

# Doctors and other Providers – and clinicians in general

## ELECTRONIC CODE OF FEDERAL REGULATIONS

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Refine this search

Search database: *Electronic Code of Federal Regulations*  
For: "(SECTION = "HEALTH CARE PROVIDER")"

Display Results: 1 to 50 of 267 Total Results  
Ordered By: Relevance

1 | 51 | 101 | 151 | 201 | 251 | Next>

Title 45: Public Welfare

### PART 162—ADMINISTRATIVE REQUIREMENTS

Subpart D—Standard Unique Health Identifier for Health Care Providers

[1] §162.414 Implementation specifications: Health care clearinghouses. [Context]

[2] §162.412 Implementation specifications: Health plans. [Context]

Subpart M—Referral Certification and Authorization

[3] §162.1301 Referral certification and authorization transaction. [Context]

Title 47: Telecommunication

### PART 54—UNIVERSAL SERVICE

Subpart G—Universal Service Support for Health Care Providers

[4] §54.649 Certifications. [Context]

Title 45: Public Welfare

### PART 162—ADMINISTRATIVE REQUIREMENTS

Subpart D—Standard Unique Health Identifier for Health Care Providers

[5] §162.408 National Provider System. [Context]

Title 47: Telecommunication

### PART 54—UNIVERSAL SERVICE

Subpart G—Universal Service Support for Health Care Providers

[6] §54.601 Health care provider eligibility. [Context]

Title 21: Food and Drugs

### PART 880—GENERAL HOSPITAL AND PERSONAL USE DEVICES

Subpart G—General Hospital and Personal Use Miscellaneous Devices

[7] §880.6870 Dry-heat sterilizer. [Context]

[8] §880.6880 Steam sterilizer. [Context]

In the context of the US Government, Health Care Providers are defined explicitly for the purpose of federal regulation.

In our context, we define a health care provider more generally as anyone who provides some form of health care or wellbeing coaching, training, or support.

# Translational Medicine - two worlds of biomedical data



## Molecular Data

Chemistry, Biology, Toxicology  
Chemical compounds / Drugs  
Proteins and Genes  
Bioassay  
Gene expression / MicroArray

## Patient Data

Physicians, Clinical Trials, Patients  
Observed side effects & adverse events  
Observational clinical studies  
Electronic medical records  
Epidemiology & demographic  
Phenotypic data  
Web & social media

# Patient-based data



## How to read a paper

On this page you will find links to articles in the *BMJ* that explain how to read and interpret different kinds of research papers:

- [Papers that go beyond numbers \(qualitative research\)](#) Trisha Greenhalgh, Rod Taylor
- [Papers that summarise other papers \(systematic reviews and meta-analyses\)](#) Trisha Greenhalgh
- [Papers that tell you what things cost \(economic analyses\)](#) Trisha Greenhalgh
- [Papers that report diagnostic or screening tests](#) Trisha Greenhalgh
- [Papers that report drug trials](#) Trisha Greenhalgh
- [Statistics for the non-statistician. II: "Significant" relations and their pitfalls](#) Trisha Greenhalgh
- [Statistics for the non-statistician](#) Trisha Greenhalgh
- [Assessing the methodological quality of published papers](#) Trisha Greenhalgh
- [Getting your bearings \(deciding what the paper is about\)](#) Trisha Greenhalgh
- [The Medline database](#) Trisha Greenhalgh

# Health Information Technology for Economic and Clinical Health Act (HITECH)

- Part of the American Recovery and Reinvestment Act of 2009
- promoted adoption and **meaningful use** of health information technology.
- Mandates audits of health care providers for compliance with the HIPAA
- Outlined adoption of **electronic health records** through **meaningful use**.

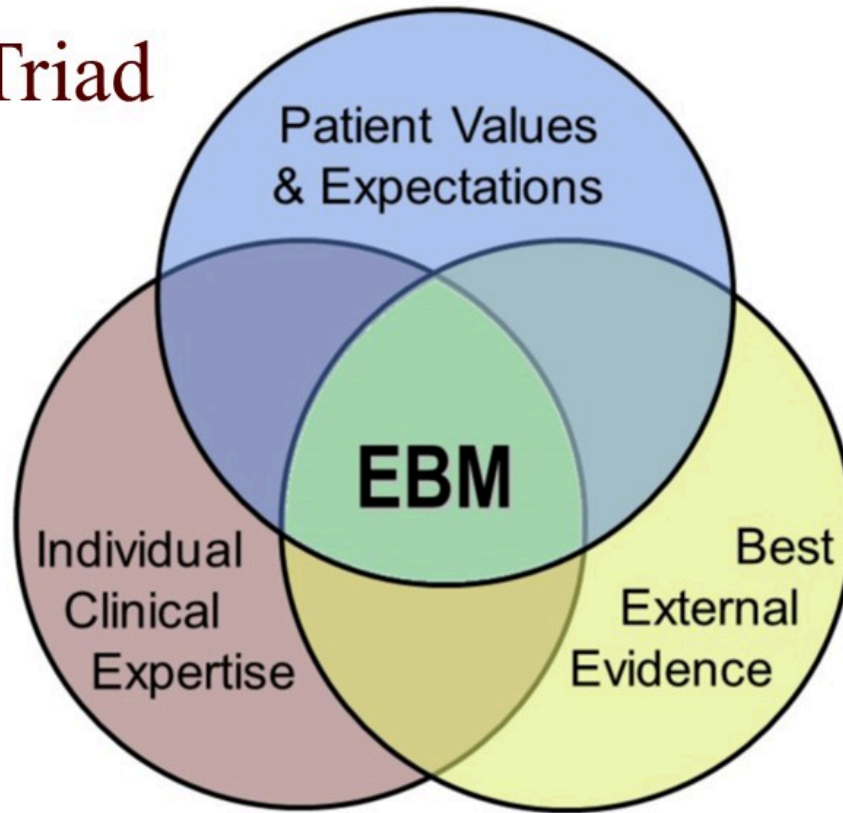
CMS Incentive programs have evolved into three stages of meaningful use

# Evidence Based Medicine

Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.

Evidence based medicine - what it is and what it isn't. David Sackett *et. al* BMJ 1996;312:71-72.

## The EBM Triad



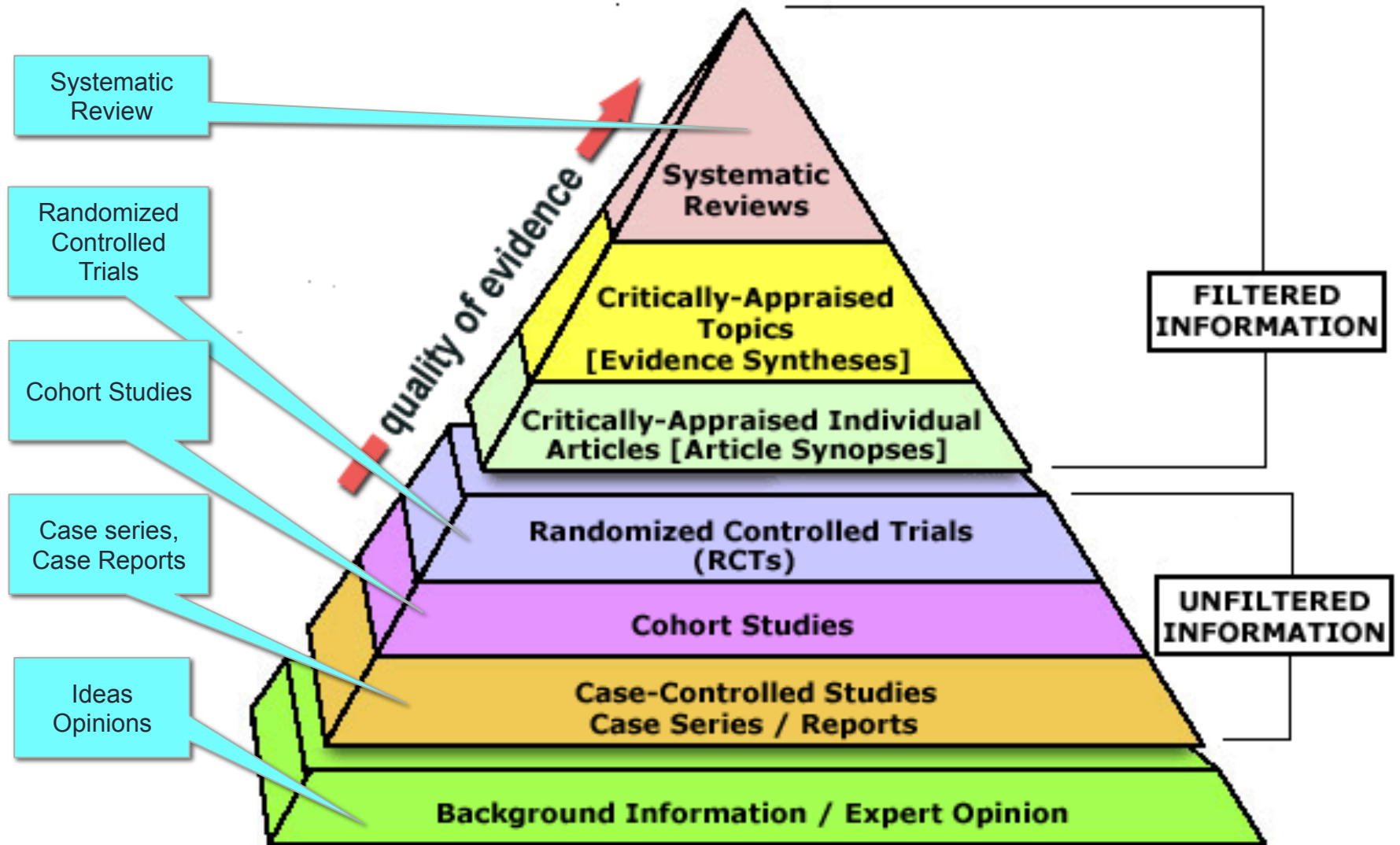
**Tutorial** on EBM here:  
<http://med.fsu.edu/index.cfm?page=medicalinformatics.ebmTutorial>

Armstrong, E.C. (2003) Harnessing new technologies while preserving basic values. *Fam Sys & Health*, (21)4, 351-355.

<https://www.sciencenews.org/blog/context/evidence-based-medicine-actually-isnt>

<http://www.ebm.med.ualberta.ca/EbmIntro.html#> (EBM Toolkit)

# Evidence Based Medicine



# Evidence Based Medicine



**Conscientious** – being careful, and thorough, in what you do

**Explicit** – being “up-front”, open, clear and transparent

**Judicious** – using good judgement and common sense

## **Original Definition:**

“Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence **in making decisions about the care of individual patients.**”

## **Alternative definition :**

"Evidence-based practice is the conscientious explicit and judicious use of current best evidence in **helping individual patients make decisions about their care in the light of their personal values and beliefs**"

**[Notice the shift from doctor makes decisions to patient makes decisions]**

# Meaningful Use

Meaningful use is using certified electronic health record (EHR) technology to:

- Improve quality, safety, efficiency, and reduce health disparities.
- Engage patients and family.
- Improve care coordination, and population and public health.
- Maintain privacy and security of patient health information.

Ultimately, it is hoped that the meaningful use compliance will result in:

- Better clinical outcomes
- Improved population health outcomes
- Increased transparency and efficiency
- Empowered individuals
- More robust research data on health systems





# Meaningful Use



Eligible professionals and hospitals **must become meaningful users of certified EHRs** to qualify for **incentive payments [and later penalties]** through the Medicare EHR Incentive Program administered by CMS.

The meaningful use criteria, objectives and measures evolve in **three stages over the five years**

## Stage 1 2011-2012

Data capture and sharing

## Stage 2 2014

Advance clinical processes

## Stage 3 2016

Improved outcomes

Stage 1: Meaningful use criteria focus on:	Stage 2: Meaningful use criteria focus on:	Stage 3: Meaningful use criteria focus on:
Electronically capturing health information in a standardized format	More rigorous health information exchange (HIE)	Improving quality, safety, and efficiency, leading to improved health outcomes
Using that information to track key clinical conditions	Increased requirements for e-prescribing and incorporating lab results	Decision support for national high-priority conditions
Communicating that information for care coordination processes	Electronic transmission of patient care summaries across multiple settings	Patient access to self-management tools
Initiating the reporting of clinical quality measures and public health information	More patient-controlled data	Access to comprehensive patient data through patient-centered HIE
Using information to engage patients and their families in their care		Improving population health

# Protected Health Information (PHI)

## Health Insurance Portability and Accountability Act (HIPAA)

### Protected Health Information (PHI)

Any **information in a medical record that can be used to identify an individual**, and that was created, used, or disclosed in the course of providing a health care service, such as a diagnosis or treatment. It generally refers to demographic **information**, medical history, test and laboratory results, **insurance information** and other data that a healthcare professional collects to identify an individual and determine appropriate care.

### Health Insurance Portability and Accountability Act (HIPAA)

US legislation (1996) that provides data privacy and security provisions for safeguarding medical information.

The **HIPAA** Privacy Rule protects most “individually identifiable **health information**” held or transmitted by a covered entity or its business associate, in any form or medium, whether electronic, on paper, or oral. The Privacy Rule calls this **information protected health information (PHI)**

The Health Information Technology for Economic and Clinical Health **Act (HITECH Act)** mandates audits of health care providers to investigate and determine if they are in compliance with the **HIPAA** Privacy Rule (effective in 2003) and Security Rule (effective in 2005).

<https://www.hhs.gov/hipaa>

# Electronic Medical Records

Patient Chart Communication

**Demo, Father** 5465 05-Mar-1955 (50) M **CHART REVIEW** 28-Jul-2005 10:15 USER.DEMO

**Problem List** Active Only Set as Today's POV Add Edit Delete

ID	Provider Narrative	Status	Entered	Onset	Notes	Modified	Provider	ICD	ICD Name
SOU3	TYPE 2 DIABETES MELLITUS	Active	03/11/2000	03/11/2000		03/11/2000		250.00	DM UNCOMPL/T-II/NIDDM,NS
SOU1	HYPERTENSION	Active	02/04/2000	01/19/1999	In Spite Of Regular Exercise, I'm Putting Client On Medication.	07/18/2005		401.9	HYPERTENSION NOS

**ICD Pick-Lists:** Display: ☐ Freq. Rank ☐ Code ☐ Description Cols: 5

**Administrative** ☐ Administrative Encounter Nec ☐ Chest Pain ☐ Diabetic Retinopathy ☐ Fibromyalgias ☐ Hypothyroid

**Medicine Pick List** ☐ Atypical Chest Pain ☐ Chf ☐ Diverticulosis ☐ Gallstones ☐ Ibs

**Obgyn Pick List** ☐ B 12 Def ☐ Chronic Anticoag ☐ Dm Type 2 Uncntrl ☐ Gastritis ☐ Insomnia

**Optometry** ☐ Bipolar Disorder ☐ Chronic Pain ☐ Dyshidrosis ☐ Gastroenteritis ☐ Issue Doctors Statement

**Peds Pick List** ☐ Bronchitis ☐ Cirrhosis ☐ Eczema Chronic ☐ Gerd ☐ Issue Of Repeat Prescriptions

☐ Cad ☐ Copd ☐ Encounters For Unspecified Admini ☐ Glaucoma ☐ Lbp

☐ Carpal Tunnel ☐ Crohn's ☐ Esrd ☐ Headache ☐ Left Without Treatment Complete

☐ Cerebral Palsy ☐ Depression ☐ Family Planning ☒ Htn ☐ Malnutrition

Show All

**Historical Diagnosis** Add to PL Set as POV

Visit Date	POV Narrative	ICD	ICD N
07/22/2005	Fractured femur	.9999	Uncod
07/22/2005	TYPE 2 DIABETES MELLITUS	250.00	Dm Ur Uncon
07/18/2005	HYPERTENSION	401.9	Hypert
07/18/2005	Fractured femur	.9999	Uncod
06/28/2005	TYPE 2 DIABETES MELLITUS	250.00	Dm Ur Uncon
06/28/2005	HYPERTENSION	401.9	Hypert
05/16/2005	TYPE 2 DIABETES MELLITUS	250.00	Dm Ur Uncon
05/16/2005	Genital warts contracted in Viet Nam	078.11	Viral,ct Acumir
12/16/2004	hypertension	401.1	Benigr
03/11/2000	TYPE 2 DIABETES	250.00	Dm Ur

**Visit Diagnosis:** Add Edit Delete

Provider Narrative	ICD	ICD Name	Priority	Cause	Injury Date	Injury Cause	Injury Place	Modifi
TYPE 2 DIABETES MELLITUS	250.00	DM UNCOMPL/T-II/NIDDM,NS UNCON	Primary					
HYPERTENSION	401.9	HYPERTENSION NOS	Secondary					
Hyperopia	367.0	HYPERMETROPIA	Secondary					
Extradural Hemorrhage								

**Hyperopia**

**Chief Complaint:** I broke my ankle <user,demo>

**Vitals:** WT:200 (91 kg), HT:65 (165 cm), TMP:98.7 (37.1 C), BP:120/80, PU:72, RS:16, PA:7, CXD:5 BMI = 33.3 (Obesity - Class 1)

**Immunizations:** DTAP

Notifications Cover Sheet Triage Wellness Notes Services **Prob/POV** Orders Medications Labs D/C Summ Reports Consults

USER.DEMO DEMO.CIAINFORMATICS.COM DEMO HOSPITAL 15-Aug-2005 16:59

# Electronic Medical Records



[Unit 1: Common Commercial Electronic Health Record \(EHR\) Systems Used in Healthcare](#)

[Unit 2: Certification of Commercial EHRs](#)

[Unit 3: How Do Organizations Select an EHR? Lessons From the Front Lines](#)

[Unit 4: Electronic Health Record Functionality](#)

[Unit 5: System and Database Architectures Used in Commercial EHRs](#)

[Unit 6: Vendor Strategies for Terminology, Knowledge Management, and Data Exchange](#)

[Unit 7: Assessing Decision Support Capabilities of Commercial EHRs](#)

[Unit 8: EHR Go-Live Strategies](#)

<http://www.healthinformaticsforum.com/courses/vendor-specific-electronic-health-records-ehr-systems/unit-1-common-commercial-electronic-health-record-systems-ehr>