

Israel's Health IT Industry

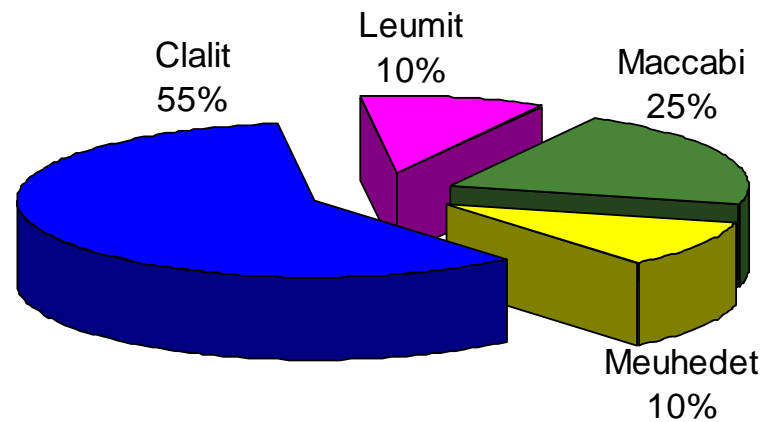
Insights & Opportunities for Collaboration

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The Israeli Health Care System

Basic features, structure and financing mechanisms

- **Universal coverage**
National Health Bill 1995
- **Based on public funding**
payroll tax and general tax
- **Enhanced by private spending**
Extra coverage, private services
- **Structure**
Four Competing
Not-for-Profit Health Funds



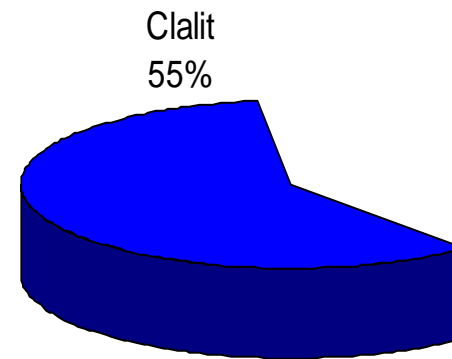
Clalit Health Services

Health IT

Case Study

Clalit: The 2nd largest HMO in the world

- US \$4 billion annual budget
- Controls 55% of the market
- 3,800,000 insured customers
- 34,000 employees (8,500 Physicians)
- National coverage by 1300 Clinics
- 14 hospitals (30% of acute beds)
- 9 subsidiaries
- 430 pharmacies



Clalit: Challenges and problems, 1997



- Uncontrolled deficit (hundreds of millions US\$)
- Competition based on quality of medical service and customer care (price is regulated)
- Ex-post management due to lack of information and standards
- Lack of quality control and performance measurement tools

Clalit: New management strategy



First step: Decentralization

- Giving **decision making power** and **responsibility** to those who interact with the clients
- Setting budgetary and quality **goals** and **objectives**
- Providing **real time information, data** and **management tools** to support employees' and management decision making

Second Step: Monitoring Quality of Care



Developed 71 Medical Quality Indicators for:

Disease management

- Diabetes
- CHF
- Hyperlipidemia
- Hypertension

Preventive Medicine

- Influenza immunization
- Mammography
- Occult Blood
- Hypertension tests

Health Promotion

- Child obesity
- Infant Hgb
- Smoking

Utilization Management

- Re-hospitalizations
- Drugs of choice
- Efficient use of Lab tests

Clalit HIT Solutions: *The Electronic Medical Record Level*

Content of a Record

- 1. Cumulative Patient Visit Data**
Diagnoses, Markers,
Prescriptions, Lab results, ...
- 2. Decision Support tools**
Patients Lists, Good Medical
Practice, Drug Interaction, ...

Benefits

1. Relevant data available in a centralized Data Warehouse
2. Creation of Chronic Disease Registries (>180)
3. Implementation of case-mix applications
4. Advanced data-mining processes
5. Enabling cutting-edge research and international collaborations
6. Enabling management/economic tools

Clalit HIT Solutions: *Health Information Exchange (HIE) Level*

- Creating a continuum of care among **different service providers**
- Creating a continuum of care **regardless of geographic location**
- Medical information sharing became an organizational norm
- Avoiding redundancies and unnecessary testing, hospitalizations, etc
- Enabling “business as usual” management during crisis (summer 2006)
 - **1 million people** fled their homes in the north of Israel during 2006 war
 - Most left without their medications or prescriptions.
 - **Use of Ofek (HIE) rose sevenfold** as physicians consulted Ofek to get medication information for the displaced citizens

Clalit : HIT Results

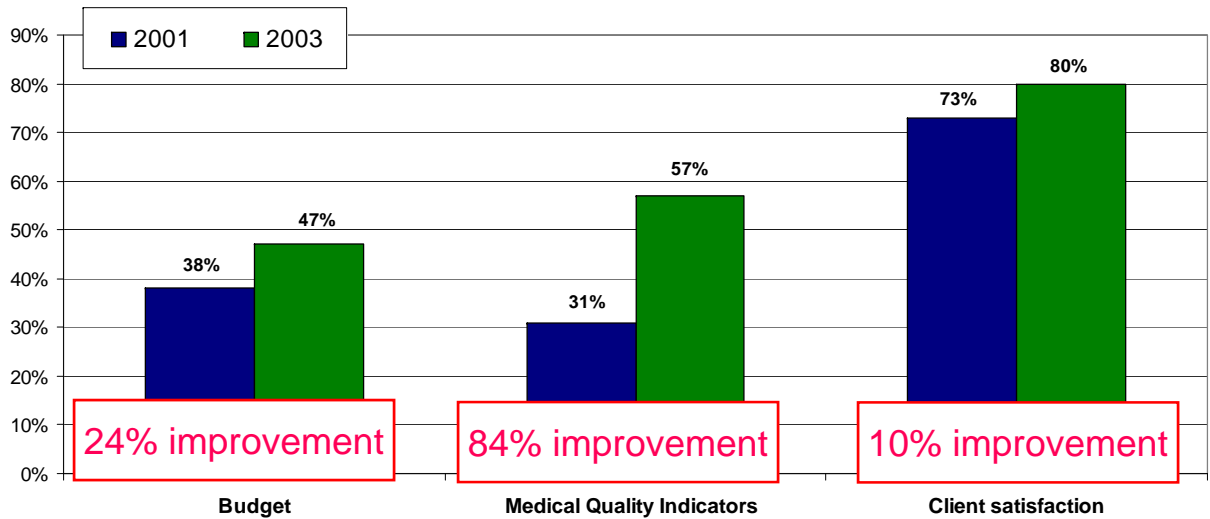


- Digitalized 3.8 million people (100%)
- Created a *continuum of care* by connecting all services
- Created centralized Data-Warehouse
- Computerized physicians order entry (CPOE) >95%
- Implemented case-mix applications
- Enabled data-mining for research and treatment purposes
- Provide strong tools for senior management
- **Cost about 2% of total expenditures**



Clalit: Immediate Results

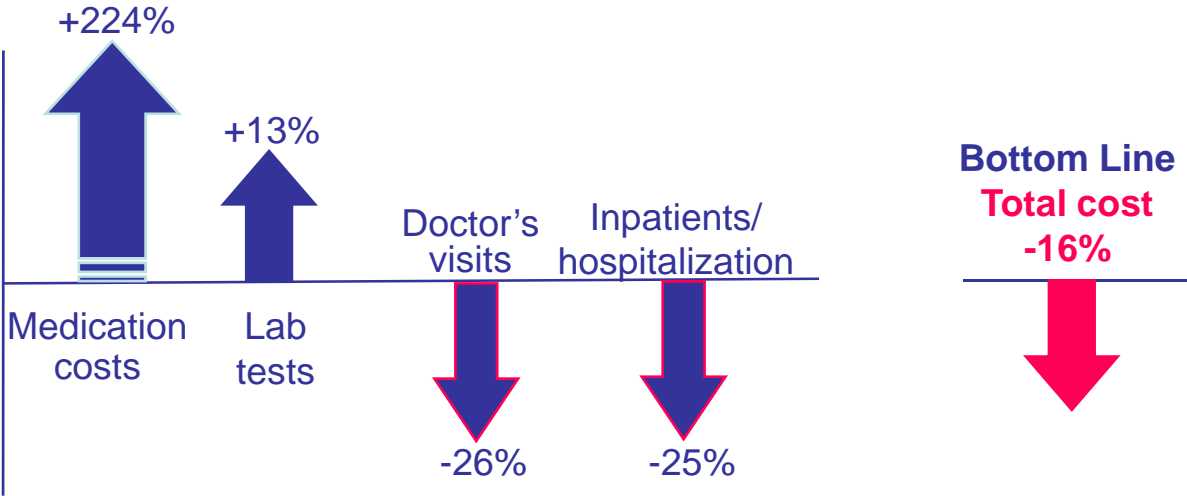
Percentage of clinics that met their goals 2001 vs. 2003





Clalit: Results (2)

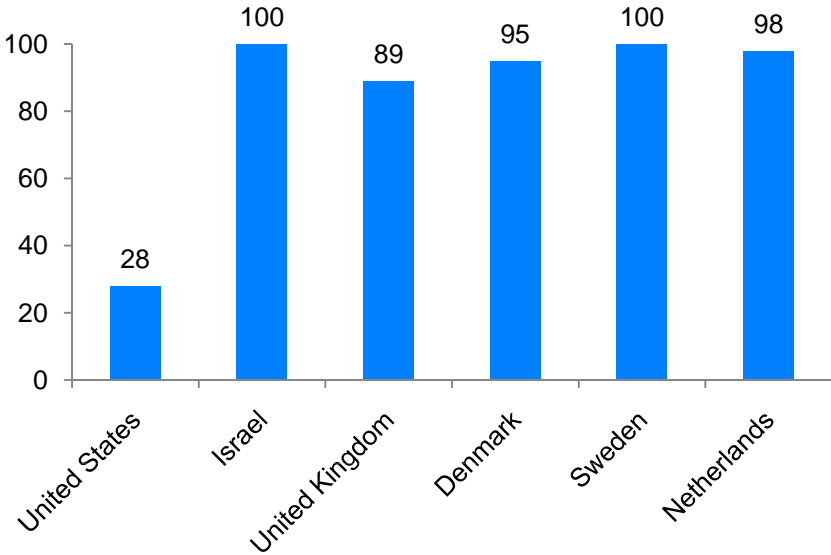
CHF: Change of medical services usage in the first year



Minimal Savings per patient in the first year: **US\$1,000**

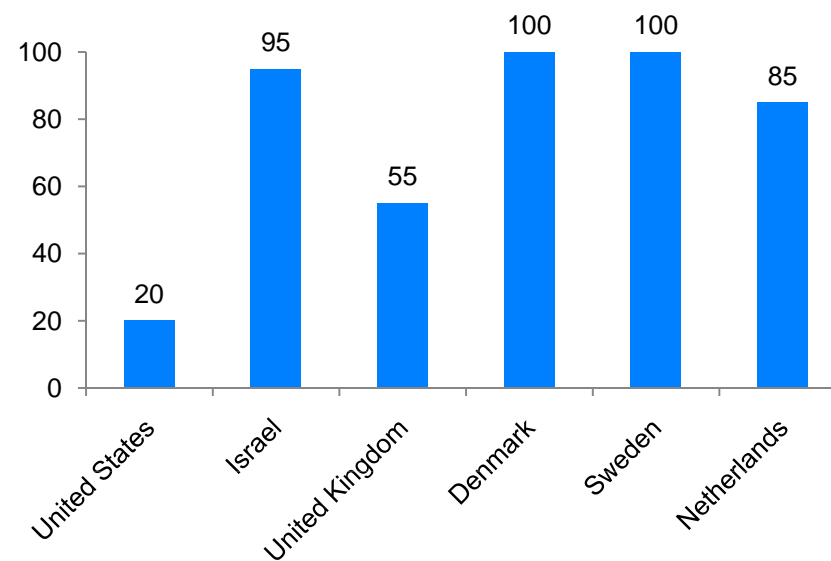
International Comparative Health Indicators

Use of EHR Systems By Primary Care Physicians



Source: The Information Technology & Innovation Foundation, September 2009

Use of E-Prescribing By Primary Care Physicians

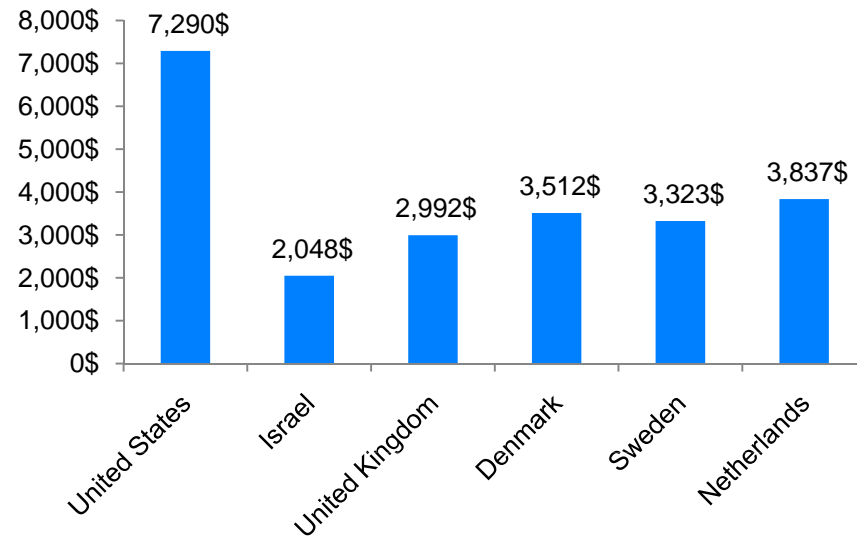


Source: *The Information Technology & Innovation Foundation, September 2009*

Still need to be done

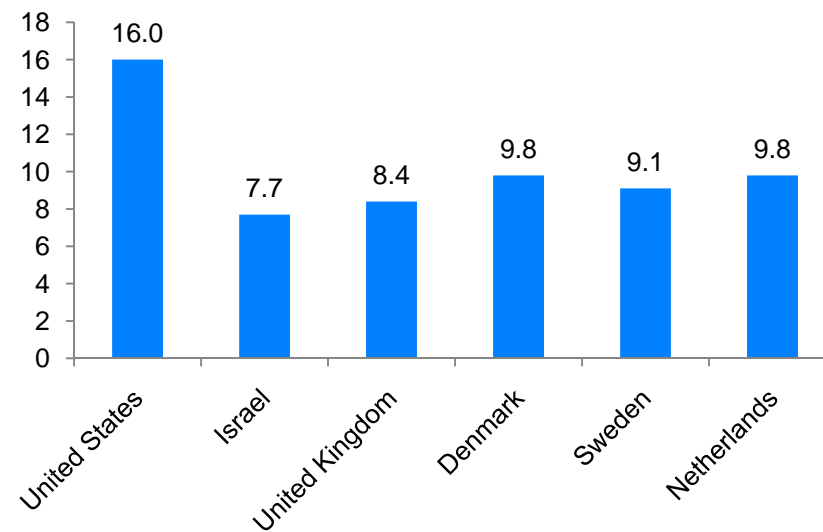
- National EHR & National Super HIE
- Better Hospital EMR Systems and Interoperability
- Better Clinical Decision Support Systems

Total health expenditure per capita In U.S. dollars (2007)



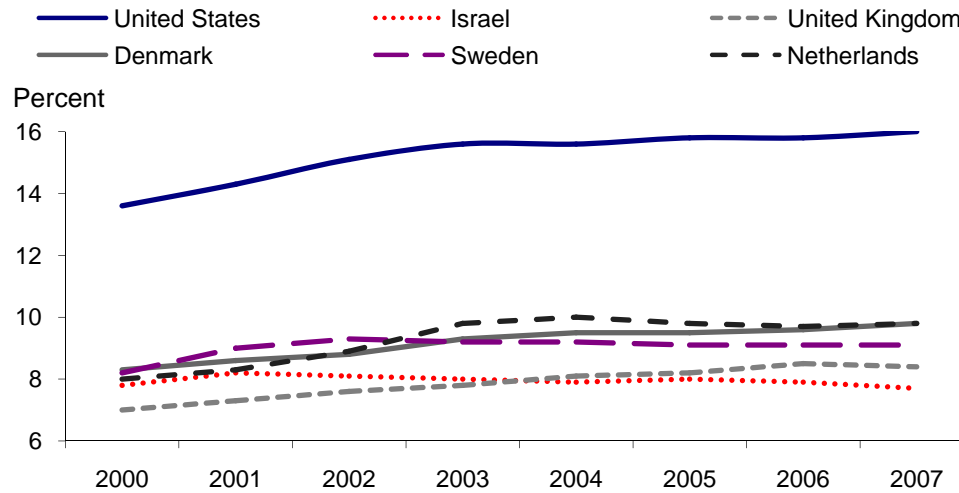
Source: OECD Health Data 2009, November 2009

Total expenditure on health care, percent of GDP (2007)



Source: OECD Health Data 2009, November 2009

Total health expenditure percent of GDP (2000–2007)



Sources: OECD Health Data 2009 and Israel Central Bureau Of Statistics

Comparative Statistics

Common indicators of a country's Quality of life

	Israel	USA
Life expectancy at birth (years) female	82	80
Life expectancy at birth (years) male	79	75
Infant mortality rate (per 1,000 live births) both sexes, 2006	4	7

Source: www.who.int (accessed March 23, 2009).

Insights

- **Health IT is the stepping stone** for cost control and better medicine
- **Pass the record level to the integrated level** – health information exchange changes your game
- **Make it to the “tipping point”** – manage your IT and manage the change. You must have enough people using the system and enough records on the system to enjoy interoperability

Insights

- **In the end it's a culture change** – this is not about hardware and software, but rather a huge cultural and organizational change
- **People! People! People!** (all stakeholders - not only the medical staff)
- **Align incentives** and make sure they are working
- **Begin with quick wins (low hanging fruits)** – people need to know they are successful. **Be patient** – change takes time

Insights

- **Insist on ROI and getting the systems you really need.** Don't waste money on unnecessary IT
- **Electronic health records are only one aspect.** Other systems can give you great ROI, even if they attend to only part of the problem
- **Learn from other's experience** –no need to repeat other's mistakes

What Can Israel Contribute to the ARRA HIT Reform



- More than 100 HIT companies, in addition to the highly innovative medical device industry, based mainly around HIT solutions
- Know how, especially in the implementation phase and change management
- Expertise in some niche fields, such as telemedicine, PHR & research

Conclusion

Israel's experience, expertise, and innovation in health IT can provide useful models and solutions for driving better quality measures, lower costs, and increase market efficiency in the U.S. health-care system



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What Does the American Recovery and Reinvestment Act Mean for Israeli Collaborative Opportunities?

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THANK YOU

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