

# History of EBM

- The name of EBM appeared in 1992 by group led by **Gordon Guyatt** at McMaster University in Canada.
- Since then the number of articles about evidence based practice has grown exponentially from one publication in 1992 to about 1000 in 1998 and international interest has led to the development of six evidence based journals that summarize the most relevant studies in clinical practice and have a combined worldwide circulation of over 175000.

# EBM Feb 17 2012

Google scholar   [Advanced Scholar Search](#)

[My Citations](#)

Scholar Articles excluding patents ▾ anytime ▾ include citations ▾  **Results 1 - 10 of about 1,440,000. (0.15 sec)**

## Evidence based medicine

F Davideff, B Haynes, D Sackett... - Bmj, 1995 - bmj.com

Busy doctors have never had time to read all the journals in their disciplines. There are, for example, about 20 clinical journals in adult internal **medicine** that report studies of direct importance to clinical practice, and in 1992 these journals included over 6000 articles with ...

[Cited by 508](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

[\[PDF\] from nih.gov](#)

## Evidence-based medicine

G Guyatt, J Cairns, D Churchill, D Cook... - JAMA: The Journal of ..., 1992 - Am Med Assoc

1. Departments of **Medicine** and Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario; Department of **Medicine**, McMaster University; Department of Clinical Epidemiology and Biostatistics, McMaster University and Departments of Health ...

[Cited by 417](#) - [Related articles](#) - [All 2 versions](#)

# Literature Searching

- Can improve the treatment of medical inpatients, even those already receiving evidence-based treatment.
  - Random sample of 146 inpatients cared for by 33 internal medicine attending physicians.
  - After physicians committed to a specific diagnosis and treatment plan, investigators performed standardized literature searches and provided the search results to the attending physicians.
  - Attending physicians changed treatment for 23 (**18%**) of the 130 eligible patients as a result of the literature searches.\*

\*. Lucas BP, Evans AT, et al. The impact of evidence on physician's inpatient treatment decisions. J Gen Intern Med 2004;19:402-409.

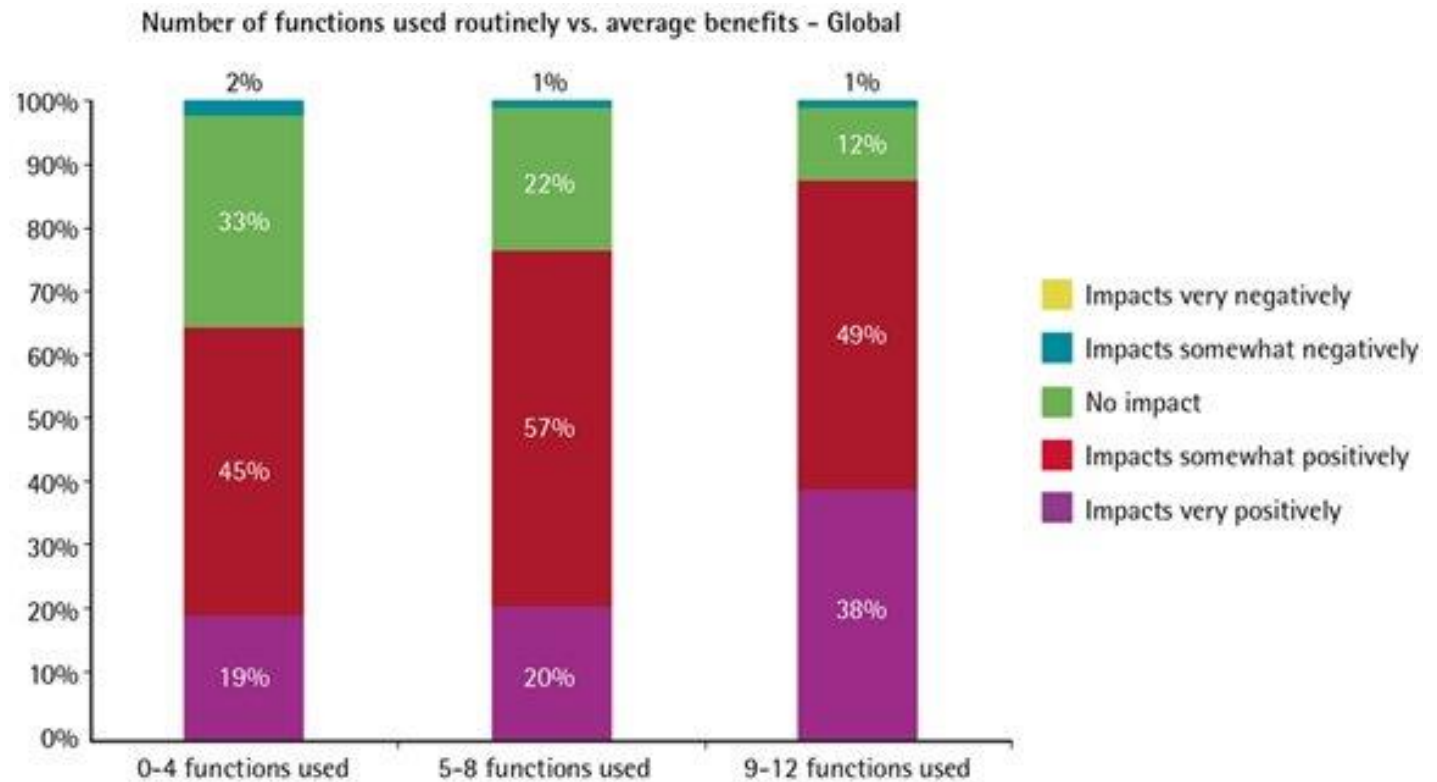
# Example Medical Records

# The Accenture study

- The Accenture survey asked physicians about the extent to which they used **12** different “functions” of EMR and HIS such as electronic entry of patient notes, electronic referrals, electronic ordering and prescribing and communicating with other physicians or patients via secure email.
- By [Jim Burke, Managing Director, Accenture UK Health Industry](#) Published Friday, 3 February 2012 –
- Research among more than 3,700 doctors in eight countries reveals ripe opportunities to accelerate broad healthcare IT initiatives, according to a new survey from Accenture

# The Accenture study

- The findings clearly show that the broadest, fastest path to integrated, effective health practices requires outreach, education and changing mindsets.
- Results showed that physicians who are routine users of a wider range of healthcare IT functions have a **more positive attitude** towards these technologies. On average across all the countries, as physicians start to use more “functions” the more positive they are about the benefits



**Figure 1 Average Benefits of Functions Used Routinely -- The Accenture eight-country physician survey found, as the number of routinely used healthcare IT functions increases, doctors' overall perception of the benefits grows more positive**

# The Accenture study

- Majority of doctors surveyed believe that healthcare IT does provide some common top benefits, including;
- better **access**, **quality** data for clinical research (70.9%),
- improved coordination of care (69.1 %)
- reduction in medical errors (66 %).
- average score of 61 %,
- In England, physicians perceived other healthcare IT benefits to include: increased speed of access to health services to patients (55.3 %), reduced number of unnecessary interventions and procedures (52 %).



# Veterans Health

- Veterans Health, which runs the largest and one of the most cost-effective healthcare systems in the United States. The VA has been employing tele-health tools for more than 11 years. “The VA is absolutely a pioneer in the use of telehealth,” They published a study linking telehealth and 17,000 VA patients with chronic disease that showed a tremendous impact – nearly a **20 %** reduction in hospital admissions.”.

# Students examples

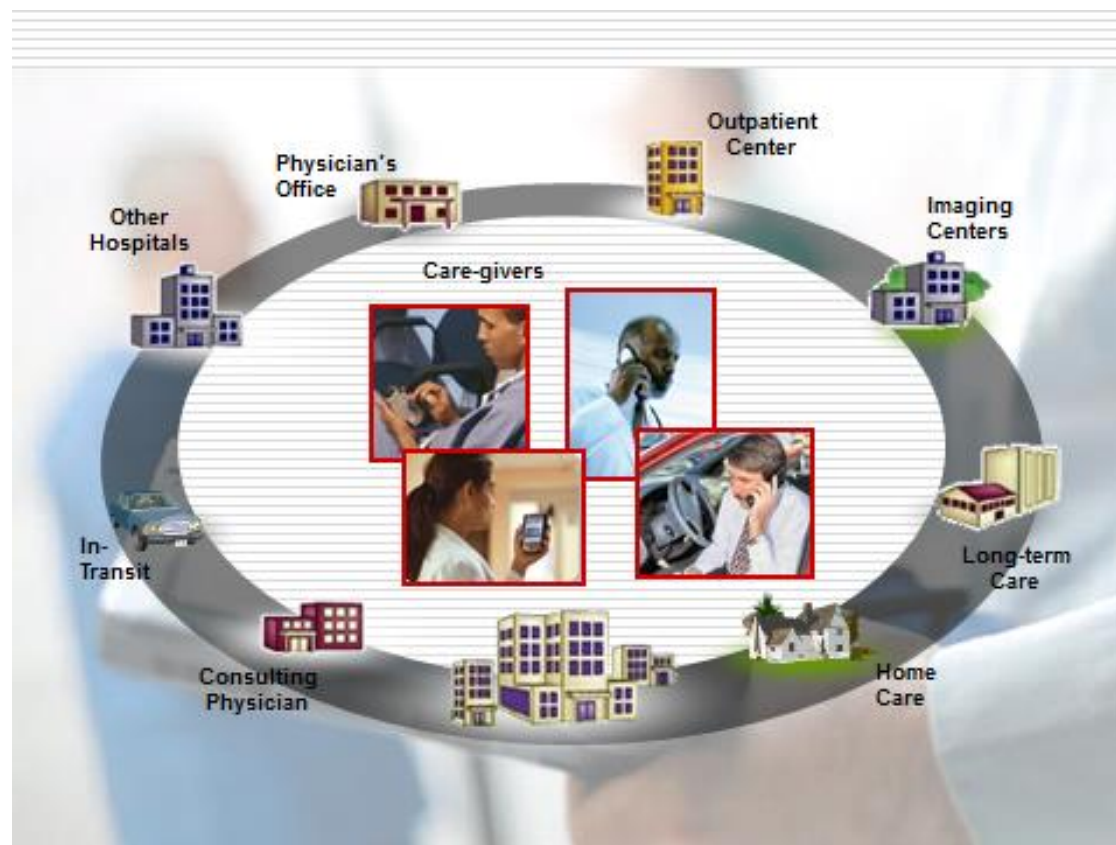


**Wireless in Healthcare**

Lamya Al-Omair

**Mobility is addicting, once you use  
it you can't live without it**





## Conclusion

- ❑ Healthcare professionals **acceptance** seems to be one of the **keys** to success for this new industry.
- ❑ We may **dream** of delivering healthcare without being forced to use network cables or **tripping** over computer wires.



# Towered Electronic Health Record

*Done By:  
Ohood Al Fakhri  
Medical Informatics  
Dr. Ahmed Al Barrak*





## BARRIERS AND ISSUES

### *Many players and many approaches*

while the expansion of health care providers and services has been a factor behind the call for EHRs and improved sharing of health information, it also means that their implementation requires support from many stakeholders. An individual may now receive care from several physicians and other providers at once. Policies to govern the implementation and use of EHRs will therefore require the support of many different provider groups.



## **BARRIERS AND ISSUES**

### ***Lack of a health network architecture***

Privacy issue:

- What information should be included in the EHR?
- Who should have access to the EHR? Which information in the EHR and under what circumstances should the EHR be shared with other health providers? How will a patient be able to access his or her own EHR?
- In what instances can the information in an EHR be used for secondary purposes (e.g. research, administration)? When is consent from the patient required?

