalmology, and Urology, in addition to 64 short-stay beds.

On the ground floor, between Women’s Hospital (WH) and the Ambulatory & Minimally Invasive Surgery (AMIS) Hospital will be a state-of-the-art medical imaging suite which will include 2 MRIs, 2 CT Scans, 1 Interventional Radiology, 2 Fluoroscopy, 4 General X-ray and 10 Ultrasound rooms. Medical Imaging is a centralized service that will provide services to all of the Medical City hospitals and programs.

The Rehabilitation Hospital has a total capacity of 200 inpatient beds including orthopedic/trauma, stroke, spinal cord injury, traumatic brain injury and pediatrics. It will also include multi-disciplinary inpatient treatment services such as day rehab, physiotherapy, speech therapy, adaptive living apartment, hydrotherapy and the ‘Easy Street’ program, which will provide real-life environments that can help patients learn to adapt more easily to environments in the real world. Outpatient programs will also be provided in a multi-disciplinary fashion and will include many programs such as fall prevention, balance center, industrial rehab, cardiopulmonary, interventional pain clinic and others. Various support services will also include doppler, ultrasound, clinical laboratory, pharmacy and dialysis.

A significant amount of teaching and research space will also be provided, allowing for the training of future clinicians and therapists, and creating an environment where research can expand and improve on patient care and outcomes.

The planning of the hospitals took into consideration the highest medical standards and the latest international technologies to make them the best pioneering healthcare facilities in the region.

### New Women’s Hospital

Plans for a replacement for the existing Women’s Hospital are well advanced. Conceptual space planning for an 11-storey building has been completed and detailed planning began in February, 2011. The new hospital will have 190 private rooms, designed to maximize light and provide a warm and healing ambience. There will be 21 labor rooms, each providing for labor, delivery and recovery so that a patient will not have to move at any stage of the birthing process. After recovery, mother and baby will be moved to their private room on the postnatal floor. The labor suite will have 3 c-section rooms with appropriate recovery areas, and the operating suite will have four theaters.

The Emergency Department will have four areas for urgent delivery and operative procedures if there is no time to take the patient to the labor or operating suites. A dedicated lift will run between the Emergency Department and the labor suites.

The new hospital will provide cutting-edge technology in all support and clinical services. Completion is scheduled for November, 2013.



## OPERATIONAL REVIEW

“THE NEW HOSPITAL AT AL WAKRA IS EXPECTED TO PROVIDE EXCELLENT CARE FOR HAMAD MEDICAL CORPORATION PATIENTS IN SOUTHERN QATAR, WHO WILL HAVE EVEN GREATER CHOICE IN THEIR HEALTHCARE PROVISION.”

### Heart Hospital

The first phase of opening for the new Heart Hospital was successfully completed in May, 2011. This state-of-the-art medical cardiac and cardiothoracic facility is intended to integrate all cardiothoracic medical and surgical services in one building.

The hospital's objectives are to enhance healthcare to heart patients, improve the quality of cardiac services, give heart patients easy access to healthcare services and expand services to match population growth.

The two-stage plan covers:

- Opening the outpatient department and cardiography and echocardiography lab; opening paramedic services such as radiology, pharmacy, laboratory and nuclear medicine.
- Opening the admission section, cardiac catheterization lab, surgery and intensive care units, rehabilitation and physical medicine and the cardiac emergency department.

The hospital is located on the Rumailah campus, adjacent to Al Amal Hospital and connected by a covered suspension bridge. The initial capacity of 116 beds is planned to expand to 200.

### Al Wakra Hospital

Hamad Medical Corporation successfully completed the first opening phase of the new Al Wakra Hospital in early summer, 2011. The population in this southern part of Qatar has expanded rapidly over the past few years and the demand for healthcare has risen substantially. The new hospital will serve the towns of Al Wakra and Mesaieed, with an excellent new road network providing swift and easy access.

The six-storey hospital is designed as a distinctive circular 'hub' with buildings attached like spokes on a wheel – an impressive structure that elegantly dominates the immediate surroundings. The landscaped site has a spacious feel, reflected in the generous proportions of the building. State-of-the-art technology will include MRI equipment with 3-Tesla capability. A pneumatic tube system links major departments and nursing units, enabling fast and accurate movement of laboratory specimens and patient medications.

Much thought, both practical and aesthetic, has been given to the finer details of this outstanding building, such as maintaining the most up-to-date infection control standards by using construction materials that are anti-bacterial and easy to disinfect.

Services at the new Al Wakra Hospital will provide excellent care for Hamad Medical Corporation patients in southern Qatar, who will have even greater choice in their healthcare provision.

### Rumailah Hospital Skilled Nursing Facility

The 80-bed Skilled Nursing Facility is part of Rumailah Hospital Residential Services, situated in Building 30 of Hamad Medical City.

The facility offers skilled nursing care, rehabilitative services, social services and personal care to residents who are long-term dependent or partially dependent.

The care team is multidisciplinary with round-the-clock physician coverage.

The official opening was in June, with 18 male patients on the fourth floor. From July to October, the remaining floors were opened and the facility is now fully occupied.

If they meet eligibility criteria, residents are accepted from all Hamad Medical Corporation inpatient units, Outpatient Clinics and Home Health Care Services. This has allowed inpatient hospital beds to be freed for acute care patients.

There is also a respite service for Home Health Care Services patients.

The facility endeavors to provide a home-like surrounding for residents, with care structured to their needs and preferences. Facilities include resident lounges, activity/dining areas, therapy rooms and a garden with playground for visiting children. Bedrooms are two- or three-bedded and each has a bathroom. Residents have their own bedside TV.

Family participation in the activities of the facility is encouraged. Visiting is open from 7:00am to 8:00pm and families and friends are encouraged to take residents for outings. Residents and family members are also encouraged to individualize the bedrooms by having personal items such as furniture, pictures and bed linen.

The facility is the first of its kind in the Middle East and is working towards JCI Accreditation in 2012 using Continuum of Care Standards.



## OPERATIONAL REVIEW

“AS WELL AS DEVELOPING NEW PROPERTIES, HAMAD MEDICAL CORPORATION HAS INVESTED IN NEW MEDICAL TECHNOLOGIES TO ENSURE IT MAINTAINS ITS POSITION AT THE FOREFRONT OF MODERN HEALTHCARE.”

### Al Maha Children's Unit at Rumailah Hospital

The Al Maha Children's Unit has been developed to provide comprehensive rehabilitation care for children who are chronically ill and specifically need to be ventilated. It is managed by an interdisciplinary team of specialists from several fields, who combine their skills and resources to care for the children's varied needs.

The unit's vision is to enhance the quality of life for children with special needs. Its mission is to:

- Enable interdisciplinary teamwork and plans of care
- Develop a learning environment for patients, families, and interdisciplinary teamwork
- Promote active family involvement
- Engage a continuum of care that begins and ends in the community

The Al Maha Children's Unit has a total of 30 inpatient beds, 18 devoted to children who need long-term ventilation and highly specialized care for their medical and personal development. It provides a team of professionals from various departments and organizations (such as social workers and other social groups), working together to deliver comprehensive patient care.

As a child's condition changes over time, the composition of the team will be adjusted to reflect changing clinical and psychosocial needs. The hospital has carefully selected staff who are devoted to the wellbeing of children with special needs and have received additional training to help care for and nurture children from infants to young adults. The unit will also enhance communication between teams and result in a comprehensive assessment and plan of care for each child.

The facility will provide great opportunity for children's social development, where they can be helped to learn and play. They will have access to a newly established garden and an educational facility that will provide individualized educational programs.

Future plans are to ensure that the delivery of care incorporates the many computer-assisted technologies available to children with specialized needs.

### New Pediatric Emergency Care Unit

A new Pediatric Emergency Care & Dialysis Unit building at Al Khor Hospital has been opened. The spacious building houses well-equipped and technologically-advanced systems, with two examination rooms, triage room and waiting area, observation room with 10 beds, procedure room, isolation room and private room. The availability of support services such as radiology, pharmacy, registration and cashier eases patient and parent convenience.

Comparative analysis of statistics shows that the number of patients visiting the PEC has increased. The average number of pediatric patients per month from January to October was 2,565 – rising to 3,820 in November and December. Patients who visited the center expressed their satisfaction with the facility and having all support services under one roof.

### Modular Theater

Rumailah Hospital offers day care and inpatient surgery for Ear, Nose and Throat (ENT), ophthalmology, plastic surgery and oral surgery. It performed more than 6,000 procedures during 2010.

Due to the increased demand for surgery and an increase in the number of surgeons appointed to reduce waiting lists and provide a greater spectrum of expertise, Rumailah Hospital was granted approval for two additional theaters together with a 12-bed day care facility and 6 additional recovery beds.

With this approval, Rumailah Hospital procured the country's first Modular Theater Suite, manufactured in the United Kingdom to the highest specification and installed in October. The entire state-of-the-art facility became operational in January, 2011 and provides tertiary-level ophthalmic surgery to Qatar residents.

This facility increases the surgical capacity by a third, further improving patient access and satisfaction as waiting lists reduce in all specialties.

### Emergency Department

The Emergency Department experienced its busiest-ever year, seeing a total of more than half a million patients – 1,500 a day on average. To respond to this demand, and improve the standard of care and the physical environment, a major clinical and structural redesign is taking place.

Key developments and service improvements in 2010 included:

- Development of a rapid medical assessment room for non-critical male ambulance patients
- Provision of a dedicated filing and data entry room
- Provision of dedicated X-ray reporting room for ED patients
- Initiating the development of a dedicated team and room for immediate complaint resolution and patient-related issues



The first stage was completed in February, 2010 with the opening of a walk-in clinic service for male patients with minor injuries and the creation of a dedicated area for the treatment of patients from local families. The upgrade also included expansion of male, female and family waiting areas. New vinyl flooring, painting, antibacterial seating and artwork all contributed to an overall improved patient environment.

### New Facilities at HGH Uro-Oncology Suite

A dedicated Uro-Oncology suite in the main HGH Outpatients section was opened in September to provide a high-quality environment for specialized treatment of patients with urological cancers. This unit enables clinical expertise to be concentrated in one area and has significantly improved the environment in which patients receive their care.

### Lithotripsy

A state-of-the-art lithotripter was opened in July: a purpose-built dedicated facility on the ground floor of HGH that doubles capacity to treat patients with kidney stones and dramatically reduces the time patients wait for this procedure. Installing this second machine has dramatically enhanced the productivity of HGH's lithotripsy service and provides a far more comfortable experience for the patient. This development has been generously sponsored by Commercial Bank.

During 2011, work will continue on upgrading lithotripsy services by refurbishing the rest of the department and replacing the older lithotripter with another new one.

### Day-Case Theaters

The two day-case theaters located in the Emergency Department were re-commissioned and opened for use in July, having being closed for a number of years. These theaters, adjacent to the Day Care Unit beds, have improved the experience of patients undergoing day-case surgery, helping to improve overall productivity by increasing the number of day care procedures, and allowing more effective use of the main operating rooms.

As well as developing new properties, Hamad Medical Corporation has invested in new medical technologies to ensure it maintains its position at the forefront of modern healthcare.

### Improvements in Laboratory Techniques Genetic Testing

This new technology has revolutionized genetic diagnostics and was previously only available in a limited number of laboratories in North America and Europe. The Hamad Medical Corporation laboratory is the only one in the GCC offering this service as a routine diagnostic test, and analyzed about 140 samples in 2010. Plans are in hand to upgrade the 44,000 probe microarray chips currently being used to 105,000 probes, providing even higher resolution and increased diagnostic yield.

### Diagnosis of TB

A range of internal enhancements includes improved Standard Operative Procedures to accommodate recent changes in clinical practices and to be in line with updates such as the latest CLSI (Clinical Laboratory Standard Institute) guidelines, and streamlined inventory control by incorporating a computer-based program and color coding of in-house storage processes.

The reporting of notifiable diseases to Qatar's Center for Disease Control has been strengthened, following a series of meetings and personal communications.

This has resulted in expeditious and near-perfect reporting of notifiable diseases, and has had a profound influence on final epidemiological analysis and management of diseases of public health importance.

The Tuberculosis Laboratory has introduced two new techniques that will improve test accuracy and specificity, and allow for identification of multi-strain resistance.

### Blood Bank and Donor Unit

The major improvement program in the Hamad Medical Corporation Blood Banks and Donor Unit ensures that the growing requirement for blood and blood components across the whole of the State of Qatar continues to be met. These demands will continue to grow, and the team will expand in 2011 to meet this challenge.

Hamad Medical Corporation is very thankful for the 12,834 volunteers who gave blood in 2010. The Donor Unit successfully achieved a 100 percent rate of donations being voluntary (not replacement from patients' relatives or friends).

New blood-processing equipment has been introduced as part of the plan for full automation of all the processes involved in blood component preparation and testing.

The Blood Bank team has played a vital role in implementing the new pre-marital screening program by analyzing nearly 8,000 samples in the last year for HIV, hepatitis B and C, syphilis and rubella.

Arrangements have been made for opening a fully equipped and staffed Blood Bank at the Heart Hospital. Services are due to begin during the first quarter of 2010. The new Blood Bank will also cater for Al Amal and Rumailah hospitals.

## OPERATIONAL REVIEW

“ALONGSIDE NEW BUILDINGS AND TECHNOLOGIES, NEW SERVICES AND PROGRAMS OF CARE WERE BEING DESIGNED, DEVELOPED AND IMPLEMENTED DURING 2010, INCLUDING THE CYSTIC FIBROSIS PROGRAM, THE OXYGEN SAFETY AT HOME PROGRAM AND THE INFECTIOUS DISEASES PROGRAMS.”

### Ambulance Services

Advanced Medical Priority Dispatch System (AMPDS) is the most important project for the Hamad Medical Corporation Ambulance Service. During 2010, the ambulance service completed the training of dispatchers on the AMPDS in Arabic and English.

Emergency Medical Dispatch gathers information from people calling for medical assistance, using a 35-card file system of medical protocols. The protocols include specific questions, response configurations, and instruction for each medical, traumatic, or life-threatening complaint so as to provide not only the very best in pre-hospital patient care, but also allow for quicker and more accurate diagnosis until the dispatch unit arrives at the scene.

### New Programs of Care

Alongside new buildings and technologies, new services and programs of care were being designed, developed and implemented during 2010. These include:

#### Cystic Fibrosis

The role of the specialist multi-disciplinary team responsible for managing patients with cystic fibrosis has been restructured from a purely pediatric service to incorporate adult needs as well.

The team, comprising doctors, specialist nurses, physiotherapists and other key staff, has developed particular expertise in managing the transition of adolescents with cystic fibrosis from pediatric care to adulthood.

With improvements in medical care, many more children are surviving the disease and growing into adulthood, where they require a dedicated specialist service.

Cystic fibrosis is an inherited disease that leads to complex problems with the respiratory system. The disease is progressive and can affect other organ systems as well as the lungs.

In Qatar there are a total of 60 patients, mainly Qatari nationals, with cystic fibrosis, of whom 22 are now treated by the specialist adult team. Over the next year the team will work closely with the pediatric service, patients and their families to take over the care of another six patients.

This service will be further developed over the next few years to ensure the growing number of patients surviving into adulthood receive the best possible care, in line with internationally accepted standards of best practice.

#### Oxygen at Home

Home Healthcare Services was awarded Joint Commission International (JCI) accreditation in 2009, the first facility in the Middle East to achieve this under the requirements of Care Continuum standards. One of the intentions was to ensure that patients could be cared for within their home environment for as long as possible, leading to a focus on improving the safety of oxygen therapy within patients' homes. Patients, families and caregivers were educated on safety aspects of ventilation or oxygen machines and therapy relating to reliance on their use.

A multi-disciplinary team of respiratory therapists, technicians and nurses devised an 'oxygen safety in the home' checklist to be completed during home visits. One example of the highlighted safety aspects was the correct storage of oxygen cylinders, which must be kept away from direct heat to protect against the risk of explosion.

Various patient education leaflets were developed to support teaching safety at home and highlight the potential dangers.

The project was a great success and has significantly improved oxygen safety in patient homes. During 2011 Home Healthcare plans to expand the home oxygen service to accept more referrals from the consultant pulmonologists, and to support more patients living at home.

### Infectious Diseases Programs

#### Tuberculosis

The Infectious Diseases Division runs a very active tuberculosis (TB) control program in collaboration with the Medical Commission, Primary Health Centers, and the Preventive Health Department of the Ministry of Public Health. The objectives of the program are to provide state-of-the-art management of TB and delivery of observed treatment. Other objectives include identifying contacts of active TB cases, treating those with latent TB and limiting the number of TB cases entering the country.

During 2010, about 750 patients with active TB were treated and a further 910 given TB chemoprophylaxis. The total number of Communicable Diseases Unit (CDU) visits during 2010 was 77,603.

The Directly Observed Treatment strategy is implemented for all patients, whether they are treated for active disease or as chemoprophylaxis. The treatment is either given in the CDU or in the health center nearest to the patient's home. For some patients who are frail or very old, home treatment is provided by CDU staff. The CDU also provides consultations to patients referred from the General Medical Commission and Primary Health Centers.



## OPERATIONAL REVIEW

“AT AL AMAL HOSPITAL, HAMAD MEDICAL CORPORATION HAS INVESTED IN A PET AND CYCLOTRON SCANNER, THE FIRST OF ITS KIND IN QATAR. THIS NEW TECHNOLOGY WILL IMPROVE DIAGNOSIS OF CANCER CELLS AND THE STAGING OF CANCER FOR PATIENTS.”

### H1N1

Work on control management of the H1N1 pandemic influenza that began early in 2009 continued during 2010. The Infectious Diseases Division contributed by participating in meetings of the pandemic preparedness committee, sharing in the various educational activities given to the hospital staff in topics related to disease prevention and general control management.

### Severe Acute Respiratory Infections (SARI)

Hamad Medical Corporation has implemented a health surveillance program for monitoring Severe Acute Respiratory Infections (SARI), in collaboration with the Supreme Council of Health, the Center for Disease Control and the World Health Organization. This international project facilitates continuous assessment of severe respiratory infections, and detects outbreaks early or in the course of epidemics or pandemics.

The aim of this new project in Qatar is to analyze the epidemiology of influenza and other viral respiratory diseases, an essential requirement to describe and understand their causes and plan their prevention. It also helps identify risk groups for complications, determining the appropriate vaccine strain, and estimating health and economic impact. The program was initiated in Al Khor Hospital in October, and AKH doctors have been trained in its use by two international consultants recognized by the World Health Organization.

Patients visiting the Emergency Department with respiratory tract infection are identified and appropriate responses for signs and symptoms are documented on the screening form.

After verbal consent, appropriate responses in the questionnaire related to clinical details are also documented.

Accurate data collection is maintained and information is forwarded to the Supreme Council of Health. The program identified and monitored 25 cases from October to December, 2010; Hamad Medical Corporation and the Supreme Council of Health will continue to work closely with international organizations that study, monitor and detect diseases of public health importance.

### Massive-Transfusion Protocol

This life-saving protocol was developed in response to issues arising from blood delivery problems in various Hamad Medical Corporation facilities for patients needing large volumes of blood because of trauma, surgical, medical, or obstetric complications. The multi-disciplinary development of a cross-Hamad Medical Corporation Massive Blood Transfusion Protocol has been led by Medical Administration, streamlining the way large quantities of blood are managed.

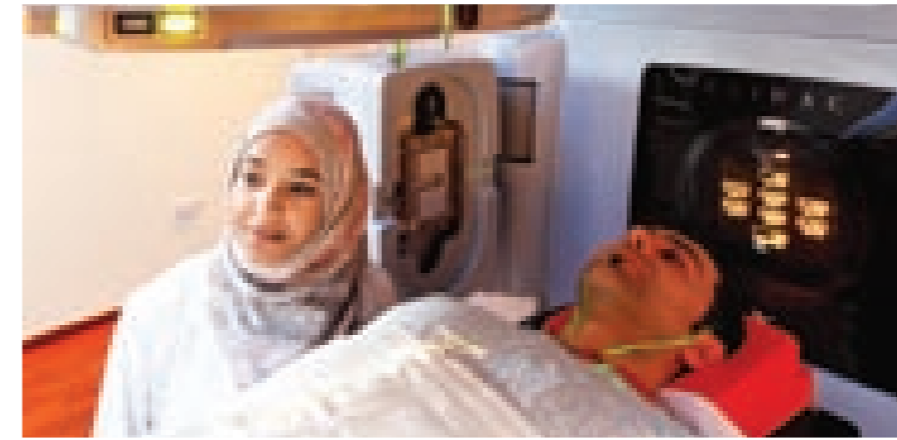
Staff from Blood Bank, Anesthesia, Medical Director's Office, Nursing, Pharmacy, Surgery, Trauma, Emergency Services, Obstetrics and Chiefs of Staff from all hospitals have been involved in developing this protocol – the first of its kind in Qatar. The protocol applies to all acute clinical facilities and represents a major step forward in standardizing the communication issues involved with massive transfusion, clarifying the roles of staff in this critical emergency situation and the way large quantities of blood are managed, ensuring effective and efficient use of a valuable and often rare resource.

### Antenatal and Postnatal Exercise Program

The new Antenatal and Postnatal exercise program developed at Al Khor Hospital is the first of its kind for Hamad Medical Corporation. The program began in May and is focused on providing education about the benefits of physical activity for antenatal and postnatal groups, on the principle that fit mothers lead to healthy children.

The program improves the wellbeing and fitness of women during pregnancy and in preparation for giving birth. Postnatal exercise aims to improve the wellbeing and fitness of postnatal women, particularly those with multigravida. The exercise program follows international policy and guidelines. Classes last for one hour in a relaxed and friendly setting and attendance must be twice a week for a course of six sessions.

Antenatal exercise helps in strengthening all muscles of the body, especially abdominal muscles. It also decreases the incidence of abdominal hernia, antenatal depression, and backache, while improving posture and reducing minor ailments such as stiffness, tension, constipation and insomnia. Exercise enhances normal delivery, shortens duration of labor and reduces the need for pain relievers or sedation.



### Serving the Nation

#### Transforming Cancer Services

##### The National Strategy

At the request of Her Highness Sheikha Moza bint Nasser, Qatar's Supreme Health Council began work in 2010 on a five-year plan to build on the improvements that have already taken place in the detection, prevention and treatment of cancer.

The aim is to merge existing cancer programs into a national strategy that will deliver world-class services. This will take into account the future challenges for cancer treatment and establish a world-class research program in collaboration with international partners.

Development of this plan is being led by Professor the Lord Darzi of Denham, KBE. Professor Darzi holds the Paul Hamlyn Chair of Surgery at Imperial College London, where he is head of surgery. He is an honorary consultant surgeon at Imperial College Hospital NHS Trust and the Royal Marsden Hospital, one of the world's leading cancer hospitals. He was knighted for his services to medicine and surgery in 2002 and was elevated to the UK's House of Lords in 2007. As Parliamentary Under-Secretary of State at the UK Department of Health, he led a major review of the National Health Service.

Professor Darzi chairs Qatar Foundation's Robotic Surgery Board, and in 2010 was invited to become a board member of Qatar's Supreme Council of Health.

A program to develop the five-year cancer plan was launched in December 2010 by Qatar's Minister of Health, His Excellency Abdullah bin Khalid Al-Qahtani.

To support delivery of the national strategy, a Transformation Program for Cancer Care at Hamad Medical Corporation was established in October 2010, when a project team was recruited to support existing Hamad Medical Corporation staff in the continuous development of cancer services.

The project began with a review of existing services, leading to development of a program plan that will drive improvement in pathways in four cancer specialties: breast, urology, gastro-intestinal and hematology. The review identified a number of complementary projects that will be progressed, including the development of breast screening services, a national cancer registry and palliative care.

Central to the success of the project will be regular interactive sessions with staff, the public and patients and their families. Having begun in November, 2010 these sessions will continue to discuss the content of the program, ensuring that the entire direction of the project is underpinned by the experiences and advice of those who have used Hamad Medical Corporation services and who best understand the system.

The local cancer development program was officially launched by Hamad Medical Corporation Managing Director Dr Hanan Al Kuwari in November.

### Positive Emission Tomography and Cyclotron

State-of-the-art equipment providing easier and more accurate diagnostics is key to the Cancer Plan. Positive Emission Tomography (PET) is a highly specialized diagnostic test allowing clinicians to examine images of tumors using state-of-the-art high-technology equipment.

At Al Amal Hospital, Hamad Medical Corporation has invested in a PET and Cyclotron scanner, the first in Qatar. This new technology will improve diagnosis of cancer cells and the staging of cancer for patients. Using PET/CT imaging in oncology provides a 3D image of the whole body, which can pinpoint not only the precise location of the tumor, but assist the clinical staff in determining its extent and development. Research shows PET/CT has been particularly successful in the stages of tumors associated with:

- Lung cancer
- Colorectal cancer
- Head and neck cancer
- Hodgkin's lymphoma

In parallel with the purchase of the PET/CT scanner will be the provision of a Cyclotron, required to provide the radio-isotopes for the scan. Both will be housed within a new facility at Al Amal Hospital.

Hamad Medical Corporation Managing Director Dr Hanan Al Kuwari laid the cornerstone for the 2,000m<sup>2</sup> two-storey building in December. It will house the Imaging Department complete with radio-isotope quality test unit, Cyclotron, administrative offices, patient and visitor reception, and conference and service rooms.

The use of PET/CT will allow the patient and the clinician the opportunity to make better informed choices, enabling the selection of different management options and courses of treatment to provide the best possible clinical outcome.



## OPERATIONAL REVIEW

“DURING 2010 HAMAD MEDICAL CORPORATION CONTINUED TO INVEST IN THE LATEST STATE-OF-THE-ART EQUIPMENT, PROVIDING ACCESS TO THE MOST RECENT TECHNOLOGY TO IMPROVE CANCER CARE AND OUTCOMES.”

### Stem Cell Transplantation

A new program of care is to be introduced within the National Cancer Plan, whereby Hamad Medical Corporation will establish a world-class Stem Cell Transplantation Program (SCT) at Al Amal Hospital to enable autologous stem cell transplants to be carried out – Qatar’s first project of this nature.

Stem cell transplants are used to treat diseases that damage or destroy the bone marrow, such as non-Hodgkin’s lymphoma and Hodgkin’s lymphoma, leukemia, multiple myeloma and aplastic anemia. SCT can also restore bone marrow damaged by total body radiation and high doses of chemotherapy used in cancer treatment.

Previously this type of treatment was mainly restricted to Qatari patients who could be treated abroad, as few non-Qatari patients could afford the treatment.

Work was undertaken at Al Amal Hospital in 2010 to create a comprehensive Transplant Unit with capacity for:

- Five-bedded Bone Marrow Transplant (BMT) of single rooms with HEPA (high efficiency particulate air) filters and positive air pressure
- An Intensive Care monitoring facility
- A dedicated day care unit
- A dedicated Aspherisis Unit offering therapeutic plasma exchange and peripheral blood stem cell collection
- Family conference and consultation rooms
- Outpatient post-transplantation clinics
- A stem cell processing and cryopreservation laboratory
- Complementary medicine support

The temporary mini-laboratory was fully commissioned by November – an interim solution until the dedicated laboratory is opened in December, 2011. The Intensive Care monitoring facility has been fully built and equipped, with staff recruited. The BMT Unit is also completed.

The BMT Unit expects to perform 8-10 transplants per year in the first year, rising to 20-25 within five years. This unit will ensure that the people of Qatar have access to the most advanced cancer treatments in this specialty, and will no longer have to travel abroad for transplants.

### National Breast Screening Program

Building on the high-profile launch of the National Cancer Plan, the benefits offered by Hamad Medical Corporation’s own Breast Screening Program will now be extended nationwide. The program was initially launched in 2008, setting up screening clinics at Hamad Medical Corporation hospitals for all women in Qatar aged 40 or more. This initiative offered services including consultation, examination and mammography and was based at both Women’s and Hamad General Hospitals.

New enhanced services will include genetic screening and a ‘one-stop shop’ for breast ultrasound and breast biopsy if required. Should results show any abnormalities these will be discussed at a multi-disciplinary meeting, allowing access to MRI and referral to the appropriate sub-specialty.

During 2011, breast screening will be rolled out to other areas of the country through dedicated and current health centers and state-of-the-art mobile clinics. This will enable patients to attend for breast screening in an area and at a time that is convenient to them.

### New Technologies in Cancer Care

During 2010 Hamad Medical Corporation continued to invest in the latest state-of-the-art equipment, providing access to the most recent technology to improve cancer care and outcomes.

### Radiotherapy

The specialty of Clinical Oncology and the provision of radiotherapy treatment are fundamental to all comprehensive cancer services. Radiotherapy treatment is provided by linear accelerators, and Al Amal Hospital has invested in two new state-of-the-art machines. These will enable new treatment to be given with greater accuracy through the most advanced techniques, including:

- Intensity Modulated Radiotherapy (IMRT): an advanced technique where the intensity of the beam used in radiotherapy is modulated to conform to the tumor.
- Image Guided Radiotherapy (IGRT): provides the ability to image patients while being treated, using the most advanced techniques such as Cone Beam CT (CBCT).
- RapidArc: a very quick method of delivering IMRT to patients, eliminating patient motion while being treated.

These new treatments importantly will not only minimize the time spent by patients having radiotherapy, but reduce exposure to surrounding normal tissue thereby causing less damage.

## OPERATIONAL REVIEW

# “THE OBJECTIVE IS TO ESTABLISH A CENTER OF EXCELLENCE IN ORGAN TRANSPLANTATION AND THEREBY PROVIDE A VIABLE ALTERNATIVE TO PATIENTS SEEKING TRANSPLANTS ABROAD.”

### Radiosurgery

Stereotactic Radiosurgery (SRS) is a radiation therapy technique that delivers highly focused doses to a small target in a single treatment session. Undertaken as an outpatient, not requiring admission, the procedure has minimal effects on surrounding tissues and organs, minimizing complications and a longer recovery time that is normally associated with invasive brain surgery.

Since this single-session treatment has such a dramatic effect on the target tissue, changes are considered 'surgical' without any incision. This is a major advancement for Hamad Medical Corporation, and a testament to the power of collaboration from different but complementary clinical disciplines working together to optimize and ensure the highest quality of care for patients.

### Magnetic Resource Imaging (MRI)

The scanner is the only dedicated MRI-Simulator unit in the Gulf region and is operated jointly with the Radiology Department. The intention over the next year is to partner with the supplier, GE Medical, as a showcase clinical reference site so that health professionals across the region can benefit from the technology and expertise available at Hamad Medical Corporation.

### Mental Health Plan

A two-year partnership began in April between the Department of Psychiatry and Asia Australia Mental Health, with the goal of enhancing the current mental health model of care and introducing a focus on rehabilitation and recovery within a community-based framework.

In line with international best practice, it is recognized that to receive good care it is not necessary for many people with mental illness to be treated in hospital, or isolated from their community. The enhanced model for treating mental illness will focus on providing more services within a community-based setting, including an increased ability to provide home visits and day care activities.

It has been shown that when people receive treatment and support within a familiar setting, the level of disability is less profound: they recover more quickly; and important links with family, friends and community are less likely to be disrupted.

The model of care will focus on all aspects of a person's life and will be supported by the introduction of a 'key worker' model. As the name suggests, the key worker is a primary support (in conjunction with the psychiatrist) and a link to assist clients identify their goals and what assistance they will need to fulfill these goals. Family, friends and significant others can also be involved in supporting the client to set and achieve goals.

Clients will be assigned a key worker on a needs basis, and support may be minimal or intensive depending on client needs. Key workers will be mobile and able to visit clients at home. Key workers will also be able to continue involvement with the client across all service areas, including re-hospitalization. This provides extra support to promote a smooth transition between services and reduces the possibility that people 'fall through the gaps'.

The model can reduce the length of inpatient admissions, prevent relapse, support recovery and reduce ongoing disability.

A well-functioning support network is known to be very important in assisting patients on their recovery journey. Many families are currently involved in a person's overall treatment, but the aim would be to enhance this involvement and increase family education in relation to their loved one's mental illness and goals for recovery. The key worker model also provides continuity and certainty for families if they require information or support for their family member.

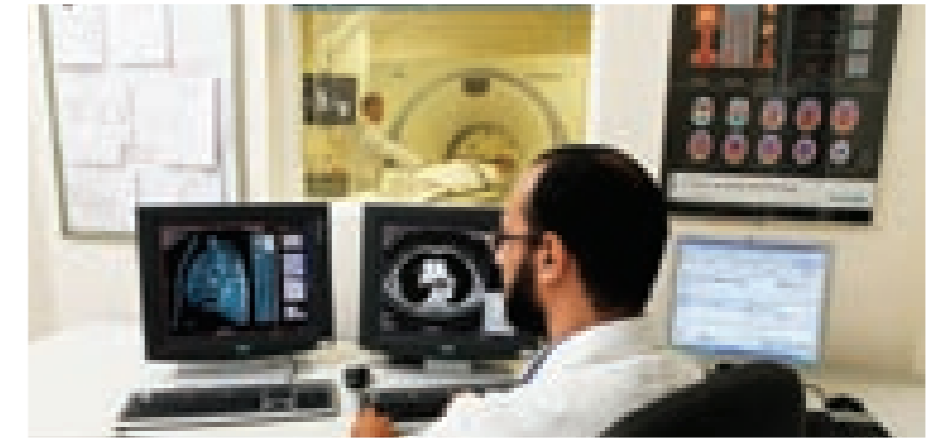
The enhanced service will assist all people in Qatar with mental illness by providing a flexible response to care and support to reduce the disability associated with the illness. Care will be provided in the most appropriate setting, and ensures that the client (and family) are involved in any treatment plans.

The service model will be introduced and followed by all psychiatry staff members, to support a holistic approach to each person's mental, physical and psychological wellbeing.

The model of care is compatible with the State of Qatar Mental Health Plan, which was approved by the Supreme Council of Health.

### Organ Transplant Plan

Hamad Medical Corporation's new initiative to set up an organ donor registry in Qatar is in line with the recently launched Doha Donation Accord that encourages people to donate organs and honors them for doing so. Doha Donation Accord is a pioneering program that has been assessed by the international transplant community as the best embodiment of the WHO guidelines and Istanbul Declaration recommendations. It was also recently endorsed by GCC Health Ministers.



Every resident in Qatar will have an organ donation statement on the back of their healthcare identification card, which will indicate whether the person consents to become an organ or tissue donor after death. Once fully operational, this program will provide Qatar with a donor registry that will be the first of its kind in the Middle East.

The initiative also means that locals and expatriates on the donor waiting list will have equal access to the available organs for transplantation regardless of their race, nationality, religion, or sex. This is a unique model that subscribes to the ethical principles of organ donation and transplantation.

### Kidney Transplants

Hamad Medical Corporation's kidney transplant program has gathered momentum, backed by a campaign by the Supreme Council of Health to raise awareness of organ donations.

A total of nine successful kidney transplants were conducted during 2010, with three taking place in one week during December. This number of transplants for the year equals the total performed over 2007-2009. Two of the people receiving donor kidneys were a teenage Qatari and a Pakistani man in his 20s. Both were suffering from end-stage renal failure and had been surviving on regular dialysis. New organs have restored them to normal lifestyles.

During the 2010 Qatar Health exhibition and conference, a campaign to encourage greater awareness and acceptance of organ donation resulted in 172 people signing up to become donors.

### Liver Transplants

Hamad Medical Corporation carries out renal and corneal transplants and is working towards conducting the first liver transplant in Qatar very soon. Currently, 70 patients are on the waiting list for liver transplants.

The process of recruiting personnel from abroad, importing equipment and framing the relevant policies and guidelines is in progress. The plan is to begin with transplantation of livers taken from brain-dead donors, and then to progress to living donor transplants, a more complex and therefore risk-intense process.

About 50 Hamad Medical Corporation staff have been trained through participation in different specialized and internationally recognized courses held in Doha and surgical training in centers of excellence abroad, including Barcelona University, Austria, Germany, Geneva and Lebanon.

### Transplants for Patients from Abroad

Hamad Medical Corporation has introduced a program to sponsor a dozen kidney transplant procedures from outside Qatar each year, where recipients happen to have a matching sibling donor. The matching donor recipient couple will be given all the support needed, including travel and post-operative care free of charge. In December, two Sudanese siblings benefited from the program. Both brothers, in their 30s, were brought to Doha for their treatment.

### Center for Organ Transplantation

Hamad Medical Corporation is in the final stages of implementing a well-structured two-year strategic plan that will see the establishment of the first Qatari organ transplant center – expected to open in the first half of 2011. Significant planning has included providing resources, training staff, assignment of buildings, and recruitment of experts for the new dedicated center.

The objective is to establish a center of excellence in organ transplantation and thereby provide a viable alternative to patients seeking transplants abroad. The center is closely aligned with the Supreme Council of Health's initiative to establish a national organ donor center.

### Residential Care

Rumailah Hospital accommodates many patients (children and adults) for whom the hospital is their home. The majority of these people live with a disability resulting from conditions such as:

- Cerebral palsy
- Spinal cord injury
- Traumatic brain injury
- Congenital abnormalities

While needing skilled care and support, these people would have a significantly improved quality of life in a domestic environment.

To accommodate this, Rumailah Hospital has recently been allocated a 41-villa residential compound for conversion to a residential care facility with capacity to accommodate 90 people. However, it is envisaged that capacity would be set aside to offer the community respite care.

The objective is to reintegrate this patient population into the community, thereby increasing the potential of improving their life skills and independence while giving the opportunity to strengthen and widen community support.

## OPERATIONAL REVIEW

“HAMAD MEDICAL CORPORATION IS SEEKING, AS AN ORGANIZATION, TO EVOLVE INTO A THRIVING ACADEMIC HEALTH SYSTEM THAT LINKS TOGETHER HEALTH, EDUCATION AND RESEARCH.”

The intended facility would provide the ideal setting to:

- Ensure privacy and dignity of patients as they will be housed in much smaller units with patients of similar needs, as opposed to being clustered in large groups with mixed diagnosis and behavioral needs
- Personalize care needs to the residents' preference (such as grooming, clothing, dietary etc)
- Target activities and rehabilitation programs to individual needs by establishing individual case management, care planning, and regular reviews
- Increase family engagement in the daily lives of patients by removing the stigma of institutionalization and diagnosis
- Increase the frequency of recreational activities and social outings supported by the volunteer program as well as trained recreational therapists
- Provide respite care for families requiring short-term relief from caring duties

### Transforming Hamad Medical Corporation into an Academic Health System

In 2010, Hamad Medical Corporation continued its challenging journey of transformation, with the goal of turning its hospitals into true Academic Health Centers. Hamad Medical Corporation is seeking, as an organization, to evolve into a thriving Academic Health System that links together health, education and research, powered by the synergies between itself and its academic partners.

To be formally launched in mid-2011, the Academic Health System Initiative will generate significant positive impact on patient care, medical education and medical research. The strength of the proposal results from the intertwining of these central activities to improve health and wellbeing whilst expanding the boundaries of knowledge and ensuring a modern, flexible and sustainable workforce. The initiative represents a major milestone in Hamad Medical Corporation's development as Qatar's leading healthcare provider through the delivery of world-class healthcare, medical education and research excellence. A key element of the initiative will be wider community engagement through developing a deeper social conscience and bestowing tangible economic and health benefits on the community.

This highly ambitious initiative will be carried out in close partnership and collaboration with Weill Cornell Medical School in Qatar (WCMC-Q) and other academic partners in Qatar and internationally. This journey of transformation will also include forging meaningful relationships with partners across a wide range of health and allied health-related domains.

### Translational Research Institute (TRI)

Scheduled for completion in 2013, the Translational Research Institute (TRI) will provide state-of-the-art core research facilities to facilitate internationally competitive outcomes in translational (bench to bedside) and clinical research. With a focus upon the fields of cancer, trauma, infectious diseases, neuroscience, diabetes, obesity, cardiovascular disease, and women's and children's health, the TRI will provide researchers with ready access to facilities that would otherwise be unavailable, leading to the translation of basic biomedical discoveries into new diagnostic biomarkers and therapies.

The facility will consolidate all research groups across Hamad Medical Corporation, and encourage collaboration and innovation through a number of cross-cutting themes such as bioinformatics, ethics, molecular imaging, functional genomics, proteomics and metabolomics, clinical imaging, clinical trials and biostatistics. As a key component of the Academic Health System Initiative, the TRI will facilitate Hamad Medical Corporation's development as an internationally recognized health research organization and the leading health research organization in the Gulf region.





## EDUCATION, TRAINING AND MEDICAL RESEARCH

Educate and train our team in the pursuit of excellence and invest in clinical research programs



## OPERATIONAL REVIEW

“THE NUMBER OF MEDICAL STUDENTS FROM WCMC-Q WHO RECEIVE THEIR CLINICAL EDUCATION AT HAMAD MEDICAL CORPORATION CONTINUES TO INCREASE YEARLY. IN 2010, 125 STUDENTS FROM THE FIRST TO THE FOURTH YEAR ATTENDED CLINICAL EDUCATION ACTIVITIES IN HAMAD MEDICAL CORPORATION’S CLINICAL DEPARTMENTS.”

### Education and Training

#### Qatar Health 2010

In contrast to 2009, Qatar Health 2010 did not employ the services of an external event management team but managed the whole process through a cooperative effort by several Hamad Medical Corporation departments – including Hamad International Training Center, Marketing, Hospitality, HIS and Human Resources.

The result was a significant improvement on the previous year, being noticeably better organized and highly professional. Although still held at Doha Exhibition Center, the event itself was bigger with 16 conferences held over a five-day period, including an internationally organized plastic surgery multi-track event.

With the emphasis on scientific quality, the accompanying exhibition was smaller than the previous year due to space constraints; however, it was a great success with the provision of:

- 16 conference tracks including: radiology, dermatology, anesthesia, pharmacy, pediatric emergency, nursing, plastic surgery, orthopedics, primary healthcare, hematology, oncology, emergency medicine and disaster management, dentistry, management, basic science, obstetrics and gynecology
- 127 international speakers and 108 local speakers
- 3,665 delegates registered with total attendance just under 2,000
- 48 exhibitors including participants from Thailand, Italy, Bahrain, UAE and Kuwait

Public lectures – a first for Qatar Health – were well attended, as were other daily activities for the public such as flu shots, BMI measurements, and various blood and physical wellbeing assessments.

Although a vast improvement on 2009, there were many lessons learned for the future. In the future, Qatar Health will be held at the newly opened Qatar National Convention Center. This state-of-the-art facility will allow Qatar Health to realize its true potential with dedicated conference and education areas along with an impressive exhibition area.

#### Weill Cornell Medical College – Qatar

The number of medical students from WCMC-Q who receive their clinical education at Hamad Medical Corporation increases yearly. In 2010, 125 students from the first to the fourth year attended clinical educational activities in Hamad Medical Corporation’s clinical departments.

The WCMC-Q medical program combines a strong foundation in medical sciences with extensive clinical training in patient care at Hamad Medical Corporation hospitals and clinics. More than 182 Hamad Medical Corporation consultants and specialists who hold WCMC-Q Clinical Faculty appointments participate in teaching students.

The WCMC-Q curriculum exposes students to clinical care at Hamad Medical Corporation from the first year of the program. Students attend outpatient clinics at Hamad General Hospital (HGH), Women’s Hospital (WH), and Primary Care Centers, where they learn to appreciate the nature of the doctor-patient relationship, understand the patient interview, and apply communication skills to elicit and record the medical history and take the vital signs of pediatric and adult patients in a one-to-one relationship with Hamad Medical Corporation/WCMC-Q clinical faculty.

The clinical core curriculum begins during the third year of medical school. The students join the Hamad Medical Corporation Clinical teams and participate in patient care and attend educational activities under the supervision of the Hamad Medical Corporation/WCMC-Q clinical faculty. The Clinical Clerkship Directors are full-time WCMC-Q Faculty. During 2010, multiple mini interviews (MMIs) took place for selection of residents at McMaster University. Hamad Medical Corporation is the first international center to apply MMI for postgraduate medical students.

Hamad Medical Corporation Medical Education also introduced the web-based resident electronic management system (med hub) during the year.

In partnership with the office of Graduate Medical Education at WCMC-Q, the International Foundation of Medicine exam (iFOM) – developed by NBME and which can be used as an equivalent for USMLE-2in international residency programs – was administered in November and used as one measure to select residency applicants to Hamad Medical Corporation. Through this partnership, and in collaboration with UIC, several faculty development workshops specifically related to GME were administered.

#### Selection of Residents

Hamad Medical Corporation aspires to be a center of academic excellence, and the selection of high-quality candidates for its medical residency programs is key to achieving this. The Applications for Residency Programs were issued during March, with an August deadline for submission. During 2010, the Department of Medical Education standardized the selection criteria, so all applicants were expected to pass USMLE Step 2 CK or equivalent, along with English proficiency exams.



The total number of applicants was 465 – including 14 Qataris, 59 Hamad Medical Corporation non-Qatari interns, and 390 expatriates, from 25 different nationalities.

Candidates were shortlisted and ranked on their USMLE Step 2 CK scores. Most applicants were recent graduates ranging between 2007 and 2010. A total of 183 were shortlisted out of 465 to attend the multiple mini interviews.

The Department of Medical Education applied for Hamad Medical Corporation-sponsored visit visas, if required, to facilitate candidates’ attendance at the December interviews. 103 candidates attended the interviews and arrangements were made by the Hospitality and Finance Departments for them to stay at Medical City Hotel for nominal charges.

The total number of candidates undertaking the MMIs was 161, with interviews spread over a weekend and conducted in three sessions daily at Medical City by 86 interviewers: 80 from Hamad Medical Corporation and 6 from WCMC-Q.

Another round of traditional interviews was conducted by the Program Directors, and both were organized by the Department of Medical Education. The traditional interview dates were set soon after the multiple mini interviews ended, and on the last day of the traditional interviews, the second match was conducted to fill in the residual posts, of which 15 residency programs selected residents for the academic year.

In total, 140 non-Qatari and eight Qatari residents were selected and matched to the various residency programs at Hamad Medical Corporation through a thorough and rigorous selection process aimed at identifying the brightest and best to train in Qatar.

#### International Conferences

Hamad Medical Corporation continued with its dedication to the principle of continuing medical education for its doctors and dentists. The Department of Medical Education, through its Office of Continuing Medical Education (OCME), provided education and training activities that facilitated doctors and dentists to maintain and improve their professional competence.

Throughout 2010, the Medical Education Department at Hamad Medical Corporation fulfilled an extensive list of activities including many workshops, conferences and symposia. The year saw a total of seven conferences, seven courses, thirteen symposia, two seminars and nineteen workshops. These included conferences covering heart health, diabetes and ophthalmology. The activities throughout the year enabled Hamad Medical Corporation medical staff to acquire new knowledge and upgrade their skills to enhance the quality of healthcare they provide.

#### Human Resources Training Programs

The Human Resources (HR) Training Section focused on building behavioral competency among Hamad Medical Corporation employees during 2010, providing six workshops to help them develop their communication skills. Close to 200 staff members participated in the ‘Communicating Effectively with Teams and Customers’ workshop, designed to help formulate strategies for thoughtful and effective communication.

HR Training also held two workshops to help develop customer service skills, and 28 employees took part in the ‘Skills of Dealing with the Public’ workshop, designed to help develop customer service and conflict management skills.

Management training and development opportunities for Qataris enabled 18 nationals holding middle management positions to complete the Level 7 Executive Diploma in Strategic Management & Leadership. A further three Qatari nationals completed the Level 3 Diploma in First Line Management.

The Human Resources English Language Training section provided courses in the community for more than 250 employees. Participating employees are evaluated during the application process so that they are placed in the appropriate program. HR benchmarks the applicant’s assessment score against the Cambridge TESOL (Tests of English for Speakers of other Languages) to preserve quality of teaching and learning and to ensure best resource utilization. In 2011, the HR English Language Training section looks forward to offering additional language training programs, including in-house courses.



## OPERATIONAL REVIEW

# “QATAR ROBOTIC SURGERY CENTER AND HAMAD MEDICAL CORPORATION ARE COLLABORATING TO DRIVE UPTAKE OF ROBOTIC SURGERY IN THE REGION.”

### Training for Pharmacists

Hamad Medical Corporation hospital pharmacies have been approved as training sites for the Qatar University (QU) College of Pharmacy degree program.

The program, which is accredited by the Canadian Council for the Accreditation of Pharmacy Programs (CCAPP), is the first to be accredited outside Canada; and internships of Structured Practical Experiences in Pharmacy (SPEP) are a key requirement.

The memorandum of understanding, between QU and Hamad Medical Corporation in 2009, led to Hamad Medical Corporation participation in the internship program, and the scale and expansion of Hamad Medical Corporation involvement is a good reflection of the professional standards of its hospital pharmacy practice.

The internship program offers four weeks of clinical experience at any one time, with each student undertaking six programs before graduation. Between 2009 and 2010 student rotations increased from nine to forty, with the number of hospital pharmacies involved growing from three to five, and the number of hospital preceptors increasing from 25 to 48.

The SPEP hospital rotation sites are carefully chosen to ensure that they provide a wide range of pharmaceutical services. They must have accreditation status with a clinical training affiliation agreement and provide significant numbers of qualified pharmacy preceptors, with access to other healthcare professionals, patients and associated health information.

The practice experiences must be of adequate intensity, breadth, structure and duration to achieve the defined educational outcomes. They must include introductory and formative experiences and a sustained period of experiences to conclude the program. Students must be able to contribute to patient care provided by inter-professional teams that include pharmacists.

Qatar University College of Pharmacy (QU CPH) certifies the SPEP program clinical internship sites annually, in accordance with minimum requirements deemed necessary to ensure a successful rotation. The first group of QU CPH graduates is scheduled to commence in June, 2011 and the first Doctor of Pharmacy students will be enrolled the following September.

### New Surgical Training Center

With the introduction of new surgical technologies, training of surgeons has developed tremendously over the last 50 years. Surgeons should acquire a broad range of clinical, technical, administrative, interpersonal and research skills, with efficient technical monitoring being critical for their training. To provide dedicated development and presentation of innovative service for medical staff, the Surgical Training Center was opened at Al Khor Hospital in April.

The center consists of an advanced digital library room, animal laboratory and surgical laparoscopy simulator. The new facility radically improves the quality of educational service by providing best-practice standards and an evidence-based model of training that boosts surgical skills.

The library consists of medical books and computers with a large number of soft copies of medical books, updated surgical courses and a large collection of video clips of surgical procedures. A teleconference facility links with Hamad General Hospital. Audio-visual training is available, during which the doctor can see live transmission of laparoscopic surgeries. A room for computer laparoscopic simulation is fitted with advanced laparoscopic equipment. The third room is an animal laboratory for tissue manipulation.

The surgical training center collects seven training modalities under one roof. The combined exposure to practical and theoretical background helps build skills for dealing with instruments and tissues before assisting expert surgeons in theater. This has made the training more efficient and has increased patient safety and surgeon skills.

### Robotic Surgery Training Program

Qatar Robotic Surgery Center (QRSC) and Hamad Medical Corporation are collaborating to drive clinical uptake of robotic surgery in the region and into the development of new clinical procedures. Involvement with QRSC has created the right atmosphere and connections to train the staff in laparoscopic and robotic surgery, and activate the combined research endeavor.



**OPERATIONAL REVIEW**

“OVER THE NEXT FEW YEARS HAMAD MEDICAL CORPORATION RESEARCH WILL BE ENDOWED WITH THE HIGHEST QUALITY OF ACADEMIC AND RESEARCH ORGANIZATIONS – LOCALLY, REGIONALLY AND INTERNATIONALLY.”

Throughout 2010 the Surgery Department continued the transformation process that began in 2008. The department has now become a state-of-the-art multi-specialty surgical center. The prominent achievements of the past 12 months have been to continue to modernize the technology, train staff, introduce sub-specialties, activate research and foster academic surgical education.

The introduction of new technologies was carried out in a staged manner in which staff were trained to lead the evolutionary change, rather than importing teams to do the job.

During the year, the department was able to introduce new and innovative methodologies in minimally invasive surgeries, laser surgery, micro-vascular surgery, laparoscopic surgery and robotic surgery. This was made possible through a vast network of collaboration with centers of excellence all over the world.

Several international projects have begun, typically a collaborative effort between local institutions inside Qatar such as Hamad Medical Corporation, Weill Cornell Medical College and QRSC, and a network of international centers of excellence.

The robotic surgery platform that is currently used has provided an advanced way of performing minimally invasive surgery (keyhole surgery or laparoscopy). This means that surgery is performed through small 1-2 cm incisions, resulting in faster recovery, less post-operative pain, less bleeding and many more specific advantages for the patient.

Current clinical use is mainly focused on urology, gynecology, cardiac and general surgical procedures.

**Critical Care Paramedic Training Program**

Critical Care Paramedics (CCPs) receive training to align their clinical practice with the needs of the people in Qatar. This is coupled with investment in improved technology and equipment, making it a service that is operated and maintained to international best-practice standards.

The CCP team is responsible for delivering pre-hospital critical care at the scene of an illness or injury, the most common being at road traffic accidents and on the way to the hospital. They generally respond to patients in rapid response vehicles, the LifeFlight helicopter, or specialist transfer ambulances. They provide immediate care at the scene as well as on the way to a healthcare facility.

The Ambulance Service has a specialized service team of 39 highly trained Critical Care Paramedics (CCPs). The team is a mix of nationalities and gender including Qatari, British, Australian, Canadian, South African and American.

**Investment in Clinical Research**

**Research Activity**

Research proposal activity in Hamad Medical Corporation continued to flourish in 2010 with more than 70 submissions, eight QNRF awards totaling around \$7 million, and the award of more than QR 250,000 to Hamad Medical Corporation researchers from the Medical Research Center. The launch of a Hamad Medical Corporation Internal Research Grant Competition in 2010 received 37 applications, increasing the internal research awards by several million Qatari riyals. The benefit of the establishment of basic science, or preclinical research, was demonstrated in the QNRF third cycle research competition, in which three of the eight grants awarded to Hamad Medical Corporation were basic science research grants totaling more than \$2.5 million.



Project No.	Title	Status	Approved Budget
NPRP 09 - 045 - 3 - 011	The Assessment of Novel Functional Risk Factors for the Predictor of Cardiovascular Event in Vulnerable Patients Following Acute Coronary Syndrome	Award Active	\$984,944
NPRP 09 - 284 - 3 - 065	Resuscitation from trauma and hemorrhagic shock by direct intracellular energy delivery	Award Active	\$666,150
NPRP 09 - 286 - 3 - 066	The peritoneal response to the sterile clinical dialysis solution	Award Active	\$813,930
NPRP 09 - 370 - 3 - 089	The CORRELATE Trial: CT Angiographic Characterization and Evaluation of Plaque by Age, Gender, Ethnicity, Race and Cardiovascular Risk Factors	Award Active	\$855,967
NPRP 09 - 390 - 3 - 097	Perinatal Neonatal Outcomes Research Study in Arabian Gulf (PEARL STUDY)	Award Active	\$1,046,500
NPRP 09 - 628 - 3 - 160	Controlling use of narghile smoking: Testing the impact of a Randomized Controlled Trial (RCT) of a School-based prevention program	Award Active	\$622,007
NPRP 09 - 726 - 3 - 187	Targeting Leukemia Initiating Cells by Arsenic and Interferon alpha in CML and ATL	Award Active	\$903,763
NPRP 09 - 758 - 3 - 203	Continuous Electroencephalography Monitoring in the Intensive Care Unit	Award Active	\$741,718

Policy and guideline development supported the activities of the MRC and Hamad Medical Corporation researchers, with the creation of eight internal and corporate policies and consent form templates used throughout Hamad Medical Corporation to adhere to international standards.

**Research Educational Program**

Education to improve research skills focused on developing programs for all healthcare professionals, including a residents' training course in research methodology in consultation with the Medical Education Center. Also introduced was the comprehensive and internationally acclaimed Collaborative Institutional Training Initiative (CITI), to assist Hamad Medical Corporation researchers in improving their research knowledge and practice to achieve international standards.

To ensure that the needs of educational program clients are satisfied, a survey was launched in December to identify the requirements of consultants, specialists, physicians and allied healthcare staff across Hamad Medical Corporation.

MRC staff fully participated in the research aspects of the SickKids International New Children's Hospital (NCH) project by participating in a variety of workgroups and establishing an MRC-NCH project team to contribute to and monitor its progress.

A clinical trial registration process was established in collaboration with the SickKids International team, and has been incorporated into the revised research support processes in the MRC. Currently, 26 clinical trials are ongoing in Hamad Medical Corporation. Most ongoing trials were registered in an international registry (clinicaltrials.gov in the US) by the end of December, and policies and procedures were put in place to ensure that all future clinical trials will be registered.

Seven Hamad Medical Corporation researchers were funded to attend international conferences, including the Initiative to Improve Cancer Care in the Arab World Conference; the steering committee for the Pan-Arab Oncology Research Network; and the Asian Pacific Research Ethics Conference. The MRC showcased its capabilities through organizing the Basic Science Track for Qatar Health 2010 International Medical Congress and Exhibition. This track for Qatar Health 2010 focused on preclinical research and was supported by international and local distinguished experts.

The MRC continued to develop to better meet its mandates from Hamad Medical Corporation by recruitment in business development and research administration, signaling the development of a more structured and business-centered approach to supporting medical research in Hamad Medical Corporation.

Participative strategic planning was the focus of the second half of 2010. An inclusive strategic planning process resulted in a strategic plan (2010-2015), which incorporates a revised organizational structure to enable the MRC to achieve its mandates, mission and vision – and that of Hamad Medical Corporation. The new structure identifies clinical research, basic science research and information and knowledge management as the main areas for expansion. Marketing of the 'new' MRC saw the launch of a newsletter and website providing essential information about research and the research activities in Hamad Medical Corporation.

Looking ahead, research in Hamad Medical Corporation will include basic or preclinical research, clinical research, and knowledge translation to improve clinical decision-making and healthcare delivery. Partnerships, collaborations and networks were the main methods of expansion and improvement of MRC activities. Over the next few years Hamad Medical Corporation research will be endowed with the highest quality of academic and research organizations – locally, regionally and internationally.

# OUR PEOPLE LEADING THE WAY

Retain and nurture a committed, talented and skilled team that sets the standard regionally and internationally



**OPERATIONAL REVIEW**

# “THE STARS OF EXCELLENCE EMPLOYEE AWARDS AND RECOGNITION PROGRAM, LAUNCHED IN MARCH 2010, RECOGNIZES AND REWARDS TEAMS WHO HAVE IMPLEMENTED QUALITY IMPROVEMENT PROJECTS.”

**Our People**

**Recruitment and Orientation**

During 2010, more than 1,400 employees joined Hamad Medical Corporation, and Human Resources began developing a welcome campaign to assist employees in the on-boarding process. A pre-arrival guide for overseas recruits was developed and is being distributed to all new overseas joiners. A housing guidebook for employees was developed to clarify processes for applying for housing.

In 2011, Human Resources will continue its orientation development efforts to rebrand all orientation materials with the new identity. It will also issue the Day 1 Welcome Package, currently in the final stage of development.

Numerous recruitment trips were undertaken in 2010 to source and recruit qualified staff for Hamad Medical Corporation services and its new facilities. In particular, Human Resources supported recruitment trips specifically focused on the growing demands for staff at Al Wakra Hospital, Heart Hospital, Skilled Nursing, Medical Records, Emergency Medical Services, Information Technology, Pharmacy and Marketing/Media/Public Relations, in addition to regular recruitment activities.

**Compensation initiatives**

To ensure the continued recruitment and retention of high-caliber staff, Hamad Medical Corporation partnered with a leading HR consulting firm to conduct a survey of healthcare salaries within the GCC region. The survey is the first of its kind in the region, focusing specifically on healthcare professions. The results of the survey have been important for Hamad Medical Corporation in its strategic planning and development process, as well as highlighting areas where Hamad Medical Corporation provides competitive compensation for recruitment initiatives.

2010 marked the third year of the Long-Serving Employees Award program, recognizing staff with 25 years of service to Hamad Medical Corporation. The program strives to recognize employees whose loyalty and commitment to excellence is an important part of Hamad Medical Corporation’s development. In 2010 Hamad Medical Corporation recognized 46 employees at a gala dinner, where their family members and guests celebrated their recognition from the Managing Director and senior Hamad Medical Corporation leadership.

**Service improvements at Al Khor**

Human Resources (HR) activated the HR Help Desk at Al Khor Hospital (AKH) in support of the Hamad Medical Corporation’s decentralization vision. HR’s commitment to the Help Desk originated from a fundamental desire to provide convenient, employee-focused services for HR transactions so that AKH staff do not have to travel to Doha for routine requests.

**Immigration Service Development**

Continuing the progress made in 2009, the HR immigration section made further use of technology to improve communication with employees. The immigration section implemented SMS notifications to all employees when exit permits were issued in the airport system. These convenient notifications canceled the need for employees to personally visit the immigration section to collect a paper exit visa. SMS technologies were also used to notify employees about residency permit processing and cancellation procedures. The SMS notifications are an important technology enabler for decentralized HR operations.

**Accreditation and Recognition**

**Arab Health Distinctive Woman Award**

In March 2011, Dr Hanan Al Kuwari, Managing Director of Hamad Medical Corporation, was presented with the prestigious Arab Health Distinctive Woman Award, by the Arab Hospitals Federation (AHF). The award recognizes Dr Al Kuwari’s valuable contributions to the healthcare industry.

The AHF highlighted Dr Al Kuwari’s commitment to guiding Hamad Medical Corporation towards becoming a leading healthcare provider focused on delivering quality patient-centered care. This honor is testimony to the esteem in which Dr Al Kuwari is held and the respect she has earned from her team and her peers within the healthcare industry in the region.

Dr Al Kuwari received praise from many senior figures in the healthcare industry, notably His Excellency Dr Mohamed bin Hamad Al Thani, Director of Public Health at the Supreme Council of Health. Dr Al Thani stated: “Dr Hanan Al Kuwari is a shining example of the new generation of Qatari women who have realized remarkable achievements for their country, through her outstanding performance in her field of expertise. We wish her every success.”

**Stars of Excellence Awards**

The Stars of Excellence Employee Awards and Recognition Program, launched in March 2010, recognizes and rewards teams who have implemented quality improvement projects. The program encourages teams, and individuals within teams, to take on improvement initiatives that benefit patients, staff and the organization.

The program was created to encourage change and development across Hamad Medical Corporation, allowing staff to be appreciated for their initiative and commitment to excellent work in providing the best in healthcare and patient services. Nearly 250 submissions were received from across all areas of Hamad Medical Corporation, representing all five of Hamad Medical Corporation’s hospitals as well as many corporate departments, centers and remote sites. The awards program, the first of its kind for Hamad Medical Corporation, carries a distinct and purposeful focus on teamwork and was a resounding success that will help deliver quality improvements in the future.



The Stars of Excellence program reflects Hamad Medical Corporation’s commitment to quality and its vision to become an internationally recognized world-class center for healthcare. Aligned with the Hamad Medical Corporation Star of Excellence Model, and its streams of excellence, the program originally featured five categories of award:

Peak Performance Award	Demonstration that performance has achieved the highest standards and has significantly contributed to the overall development and success of the organization and improved patient care.
Spirit of Service Award	Delivery of responsive service that achieves optimal outcomes for the patient, their families, the staff, the organization, and their environments.
Distinction in Practice Award (Clinical or Operational)	Delivery of the highest standards of safety and quality in clinical care or efficiency and effectiveness in operational practice.
Technological Innovation Award	Use or development of innovative technology that supports and improves quality clinical practice, business, and operational efficiency.
Leadership Team Impact Award	Creating, developing, and nurturing cohesive and high-functioning teams that collectively achieve the organization’s aims, goals, and objectives.

A sixth category, the Guiding Star of Excellence Award, was added in order to recognize teams that demonstrated the highest level of achievement in more than one category, or stream, of excellence and therefore received the highest level of distinction. The Pre-Integration Program project won ‘The Guiding Stars of Excellence’ after having reached the highest level of achievement in more than one category.

The program is a day care service offered by the Children’s Rehabilitation Department, Rumailah Hospital, under Rehabilitation Services. It aims to enhance the skills of children with physical disabilities and/or cognitive delays, so they can integrate into schools or community centers. Children with special needs are given comprehensive, effective and family-centered interdisciplinary rehabilitation services (physiotherapy, occupational therapy, speech therapy and special education) in a structured and safe environment.

An individualized program is developed and implemented to facilitate and improve each child’s behavioral, social, emotional, cognitive, perceptual, motor, sensory, pre-academic and self-care skills, as well as to enhance the capacity of families to meet their children’s needs.

The Hand Therapy unit from Occupational Therapy was awarded ‘The Glowing Stars of Excellence’ for Distinction in Practice. The project was entitled: ‘The implementation and development of the Hand Therapy Unit, a much-needed service in Qatar’.

The Hand Therapy service was introduced in Qatar in response to the growing volume of patients with upper extremity injury incurred in the construction boom. The aim of the program was to develop and implement a world-class Hand Therapy Unit to provide a specialized and comprehensive service to the population of Qatar, comparable to that available in other international centers of excellence.

The Hand Therapy Unit offers an exclusive service of specialized treatment techniques including advanced splinting, designing and implementing exercise programs, scar management and fabrication of pressure garments for burn patients, sensory re-education after nerve injuries, functional retraining of the injured upper extremity, ergonomics, and conditioning before returning to work.

**Arab Health Awards 2011**

The annual Arab Health Innovation & Achievement awards in Dubai are designed to showcase excellence in healthcare in the region. As part of a continuous journey towards excellence, Hamad Medical Corporation submitted numerous projects to gauge feedback from an independent and international judging panel on the perceived merit of these projects.



## OPERATIONAL REVIEW

# “HAMAD MEDICAL CORPORATION EARNED THE SULTAN BIN ABDULAZIZ HUMANITARIAN CITY AWARD FOR EXCELLENCE IN REHABILITATION SERVICES FOR ITS PROJECT AT RUMAILAH HOSPITAL.”

Hamad Medical Corporation was rewarded by having six of its projects (at least one from each of its current five hospitals) shortlisted for an award:

- Sultan Bin Abdulaziz Humanitarian City Award for Excellence in Rehabilitation Services (Rumailah Hospital)
- Excellence in Hospital Emergency Department Award (Hamad General Hospital)
- Excellence in Laboratory Services Award (Al Khor and Al Amal Hospital)
- Excellence in Patient Safety Award (Hamad General Hospital)
- Human Resource Development Award (an Hamad Medical Corporation corporate initiative)

Hamad Medical Corporation earned the Sultan Bin Abdulaziz Humanitarian City Award for Excellence in Rehabilitation Services for its project at Rumailah Hospital: ‘Community-based rehabilitation in Qatar: How it positively influences the lives of people with disabilities’. The Rehabilitation Services Award is granted to healthcare and rehabilitation facilities, individuals and organizations (private or public) that have contributed to rehabilitation services for the people of the region. It is intended to encourage further participation in this field.

Hamad Medical Corporation also won the Human Resource Development Award for its project on achieving and sustaining physician excellence. The award means that Hamad Medical Corporation has been identified as the employer of choice to support the region’s top talent.

Criteria for the Human Resource Development Award include retention policies, rate of turnover, occupational health and safety policies, institutionalized education and training, availability of educational facilities, achievement of continuing medical education (CME) hours, competency, staff review and appraisal process, evaluation and verification of skills, orientation program, and broad-based personal and professional career/development opportunities.

The Arab Health Awards recognize the outstanding achievements of individuals, departments, teams, or organizations that have contributed to the growth and development of Middle East healthcare. They are an important industry accolade and a testimony to Hamad Medical Corporation’s outstanding achievements.

### International Accreditation and Recognition

#### The Accreditation Process

Hamad Medical Corporation was accredited during 2010 as meeting the Hospitality Assured standard. Hospitality Services, employing some 1,800 people, covers functions such as transport and catering, security and housekeeping, and other key support activities including patient and visitor services. Feedback from patients and visitors is guiding the planning and delivery practices, and creating a culture of continuous development.

The Hamad Medical Corporation team set themselves an ambitious target and achieved Hospitality Assured accreditation in a demanding short timescale. Not only is the quality of medical attention monitored by the Joint Commission International: the standard of patient support is seen as vital to the recovery process and is also qualitatively checked.

In this respect, Hamad Medical Corporation stakeholders including patients, relatives, government and employees can be reassured that the organization is striving for, and achieving, continuous improvement in all its services.

Representatives from the Institute of Hospitality conducted the Hospitality Assured assessment in October, with eight departments participating and receiving the accreditation:

- Catering
- Housekeeping
- Laundry
- Mail Service
- Copy Center
- Security
- Transport
- Corporate Customer Service

Hospitality Assured is the quality standard created by the Institute of Hospitality specifically for customer-facing businesses. It encourages organizations to look at their own operation from the user’s perspective and to see where improvements should be made.

Accredited Hamad Medical Corporation departments now have internal benchmarks (as well as those of international comparators) against which to measure their improvement.

## OPERATIONAL REVIEW

“JANUARY 2010 MARKED THE LAUNCH OF THE REDESIGNED HAMAD MEDICAL CORPORATION BRAND IDENTITY. THE NEW BRAND REPRESENTS THE THREE KEY PILLARS OF HAMAD MEDICAL CORPORATION: HEALTH, EDUCATION AND RESEARCH.”

### Hospitality Leadership and Training

Developing managers and supervisors in the Hospitality Department through training enables them to pass their knowledge and skills to their teams and achieve a consistent standard at Hamad General Hospital.

A Director of Hospitality Training role was introduced to focus on implementing hospitality through staff training, development and coaching. Close on 50 supervisors from the Catering, Kitchen, Patient & Visitor Service Center and Housekeeping departments were exposed to practices at a local five-star hotel so they could learn new ideas and techniques to improve patient satisfaction based on hotel guest experience.

Performance management training was undertaken by 69 staff in preparation for the annual performance reviews, and to enable assessors to accurately review and assess their subordinates. Staff also learned to understand the rating given and to determine any training needed to carry out their duties efficiently and effectively.

A 'Train the Trainer' program was piloted with eight delegates from the Engineering Department. The program aims to develop departmental trainers who can train on job/craft skills according to standard, so that necessary services are consistently delivered. These trainers will keep clear documentation of all training activities within the department and prepare plans to meet future training requirements.

E-learning began in the Hospitality Department with 11 people signing up for various programs available through HIS. Senior staff within the Hospitality Department all come from a hotel hospitality background, and are playing a key role in ensuring Hamad Medical Corporation's commitment to improving the hospital environment and patient services.

### Magnet Accreditation for Nursing

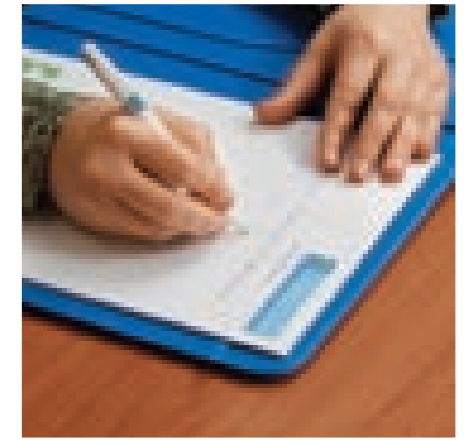
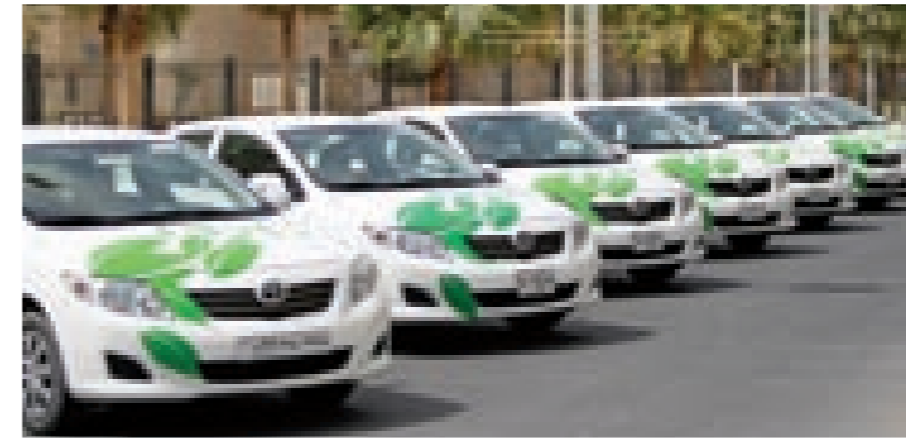
The Nursing Department at Hamad Medical Corporation is currently seeking the prestigious Nursing Magnet status from the American Nurses Credential Center (ANCC). The ANCC, an affiliate of the American Nurses Association, awards Magnet Status to those organizations that deliver healthcare excellence through their nursing services. The Nursing Department at Hamad Medical Corporation is focused on meeting the strict requirements set out by the ANCC that ensure nursing services offer reliable and quality care to patients.

Magnet Status criteria include nurses having a high level of job satisfaction, a low nurse turnover rate, and nurse involvement in data collection and decision making. By working towards Magnet Status the Hamad Medical Corporation Nursing Department is committed to ensuring that staff nurses are valued and involved in the development of the care services.

### JCI Update and Practicum

The JCI consultant visited Home Healthcare Services in December and conducted an operational assessment based on the Care Continuum standards.

The consultant complimented the organization on embedding the standards into everyday practice, and on staff's engagement in the consultation process, commending their efforts to improve delivery of quality patient care.



The department is working on the findings and recommendations outlined in the consultant's report, among them that resource allocation such as staffing and transport should be given first priority to meet the demands of patient care at home.

### Accreditation Council for Graduate Medical Education (ACGME)

Further progress has been made in aligning Hamad Medical Corporation Residency Programs with the requirements of the Accreditation Council for Graduate Medical Education (ACGME).

Hamad Medical Corporation Medical Education Department followed the institutional and common ACGME program requirements and implemented a new outcomes-based alignment strategy for ACGME accreditation of the 20 Hamad Medical Corporation residency training programs, which have 500 residents from 36 countries.

The strategy focuses on continuous assessment and improvement of trainees, with progressive supervision and graded responsibility to guarantee the highest quality of patient care and safety, promotion of excellence, and ongoing education.

### Rebranding Program

January 2010 marked the launch of the redesigned Hamad Medical Corporation brand identity. The new brand represents the three key pillars of Hamad Medical Corporation: Health, Education and Research. The first step in the implementation has been to introduce the new brand logo into a wide range of aspects within Hamad Medical Corporation. The logo features three leaves that represent the relationship between nature and medicine. The positioning of the leaves is also of particular significance as the flowing leaves highlight the visual language used by everyone at Hamad Medical Corporation to express themselves. The circular flow also emphasizes the momentum of change that is a key feature of Hamad Medical Corporation's pursuit of continual progress and development.

During 2010, the branding team initiated the extensive process of rolling out the new brand into all aspects of Hamad Medical Corporation. There are currently many visible examples of the new brand in action, including its use on corporate stationery, staff ID cards, corporate vehicles, business cards and on printed material.

The brand implementation is an ongoing process that will continue throughout 2011 and beyond. Projects currently being worked on include introducing the new brand logo to Hamad Medical Corporation ambulances, medical forms, signage, uniforms and noticeboards.

In addition to implementing the visual aspect of the new logo, the rebranding has been the catalyst to address and revise the corporate vision, mission and values that form the platform for quality and change management.

The new brand agenda is far more complex than simply the introduction of the new logo. A brand is only as powerful as the impression it makes in the minds of its perceivers. Subsequently, every member of staff at Hamad Medical Corporation is responsible for ensuring that everything that is done, said, manifested and delivered is aligned with the new brand values.

Across the organization there are opportunities for the brand to add value to everything Hamad Medical Corporation does, from supporting Hamad Medical Corporation's drive for quality and excellence, through positioning Hamad Medical Corporation as an open and visionary organization, to articulating and advocating both trust and respect to all of Hamad Medical Corporation's stakeholders. Hamad Medical Corporation is beginning to see the initial signs of this process and will continue to see greater evidence as the new brand develops into a holistic ideology that aligns the whole organization – becoming patient-centric through being brand-focused, while ensuring Hamad Medical Corporation staff are fully committed to putting the patient at the center of their work.



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