ISRAEL
HealthCare IT Industry

“Necessity is the mother of invention” – Plato

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Israel HealthCare IT Industry

*Key Challenges in the EU HealthCare Sector*

- **Ageing Population**
  Oldest baby boomers (1946-1964) approaching 65

- **Increase in the incidence of Chronic Illnesses**
  More than 67% of aging population have at least two chronic illnesses

- **Critical need to lower soaring costs** (Upwards of 11% of Europe’s GDP)

- **New technologies, devices, drugs, and personalized treatment options enter market** ➔ Increase amount of data

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**E – Health Solutions**

- Economy Requires it.
- Technology Enables it.
- Demography Demands it.
E-Health is the next step in healthcare evolution. It will help improve the efficiency and effectiveness of healthcare services as well as open the door for new solutions in addressing global healthcare challenges.

- ICT Solutions
- Telemedicine & Telecare
- Mobile Health
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E – Health Solutions

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ICT Solutions in the Healthcare sector:
various applications are being developed to make healthcare system function more effectively: EMR/EHRs, PACS/RIS, ePrescription, Computerized Physician Order Entry (CPOE), Electronic Health Cards (EHCs), Clinical Decision Support, Business Analytics, Healthcare Information Exchange, etc.
Telemedicine and Telecare – making healthcare information ubiquitous by removing the geographical boundaries and enabling the shift of treatments and procedures from inpatient to outpatient to home care.

At the same time, the growing emphasis on early diagnostics and preventive medicine helps to control soaring costs of healthcare services.
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E – Health Solutions

- ICT Solutions
- Telemedicine & Telecare
- Mobile Health

**Mobile Health** refers to the use of mobile devices such as smart phones, patient monitoring devices, Personal Digital Assistants (PDA) and other wireless devices that together with biomarkers, drug delivery developments and sophisticated Medical devices are paving the way towards personalized medicine.
Why Israel?

Israel is among the first adopters of the major cultural change called Health IT. Israel has the “know how” and close to 20-year implementation expertise to manage this change.
Israel HealthCare Sector

- National health insurance law enacted in 1995. Every citizen entitled to health care services defined by the government.
- Hybrid system of four not-for-profit healthcare funds, complementary insurance, and private insurance.
- Citizens free to choose and change health plans.
- Health plans must accept applicant regardless of medical history.

Small country, with small budgets forces organizations to “work smart and cheaply”
Gartner, 2006
Israel HealthCare Sector

Incentives

- The Health Funds are the insurers, payers and providers. Incentive to invest in IT to lower costs, improve service and improve quality of care.

- The Health funds are paid on a per capita basis. Competitive environment pushes them to use technology in new and creative ways.

- Healthcare provided by 4 HMOs fighting for market share. Improving revenues are both driven by technological innovation.
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*Penetration*

- **100% EMR usage**: Every Israeli doctor routinely uses an EMR
- **Computer Physician Order Entries (CPOE) and E-Prescribing**: each estimated at 95%
- **First country to introduce and implement an HIE system**, which covers about 70% of population
- **One of the first countries to use telemedicine and introduce** electronic clinical decision support systems and online indicators for medical and service quality
HealthCare IT is a combination of telemedicine and telecare along with the management of healthcare services. This acts as an umbrella to define all the services that have resulted in revolutionizing the healthcare sector which is being facilitated by the innovations in ICT.
Many local IT vendors support and develop solutions for all aspects of Healthcare IT— from administration, labs, billing, CPR, etc. Multi-national vendors invest in Healthcare solutions with local research labs.

More than 100 Health IT companies covering the entire spectrum of Health IT solutions.

Israel is a great beta-site for most local HIT companies, using the “early adapter” spirit of local clinical community and the excellent IT infrastructure.

Primary Care Physicians (PCP) employed by HMOs, or operate as specialists get paid on a per-visit system. Many physicians work for more than one Health Fund. This helps the HMOs in lowering resistance to new technology. 99.9% of PCP enter medical data electronically.
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Israel, is one of the leaders in the use of IT for Healthcare!
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Several recent M&A’s made Israeli PACS available worldwide

GE
- Dynamic Imaging
- Real Time Imaging

Philips
- CDP Medical
- Shina-Systems (OEM)

Carestream (AGFA)
- Algotech
- Orthocad (OEM)

McKesson
- Medcon
**Israel HealthCare IT at a Glimpse**

*Industry Leaders*

**dbMotion** – provides clinicians an access to the real-time, integrated clinical information. The health interoperability and intelligence solution enables healthcare organizations and HIEs to meaningfully integrate and leverage their information assets. dbMotion created the first Virtual Health Record (VHR) which overcomes concerns over data ownership and control.

**iMDsoft** – is a global leader in hospital-wide, high-end clinical information systems and EMRs for critical, perioperative, and acute care. Systems designed to enhance the overall care quality and improve financial performance, particularly in the high-cost areas where need is the greatest. Hospitals, healthcare systems, and major medical centers across the US, Europe, and Asia use iMDsoft’s innovative technology to promote patient safety, contain costs, support research and compliance, and achieve sustainable market leadership.
eWaveMD – one of Israel’s biggest system integrators and software providers has produced strategic web-based solutions for electronic health record applications, electronic diagnostic and monitoring devices, patient portals and disease management.

Card Guard – develops, manufactures, and markets innovative telemedicine products and technologies. Card Guard’s telemedicine products provide a total solution to health care providers seeking to balance quality of care, rising costs of treatment, and shrinking budgets. The company is well known as LifeWatch, the US’ leading ambulatory health monitoring services company.
Israel HealthCare IT at a Glimpse

Industry Leaders

Aerotel – is a manufacturer of modular, mobile and home based telemedicine and telecare solutions, designed to transfer essential medical and lifestyle data over the telephone, mobile phone, wireless, the Internet and other electronic media.

SHL Telemedisin– telemonitoring of cardiac patients using a call-center that monitors patients using a personalized ECG device. The company has had significant success in Israel and Europe and is expanding activity to other countries.

MediLogos – provides a suite which combines clinical decision support technology, knowledge engineering technology, clinical data analysis, IT and clinical medicine, that enables Care Delivery Organizations (CDOs) to ensure compliance with their own clinical guidelines for managing chronic-care patients, while lowering their costs.
Israel HealthCare IT at a Glimpse

Industry Leaders

**ELAD HealthCare Solutions** – provides Chameleon™ a general-purpose, comprehensive Electronic Medical Record for acute care hospitals and outpatient clinics.

**ideoMobile** – M-Health solution is a dedicated mobile application that connects with existing internet health services or health systems to enable and extend health services to the mobile channel. The company’s Mobile Health Solution is rich and secure mobile user experience with ready to use business modules available on a wide variety of device platforms (Symbian, J2ME, iPhone, Windows Mobile, Blackberry, Android).

**2P2D** – Developing ClinicAid, a wireless telemedicine system that provides real-time monitoring and documentation of participants’ drug compliance and adherence. The system dispenses drugs in personalized dosages according to the study protocol treatment regimen.
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Leading the global Healthcare IT front
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**Acronyms**

- **EMR** – Electronic Medical Record.
- **HIS** (Hospital Information System) – Manages patients records in the hospital level
- **HIE** (Healthcare Information Exchange) – Sharing patients data across multiple facilities inside the enterprise digitally.
- **LIS** (Laboratory Information System) – Digital management of lab results.
- **CPOE** (Computerized Prescription Order Entry) – Digital ordering of tests inside hospitals
- **PACS** (Picture Archive Communication System) – Management system for imaging