



# Jordan: Health Technology and Medical Devices

Muna Farkouh  
September 12

## Summary

- Medical Tourism 10% of Jordan's GDP
- Total imports \$74 million US imports market share 30%
- Number of Arab and Foreign patients who received treatment in Jordan increased by 10%, 26,000 – 50,000 Libyans in Jordan for healthcare
- Medical Accountability Law
- Used/Refurbished Equipment not prohibited
- Required USFDA, CE mark or Japanese certification

## Market Demand

Jordan's health care system is regarded as one of the best in the region. Jordan has become a medical tourism destination in the region by offering relatively high-quality care at comparatively inexpensive rates. The boom in private hospitals is keyed to this growing "medical tourism" trade. Medical tourism generates about two-thirds of all the tourism income to Jordan, as patients often travel with their entire families and/or stay for relatively long periods.

Jordan's health care system uses the latest technologies and has highly educated and well trained doctors. Many Jordanian physicians have received some form of medical training in the U.S., giving U.S. products good exposure. Jordanian doctors are respected throughout the region for their expertise, hence their choices of technology influences buying decision throughout the region. Many doctors in the region are trained in Jordan, and many Jordanian doctors work in neighboring countries. The influence of Jordanian doctors' choices in medical technology can impact buying decisions in other countries where they practice. This raises the incentive for US firms to enter the Jordanian market.

Primary health care sector reforms underway include renovating and adding medical diagnostic devices and therapeutic equipment; improving the quality of health care and hospital services; upgrading hospital infrastructure; developing and implementing health information systems, and medical research.

According to the World Health Organization (WHO), 10% of Jordan's GDP goes toward health care, with the public sector financing over 45% of this total. Jordan spent \$350 per capita on health in 2010 (more than twice the regional average). By the end of the year 2008, Jordan had 100 hospitals with a total bed capacity of 11,000, and nearly a third of these facilities are in the private sector.

Jordan has the highest per capita rate of health related expenditures after Saudi Arabia and Lebanon. Through 44 public hospitals and 60 private hospitals, it provides health care services for its citizens and over 250,000 patients from neighboring countries annually. Imports of medical equipment and pharmaceuticals exceeded \$370 million in the year 2008 and are expected to grow to US \$ 519 million by 2013, representing a compound annual growth rate (CAGR) of 7.01%. . The main drivers for growth include the continuing high volume medicine export activity, generated by Jordan's domestic drug manufacturers. Additionally, the epidemiological profile of Jordan indicates an increasing burden of obesity and diabetes-related disorders, which will drive spending in overall healthcare.

**Medical equipment:** Demand for medical equipment and services should increase during the next few years with the increase in the number of government and privately owned hospitals; new equipment for hospitals under construction; renovated equipment to replace existing equipment in functioning facilities; upgrading clinics and health care structures; expanding health insurance coverage; and shifting from older conventional methods to modern treatment methods. It should be mentioned that since 1998, the Ministry of Health has prohibited the import of used and refurbished medical devices into the Kingdom.

**Medical tourism:** In 2004, the MoH set a plan with public and private sectors to generate an annual \$1 billion in medical tourism by the year 2010. Medical Tourism experts at the World Bank have ranked Jordan the leader in the Arab region and the fifth in the world as a medical tourism hub. The medical tourism sector annually generates over \$1 billion in revenues, as the number of foreign patients from 84 foreign countries seeking treatment in the Kingdom in 2008 stands at over 200,100 per year a 10.5% increase over the previous year's total of 190,000, outstripping the (8.8%) increase in general tourism arrivals.

A study commissioned by the PHA for the Ministry of Health said 45,000 Iraqi patients have treated by Jordanian private hospitals in 2007, while Palestinians and Sudanese came second with around 25,000 patients from each country, 20,000 Yemenies, 19,000 Saudis, 10,000 Syrians, 10,000 Libyians and other Bahrain, Algeria and Kuwait. The study also showed that more than 1,800 US citizens, 1,200 UK citizens and 400 Canadian citizens sought medical treatment in the Kingdom during 2007. (cost of treatment in Jordan for an American patient, including air travel and accommodation, is only 25% of the cost of receiving treatment in the US.

In the meantime, Jordan continues to make efforts, such as marketing campaign and web promotions, to attract medical tourists from new destinations, including the former Soviet Union and Africa. And in February 2009 Jordan held an international medical tourism congress aiming to develop new strategies to improve and expand the capacity of the private health sector while also seeking opportunities for growth from other markets. Regulatory policies are also being implemented to gain international quality accreditation to provide standardized protocols for global patients.

Jordan's current medical tourism sector revenues are estimated to reach US\$650mn - \$700 million by the end of 2010 and the country is keen to reach its ambitious target of US\$1bn by 2012. Jordan is aiming to reach the figure of 300,000 medical tourists in 2015, which would bring revenues of US\$1.5bn.

**Laws:** As for improving standards the focus of health care policy in Jordan in 2011 is greater equity and accountability. The government has taken steps in areas such as medical responsibility and e-health care and creating more accountability health care system through the implementation of medical responsibility, accreditation and e-health care regulations. One of those action was drafting of the medical responsibility law. Expected to pass in 2012, its current working protects patients' rights, ensures compliance with clinical guidelines and offers reasonable compensation in cases of malpractice. The move should help with gaining international accreditation. 14 Hospitals in Jordan have received national accreditation based on reducing medical errors and preventable harm in the hospital and six hospitals have received Joint Commission International (JCI).

U.S. companies are encouraged to appoint technically strong agents and distributors to sell their products and technologies in Jordan, and participate in leading trade exhibitions, such as the "Arab Health" in Dubai, to create market and product exposure. The U.S. Commercial Service (CS) offers programs to introduce U.S. products and technologies in Jordan.

E-Health Care: E-health care is another key government program aiming to ensure the accountability of the health care system. The government of Jordan began a pilot projects in 2011 that hopes to expand to the entire health care system, starting with public hospital. The e-health initiative system will operate the storage, retrieval and updating of the electronic health records (HER) of patients cared for by all the participating health care facilities in Jordan. Ideally the e-health system will reduce danger of errors during treatment. The system will alert the provider of lab results to dangers of drug interactions and it will remind providers when their patient is due for exams or tests.

The ICT Taskforce was created to help modernize and advance the health industry locally, and develop Jordanian companies' capacity and skills in developing advanced products and services in the healthcare industry regionally and globally.

Furthermore, the Healthcare ICT Taskforce supports the globally relevant cluster of healthcare technology companies in Jordan, contributing to revenue generation, job creation, as well as further enhancing the country's brand as a destination for healthcare services and products.

The Healthcare ICT Taskforce was launched in Nov. 2011 alongside with the World Economic Forum under the patronage of H.M. King Abdullah II and the participation of Cisco Healthcare Solution executives, Int@j, and Jordanian Healthcare ICT companies' executives.

- Open platform of Jordanian Health ICT companies
- Under the umbrella of Int@j
- Supported by King Abdullah II Fund for Development (KAFD) and Cisco Systems
- Includes all stakeholders in Healthcare ICT in Jordan

The Health ICT Taskforce focus is an:

- Organizing Health ICT cluster under Int@j to promote knowledge sharing and marketing
- Accelerating the growth of Health ICT companies through a platform of cooperation
- Creating a point of reference for global and regional leaders wishing to partner with Jordan's Health ICT cluster
- Building capability of Jordanian Health ICT companies and their teams on trends and new technologies

The Healthcare ICT Taskforce main goals are:

- Developing exports
- Creating Jobs
- Innovative solutions in Healthcare ICT

Cisco has engaged with multiple stakeholders to enhance the competitiveness and capability of Jordan's healthcare technologies sector. At its core are local tech innovators, several of whom are represented by the Healthcare Technologies Task Force, an initiative of Jordan's Information and Communications Technology Association – Int@j, KAFD, with which Cisco has partnered to help in providing guidance, mentorship, and support to its program of work. Cisco's goal from this partnership is to support a platform that enables growth of tech firms that are designing and deploying solutions that enhance the quality of healthcare service providers, whether focused on better quality of care, increased productivity and workflow efficiency, or better access to information.

#### **Projected Taskforce Activities:**

Jordan's Healthcare ICT Taskforce is projected to tackle but not limited to the following key areas:

- Defining regional and global industry opportunities
- Developing mentorship programs to link Jordanian companies with innovative & leading global Healthcare ICT companies

- Promoting awareness of Jordan's Healthcare ICT brand and Taskforce cluster through capitalizing on competitive advantages
- Developing cooperation and collaboration for Healthcare ICT companies to advance and innovate through highlighting current opportunities and future trends in Healthcare ICT Technologies globally
- Conducting Healthcare ICT boot camps for cluster members via leading Healthcare ICT companies

Current Healthcare ICT Taskforce Companies: <http://newsroom.cisco.com/press-release-content?type=webcontent&articleId=526842>

## Market Data

### Key Social Indicators 2010

Indicator	FY 2010
Population (000)	6.5
Growth rate (%)	2.2
Crude Birth Rate (Per 1000 Births)	30.6
Crude Death Rate (Per 1000 Population)	7.0
Infant mortality (per 000)	23
Life expectancy	73
Males (years)	71.6
Females (years)	74.4
Population median age (yrs)	21.1
Total Hospitals Numbers	106
Total Hospital Beds	11779

Source: Information Center/Ministry of Health/WHO

## Best Prospects

### Sub-Sector Best Prospects

There is a need in the next five years for 10 hospitals each with 10,000 beds. (focus on Amman, Zarqa, and Irbid) .

Best Services Prospects include:

- Consulting in hospital administration, quality control and certification standards
- Training

### **Best Product Services include:**

Given the hospital redesign projects and private clinics investments the following equipment offers excellent sales prospects.

- Medical Equipment; C-T Scanners; MRI; PET Scanner; Physiological monitoring; Kidney Dialysis equipment reagents for automated laboratories; Laparoscopy surgery; Endoscopy; Cardiology equipment; Cardiology surgery; Ophthalmology; Neurosurgery; Oncology; Medical Supplies; Electro medical Equipment; Other Medical & Equipment Instruments; Other Electro-diagnostic Apparatus ; UV/IR Apparatus; Surgical Medical Equipment; Radiology and Imaging equipment; Sonography equipment; Endoscopy equipment and flexible scopes; Anesthesia and operating theatres; Laparoscopic surgery; Hospital/ Clinical furniture; Sterilization equipment; and Surgical instruments.
- Consumables for Clinical laboratories ie Tubes/Glasses
- Equipment and supplies for plastic surgery
- Medical Surgical Sterilizers
- Medical x-ray, Alpha, Beta, Gamma Ray Equipment
- Orthopedic & Prosthetic Appliances
- Clinical Lab Diagnostic Equipment; and Clinical laboratories Equipment
- Organ transplant
- Mental health

### **EHealth**

- Healthcare management systems
- Software modules for specific fields and applications (radiology, imaging, etc.)
- Integrated medical insurance solutions
- Medical devices and equipment
- Customer relations management
- Mobile healthcare applications
- Online medical content providers

## **Opportunities**

Hospitals, both private and public, will continue to expand and the demand for new hospitals and medical equipment and pharmaceuticals will continue to grow. The new Queen Rania Pediatric Hospital is operational and started its services as of Feb, 2010. Also, a new general military hospital is now under construction in Aqaba to replace the old existed Princess Haya Hospital, managed by the RMS as the current location of Princess Haya does not allow any expansion.

The MoH plans to continue investing in hospital infrastructure throughout the country, improving the quality of health care and hospital services and developing and implementing health information systems. Primary health care sector reforms will include renovating and adding medical diagnostic devices and therapeutic equipment; improving the quality of health care and hospital services; upgrading hospital infrastructure; and developing and implementing health information systems.

The Jordanian dental services sector is also expected to grow over the coming years. Such growth is mainly triggered by the inclusion of dental services to the universal healthcare scheme provided by the Ministry of Health. These government initiatives have been well received by the people of Jordan as

most of them have had limited access to dental services. Private dental service insurance coverage also exists in Jordan. Dental clinics at all public hospitals have experienced a large increase in the number of patients using the national healthcare scheme for dental services for all categories of the society.

## Trade Events

October 8-12, 2012 Jordan Health Technology Reverse Trade Mission to the Bay Area  
January 28-31, 2013 Arab Health in Dubai, Dubai  
March 6-7, 2012 Jordan ICT Forum, Amman

## Resources & Contacts

Ministry of Health: [www.moh.gov.jo](http://www.moh.gov.jo)  
Medical Tourism Directorate: [www.moh.gov.jo](http://www.moh.gov.jo)  
Jordan Medical Council: [www.jmc.gov.jo](http://www.jmc.gov.jo)  
Higher Health Council: [www.hhc.gov.jo](http://www.hhc.gov.jo)  
Jordan Private Hospitals Association: [www.pha-jo.com](http://www.pha-jo.com)  
Jordanian Association of Manufacturers of Pharmaceuticals & Medical Appliances: [www.japm.org.jo](http://www.japm.org.jo)

## For More Information [NOTE: only use this format, do not change it.]

The U.S. Commercial Service in Amman, Jordan can be contacted via e-mail at: [Muna.Farkouh@trade.gov](mailto:Muna.Farkouh@trade.gov);  
Phone: 962 6 590 6057; Fax: 962 6 592 0146; or website: [www.buyusa.gov](http://www.buyusa.gov) or [www.export.gov](http://www.export.gov)

## The U.S. Commercial Service — Your Global Business Partner

With its network of offices across the United States and in more than 80 countries, the U.S. Commercial Service of the U.S. Department of Commerce utilizes its global presence and international marketing expertise to help U.S. companies sell their products and services worldwide. Locate the U.S. Commercial Service trade specialist in the U.S. nearest you by visiting <http://www.export.gov/eac>.

**Comments and Suggestions:** We welcome your comments and suggestions regarding this market research. You can e-mail us your comments/suggestions to: [Market\\_Research\\_Feedback@trade.gov](mailto:Market_Research_Feedback@trade.gov). Please include the name of the applicable market research in your e-mail. We greatly appreciate your feedback.

*Disclaimer: The information provided in this report is intended to be of assistance to U.S. exporters. While we make every effort to ensure its accuracy, neither the United States government nor any of its employees make any representation as to the accuracy or completeness of information in this or any other United States government document. Readers are advised to independently verify any information prior to reliance thereon. The information provided in this report does not constitute legal advice. The Commercial Service reference to or inclusion of material by a non-U.S. Government entity in this document is for informational purposes only and does not constitute an endorsement by the Commercial Service of the entity, its materials, or its products or services*

*International copyright, U.S. Department of Commerce, 2007. All rights reserved outside of the United States.*