

# EBM Resources in the Palm of your Hand

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**King Saud university, School of medicine**

*KFSH & RC, Feb. 2013*

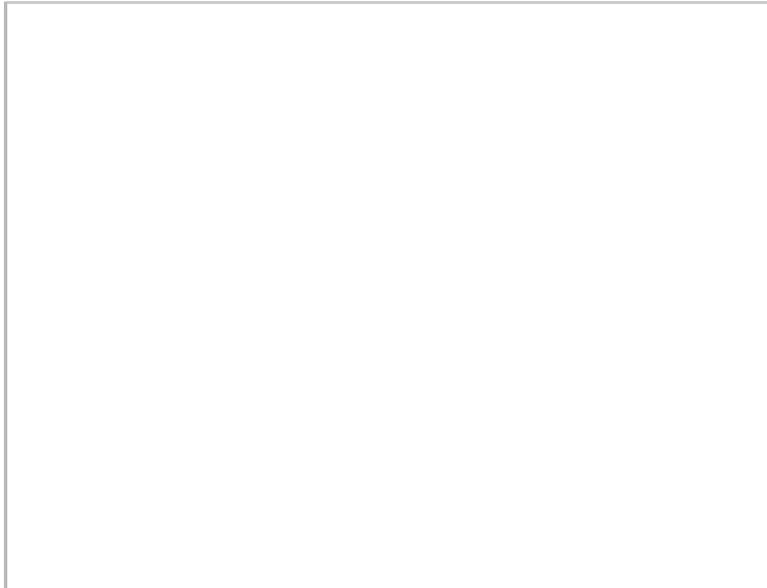


# Use this channel for Questions & Feedback

\* <http://todaysmeet.com/EBM>

**Today'sMeet**

Listen.



[today.io/b12h](http://today.io/b12h) 

[transcript](#) | [projector](#)

Talk.

Message:

106

**How to practice EBM  
using my iPad?**

By submitting this form you agree to the [Privacy Policy](#) and [Terms](#).

Say.



# What is mobile platform?

- \* Platform = a standard for the hardware of a computer system, which determines what kinds of software it can run (Oxford)
  - \* such as: such as Mac OS, Linux or Windows that controls a desktop computer or laptop
- \* Mobile platforms:

# What is the platform of your phone device?

1. Apple's iOS
2. Google's Android
3. Microsoft's Windows Mobile
4. RIM's BlackBerry OS
5. Nokia's Symbian
6. Palm OS
7. Feature phone
8. Other
9. None



# What is the platform of your tablet device?

1. Apple's iOS (iPad)
2. Google's Android
3. Microsoft's Windows
4. RIM's BlackBerry OS
5. Other
6. None

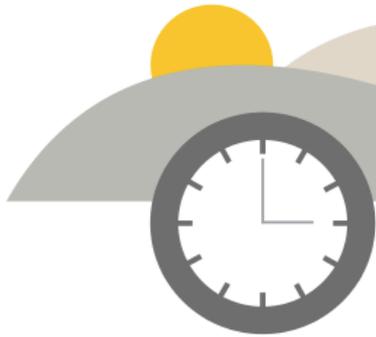


# Context drives device choice

Today consumers own multiple devices and move seamlessly between them throughout the day



The device we choose to use at a particular time is often driven by our **context**:



The amount of **time** we have or need



The **goal** we want to accomplish



Our **location**



Our **attitude** and state of mind

[http://services.google.com/fh/files/misc/multiscreenworld\\_final.pdf](http://services.google.com/fh/files/misc/multiscreenworld_final.pdf)



# Computers keep us productive and informed

## Context:

- Office or home use
- Productive, task-oriented
- Requires lots of time & focus
- Serious, research intensive attitude

# 24%

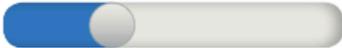
of our daily media interactions occur on a PC

31%  
Out of home

69%  
At home

## PC use is motivated by:

Finding Information  40%

Keep up to date  29%

# Smartphones keep us connected

## Context:

- On-the-go as well as at home
- Communicate and connect
- Short bursts of time
- Need info quickly and immediately

# 38%

of our daily media interactions occur on a smartphone

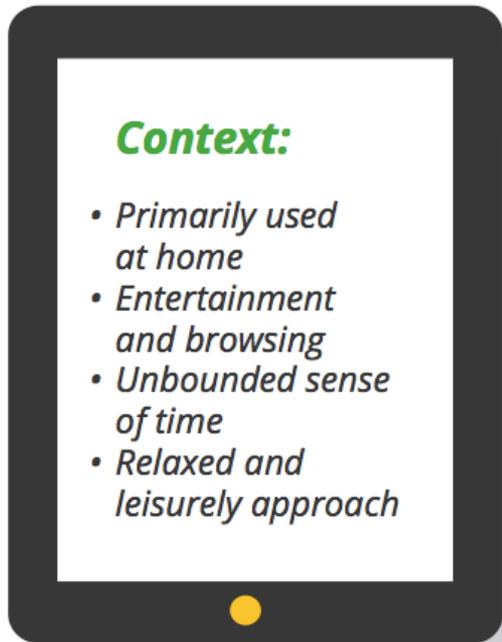
## Smartphone use is motivated by:

Communication  54%

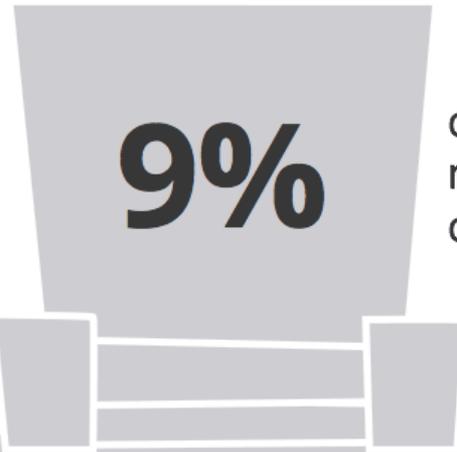
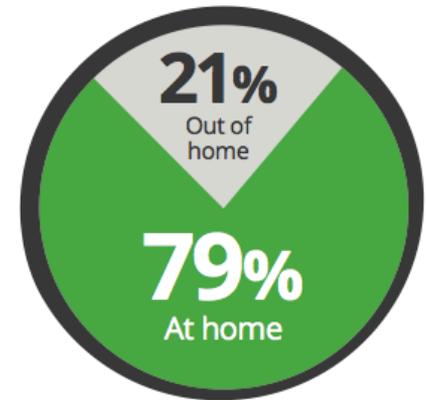
Entertainment  33%



# Tablets keep us entertained



## Tablet use is motivated by:



of our daily media interactions occur on tablets



# Consumer viewpoints on device differences



**"My phone...** I consider it my **personal device**, my go-to device. It's close to me, if I need that quick, precise feedback.

When I need to be more in depth, that's when I start using **my tablet**. The other part of it is where I **disconnect from my work** life and kind of go into where I want to be at the moment..... I'm totally removed from today's reality. I can't get a phone call, I don't check my email **it's my dream world**.

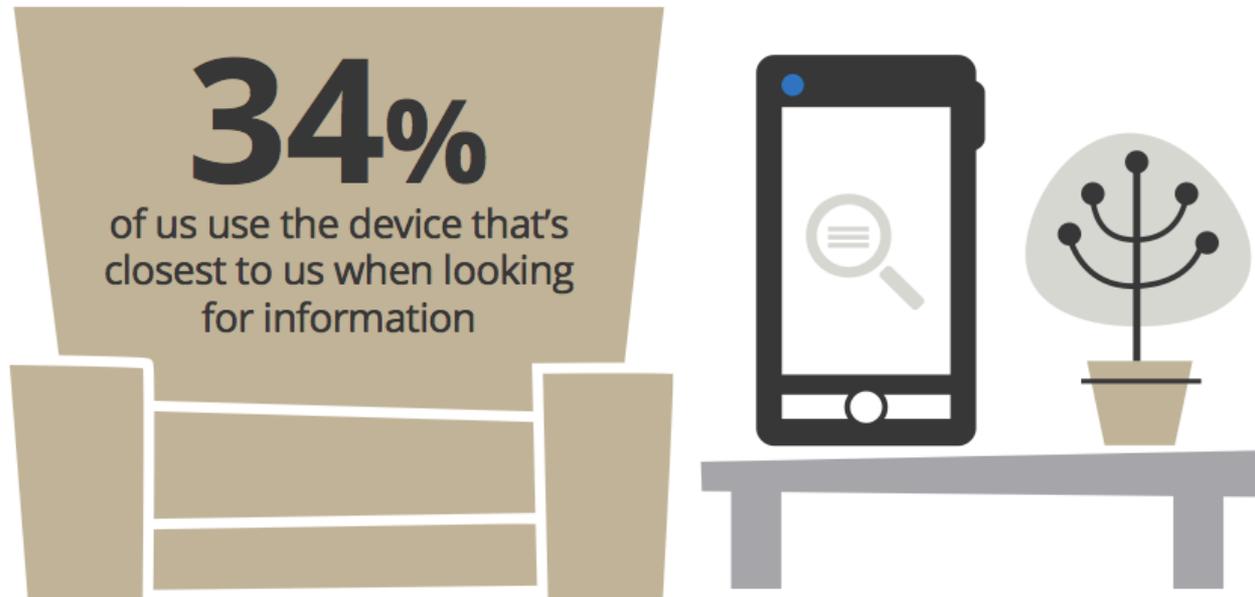
And then moving to the **laptop**, well, for me **that's business**. **That's work**. I feel like I've got to be crunching numbers or doing something."

- Bradley



# Many times we turn to the screen that's closest

While we all have screen preferences for certain activities,  
we are also creatures of convenience



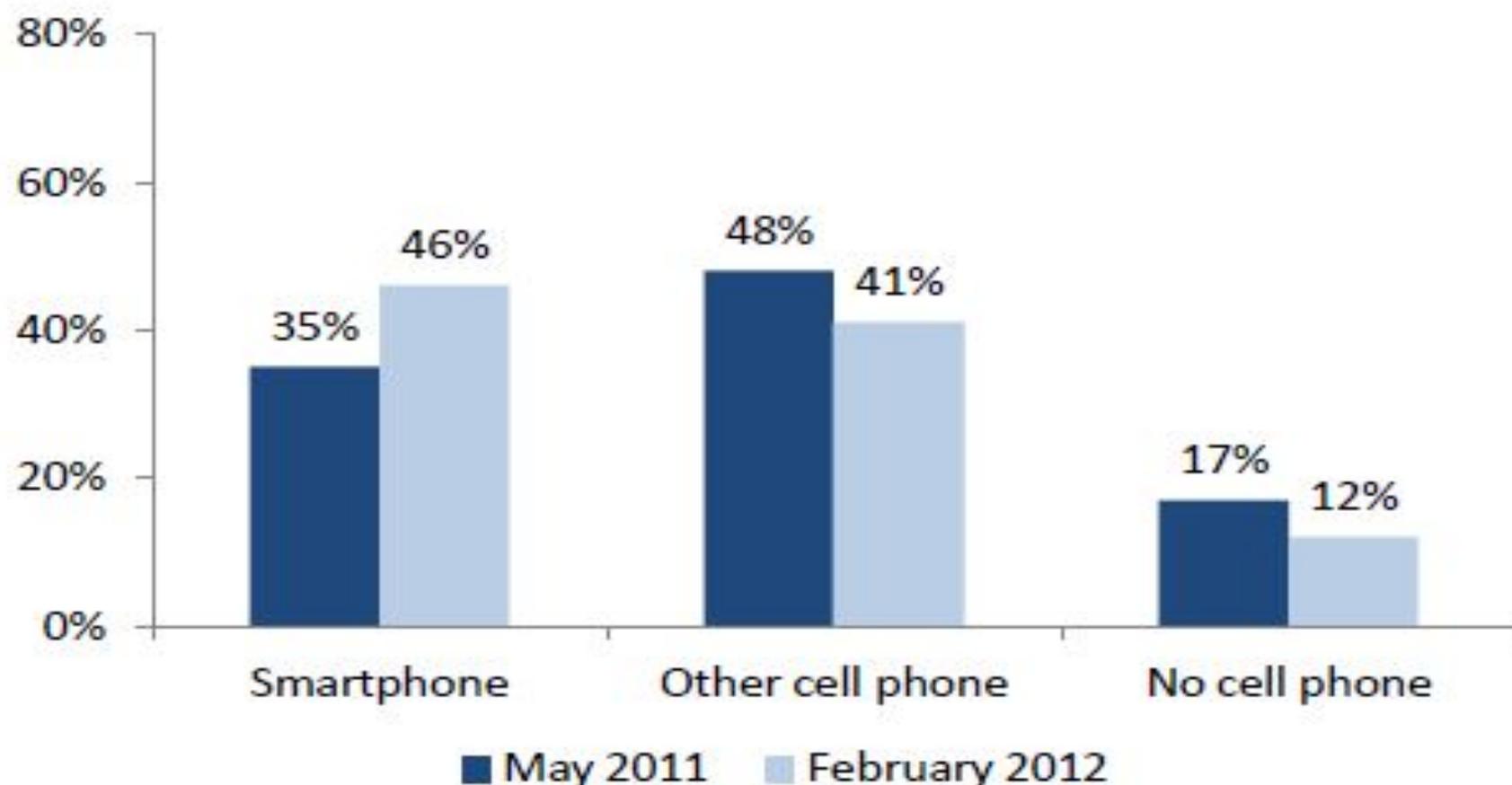
"If I'm watching TV I won't go upstairs to grab my laptop to follow up on a product I see, I'd just pull out my phone." - Sophie

[http://services.google.com/fh/files/misc/multiscreenworld\\_final.pdf](http://services.google.com/fh/files/misc/multiscreenworld_final.pdf)



## Changes in smartphone ownership, 2011-2012

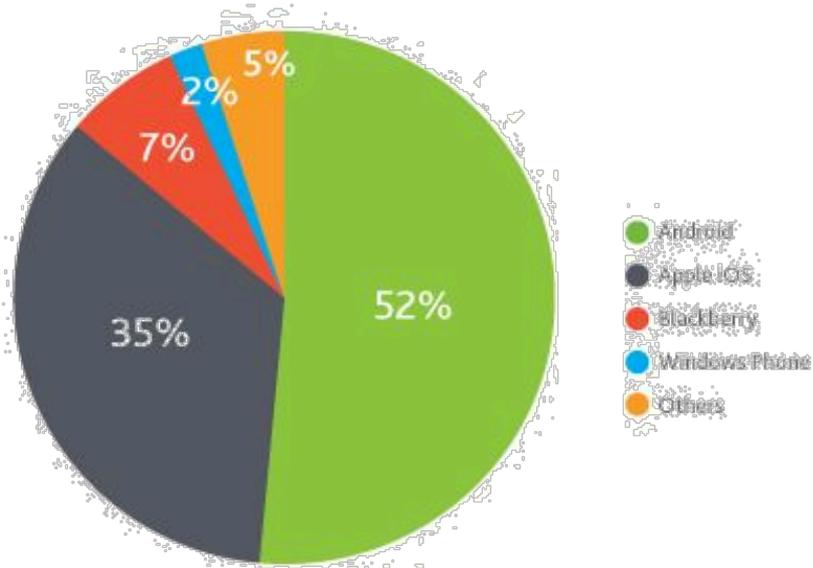
% of US adults who own...



Source: Pew Research Center's Internet & American Life Project April 26-May 22, 2011 and January 20-February 19, 2012 tracking surveys. For 2011 data, n=2,277 adults ages 18 and older, including 755 interviews conducted on respondent's cell phone. For 2012 data, n=2,253 adults and survey includes 901 cell phone interviews. Both 2011 and 2012 data include Spanish-language interviews.

## Top U.S. Smartphone Operating Systems by Market Share

Q3 2012, Nielsen Mobile Insights

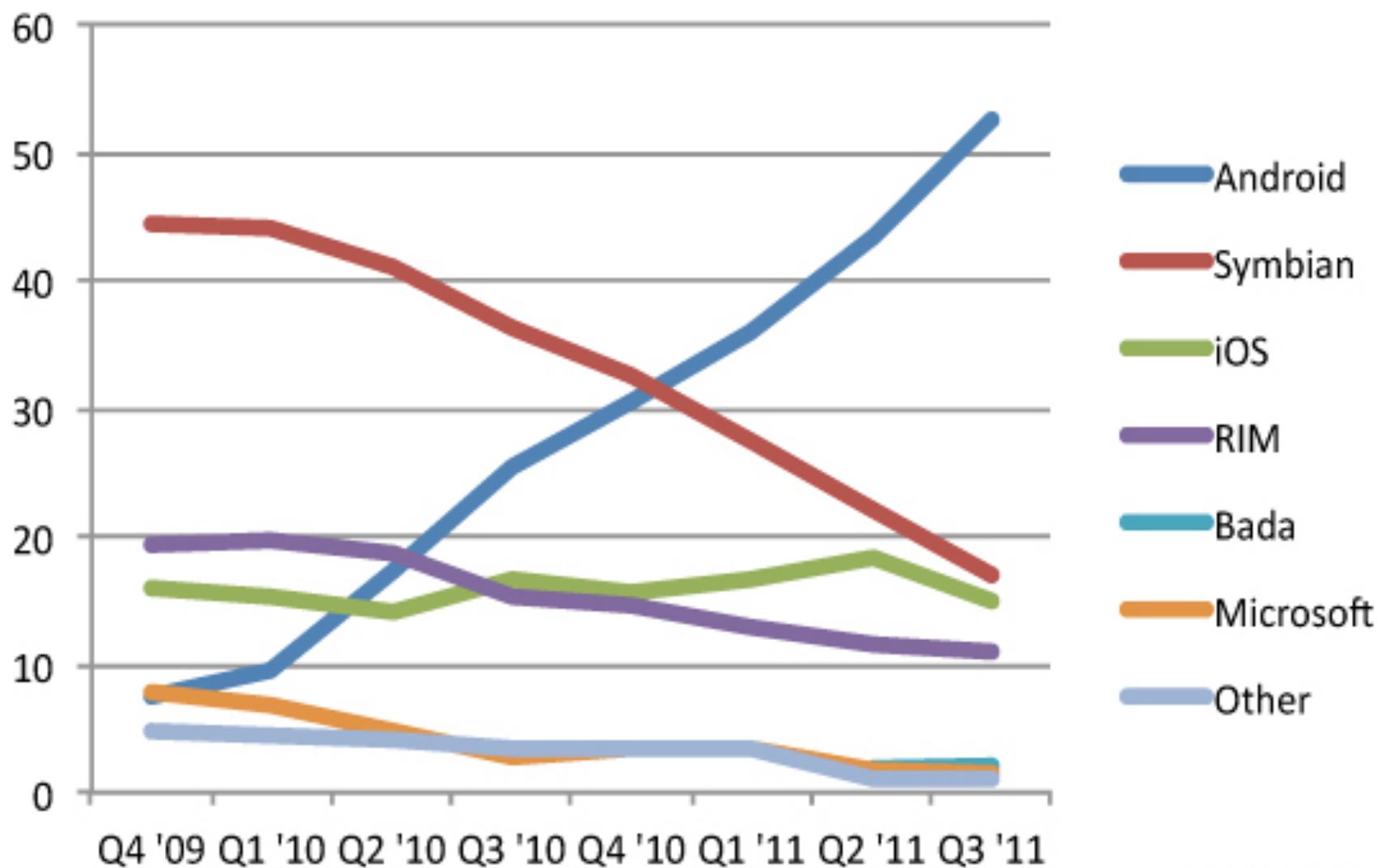


Read as: During Q3 2012, 52% of smartphone owners had a handset that runs on the Android operating system.

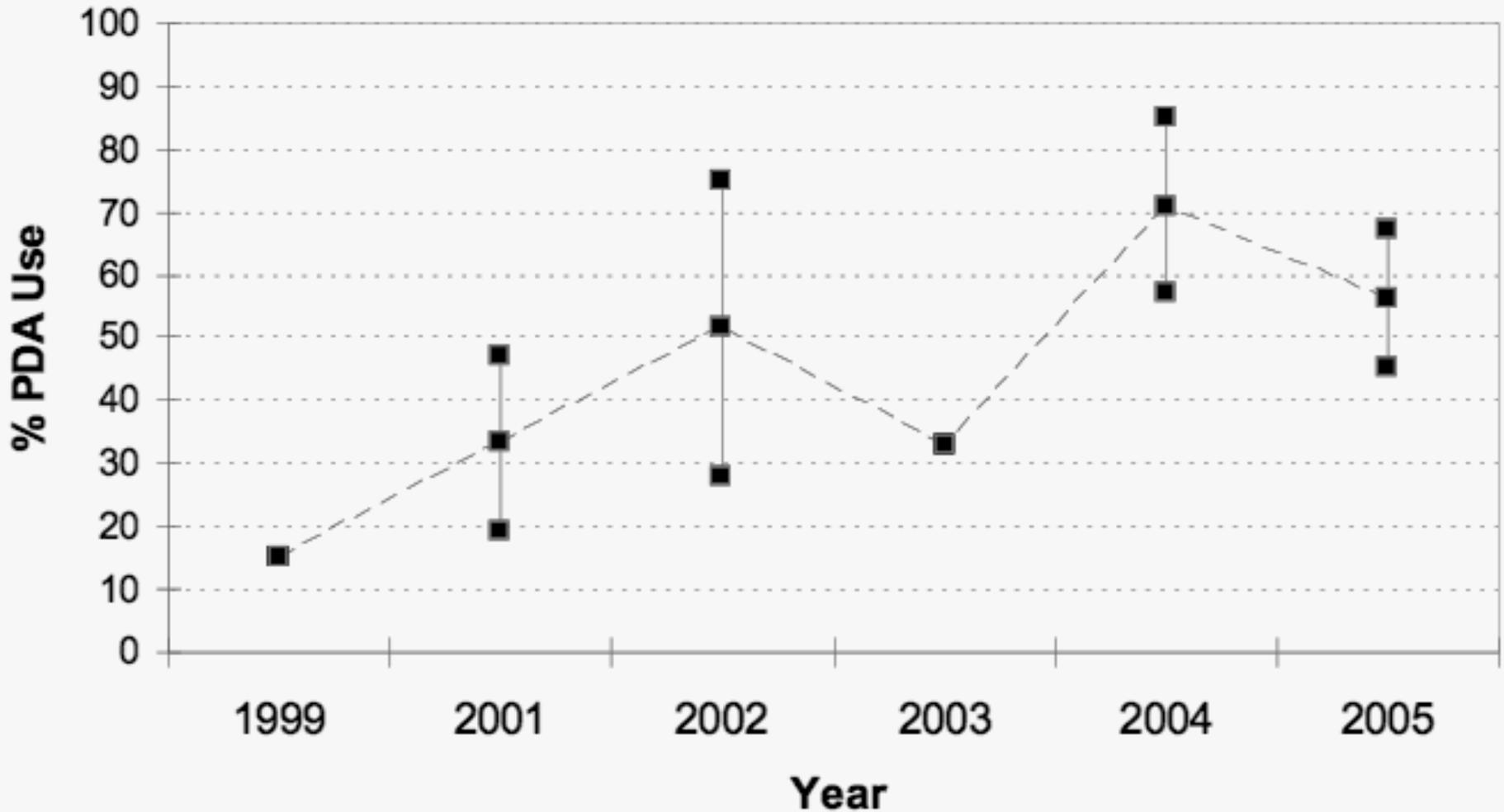
Source: Nielsen



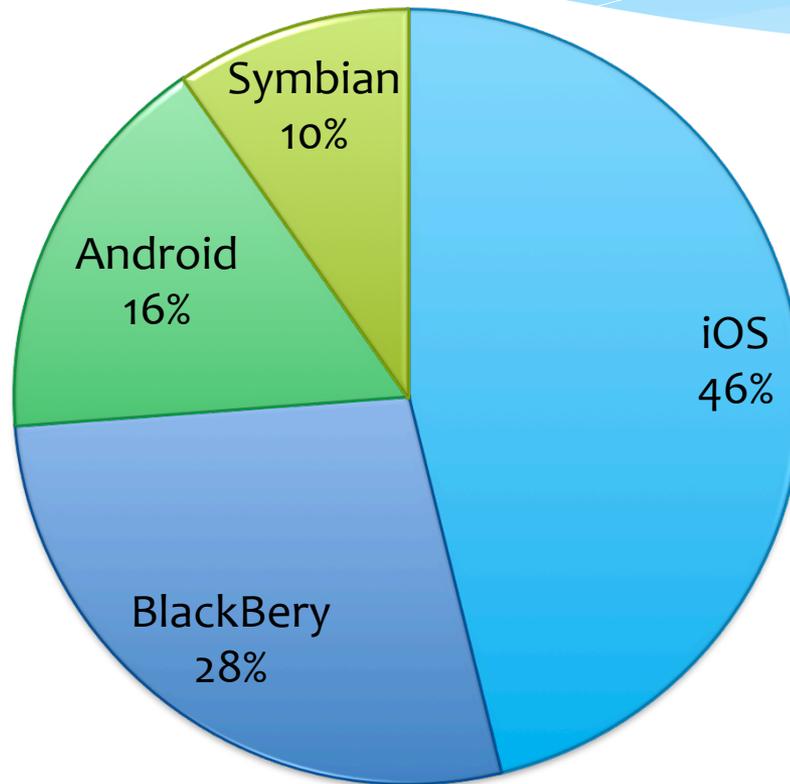
## Market Share For Smartphone Operating Systems



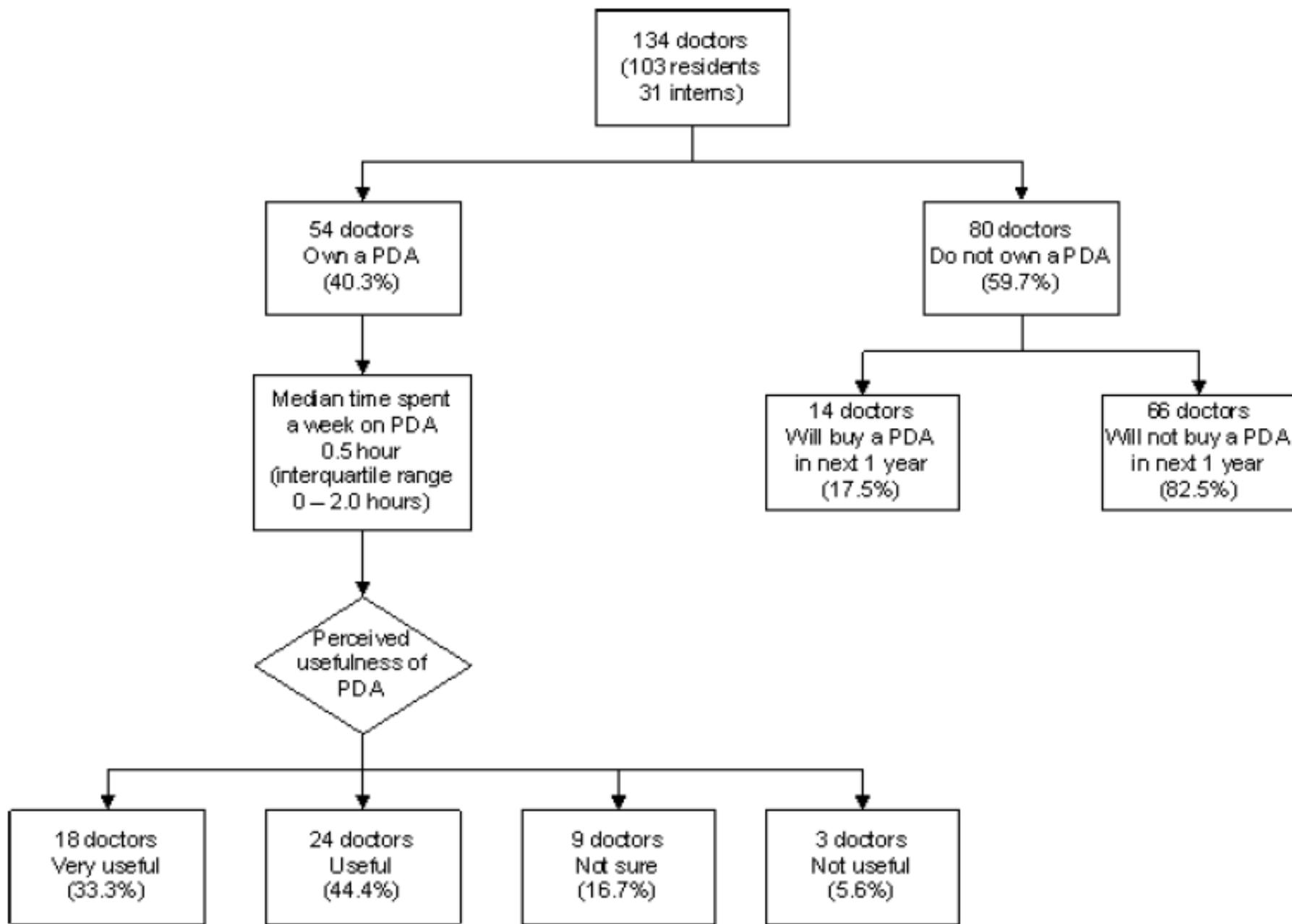
# Range Plots of PDA Usage by Health Care Providers (n=17 surveys)



# Mobile platforms among medical students



Mobile Platforms distribution among 3rd year medical students, KSU; N=145

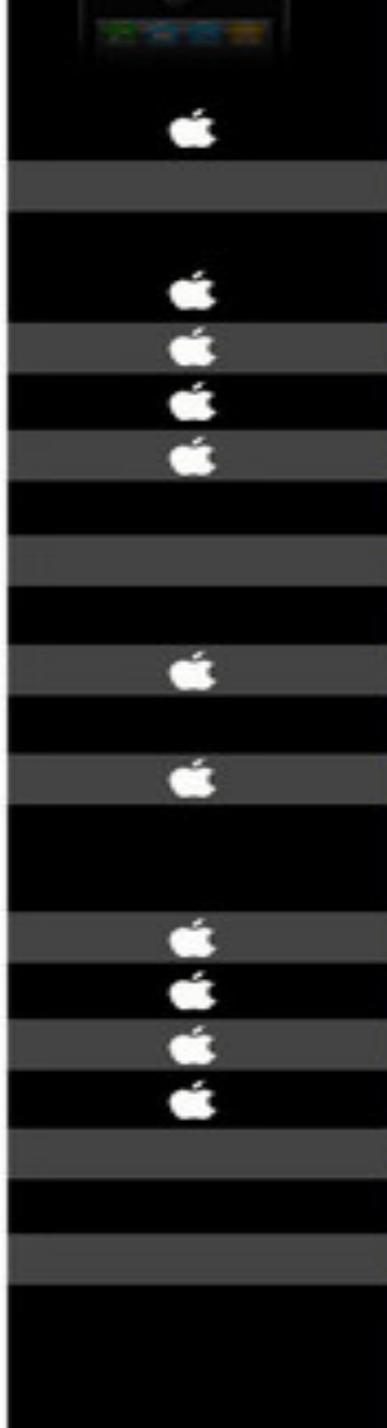


**Figure 1**  
**Doctors' use and perception of the personal digital assistant (PDA).**

**Windows Phone 7**
**iOS (iPhone)**
**Android**

<b>Developer</b>	Microsoft	Apple	Google
<b>Copy/Paste</b>	✗	✓	✓
<b>Multitasking</b>	✗	✓	✓
<b>Flash Support</b>	✗	✗	✓
<b>Silverlight Support</b>	✗	✗	✗
<b>HTML5 Support</b>	✗	✓	✓
<b>Unified Inbox</b>	✗	✓	✓
<b>Exchange Support</b>	✓	✓	✓
<b>Threaded Email</b>	✗	✓	✓
<b>Visual Voicemail</b>	✗	✓	✓
<b>Video Calling</b>	✗	✓	✓ Third Party App
<b>Universal Search</b>	✗	✓	✓
<b>Internet Tethering</b>	✗	✓	✓
<b>Removable Storage</b>	✗	✗	✓
<b>Facebook Integration</b>	✓	✗ (Third Party App)	✓ (Third Party Integration)
<b>Twitter Integration</b>	✗	✗ (Third Party App)	✓ (Third Party Integration)
<b>Folders</b>	Hubs	✓	✓
<b>Apps Organization</b>	Alphabetical	Customizable	Customizable
<b>App Store</b>	1,000+ Apps	300,000+ Apps	90,000+ Apps
<b>Microsoft Office Support</b>	Built-In	Third Party App	Third Party App
<b>Widgets</b>	Tiles on Home Screen	✗	✓
<b>Media Sync</b>	Zune Software Mac & PC	iTunes Mac & PC	Direct File Transfer + Third Party Software
<b>X-Box Live Integration</b>	Built-In	Via Third Party App	Via Third Party App

Ease of Use  
 Openness  
 Battery Life  
 Multitasking  
 Software Keyboard  
 System-Wide Search  
 Notification System  
 Voice-to-Text  
 Syncing  
 Non-Google Syncing  
 Tethering  
 Release/Update Consistency  
 Customizable  
 Apps  
 Web Browsing  
 Gaming  
 Music Player  
 Free Turn-by-Turn Navigation  
 Google Apps Integration  
 Google Voice

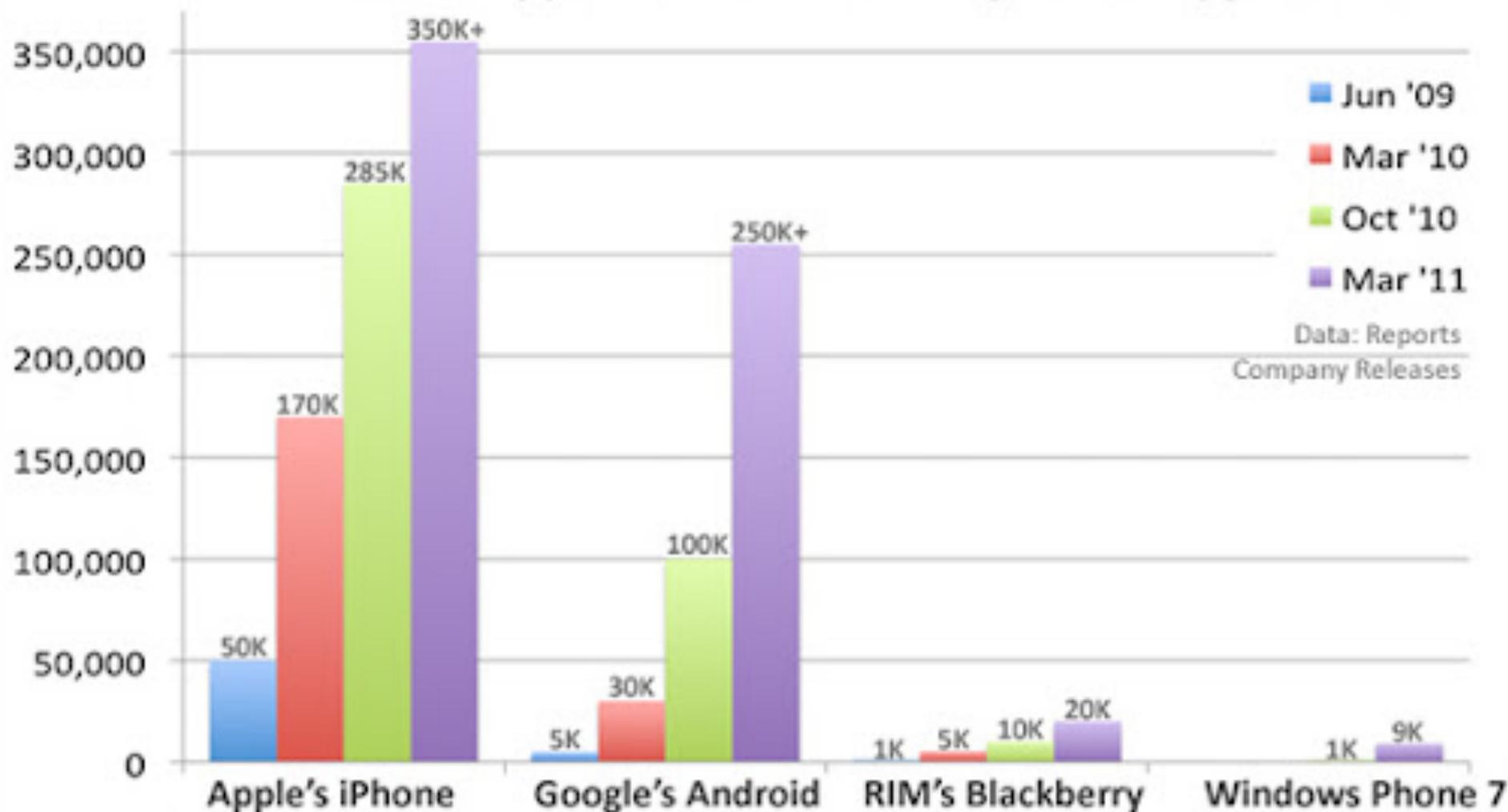


lifehacker

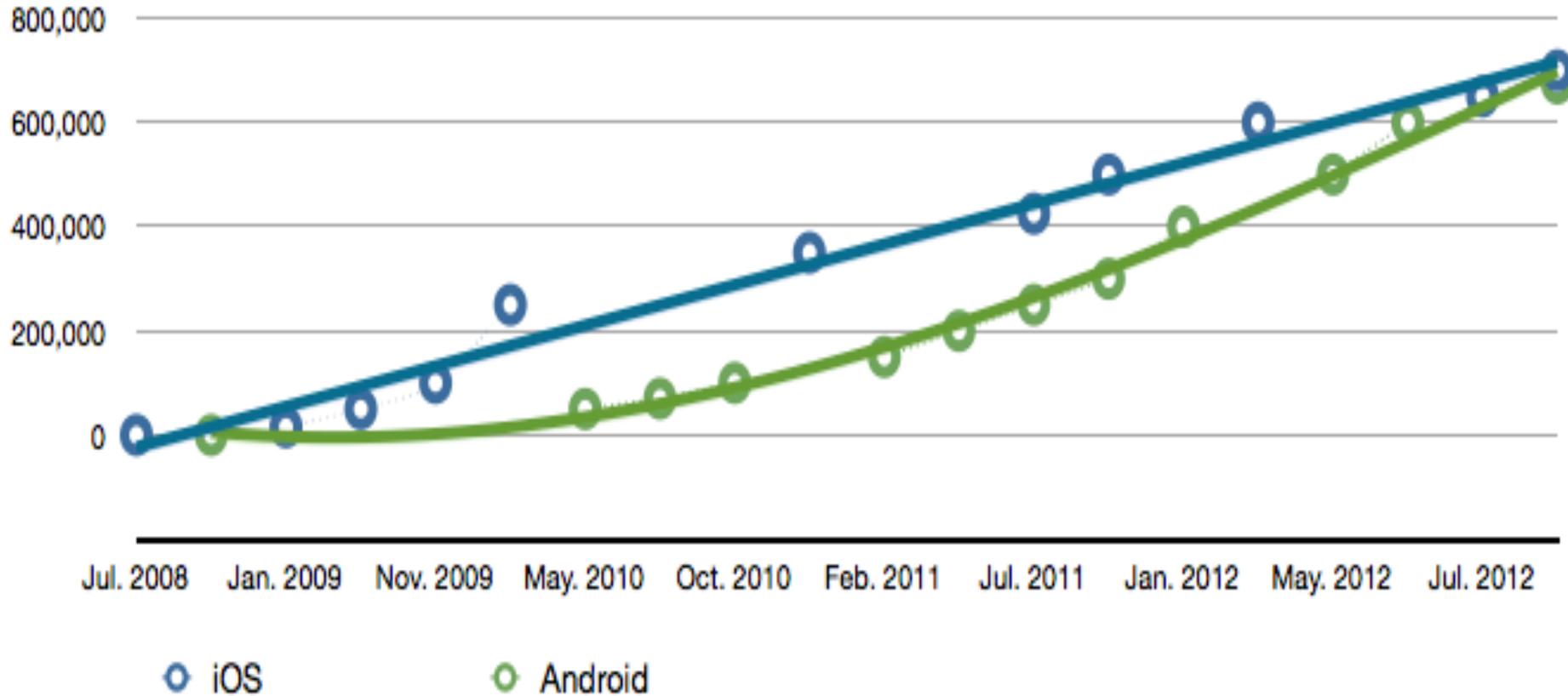




## Number Of Apps Available At Smartphones' Apps Stores



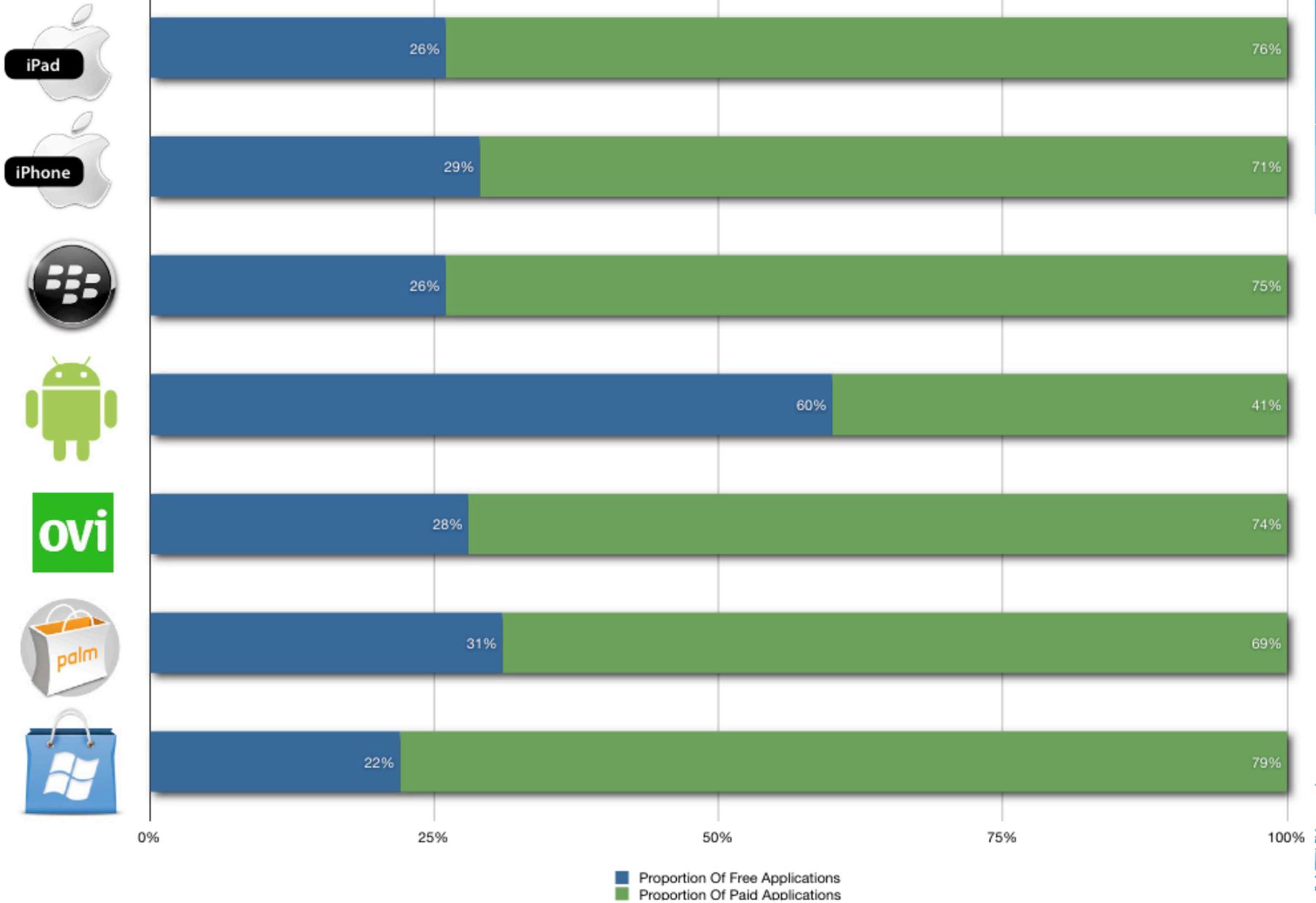
## No. of apps: iTunes App Store vs Google Play



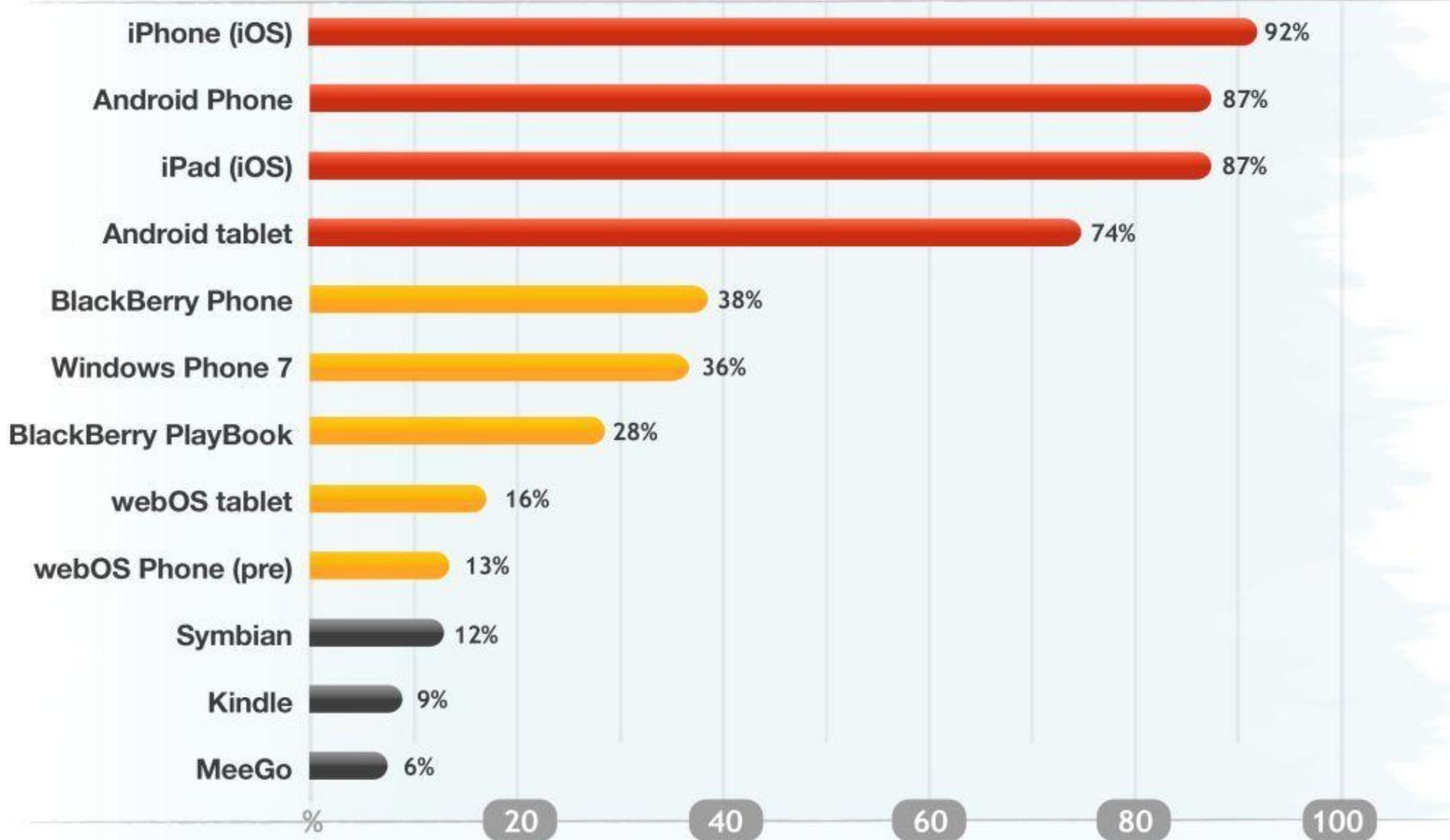
<http://www.insidemobileapps.com/2012/09/26/tracking-growth-the-itunes-app-store-vs-google-play/>



# Proportion Free vs. Paid (US, July 2010)



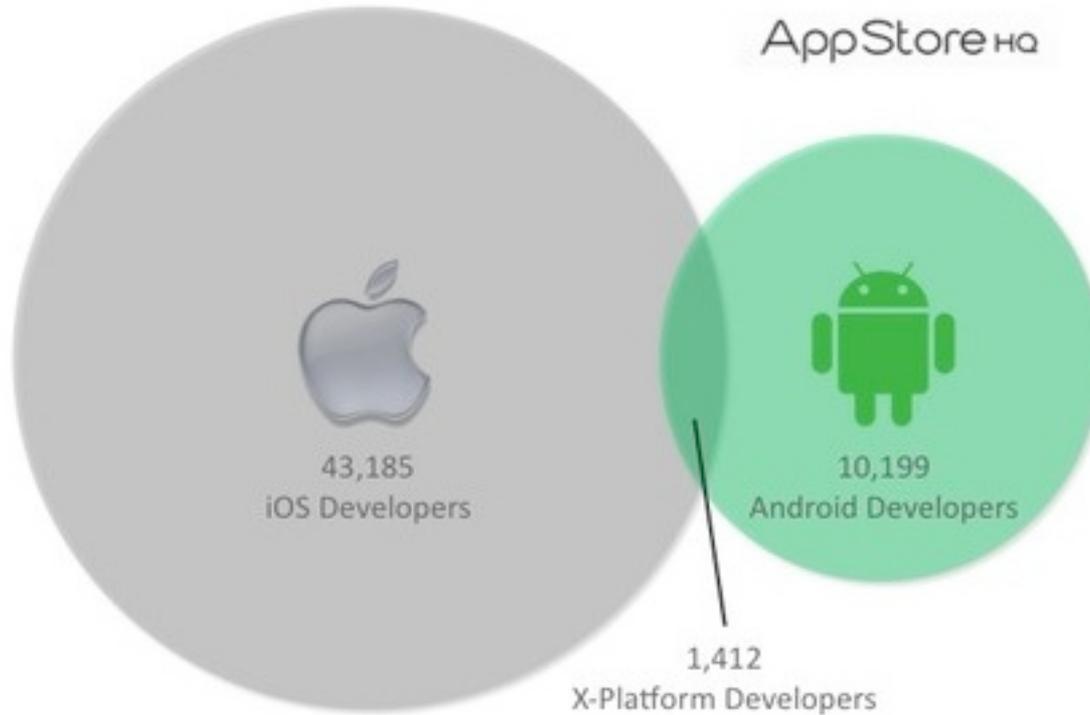
## 'Very Interested' In Developing For Each Platform



N = 1,971 responses

Source: Appcelerator / IDC - 01/2011





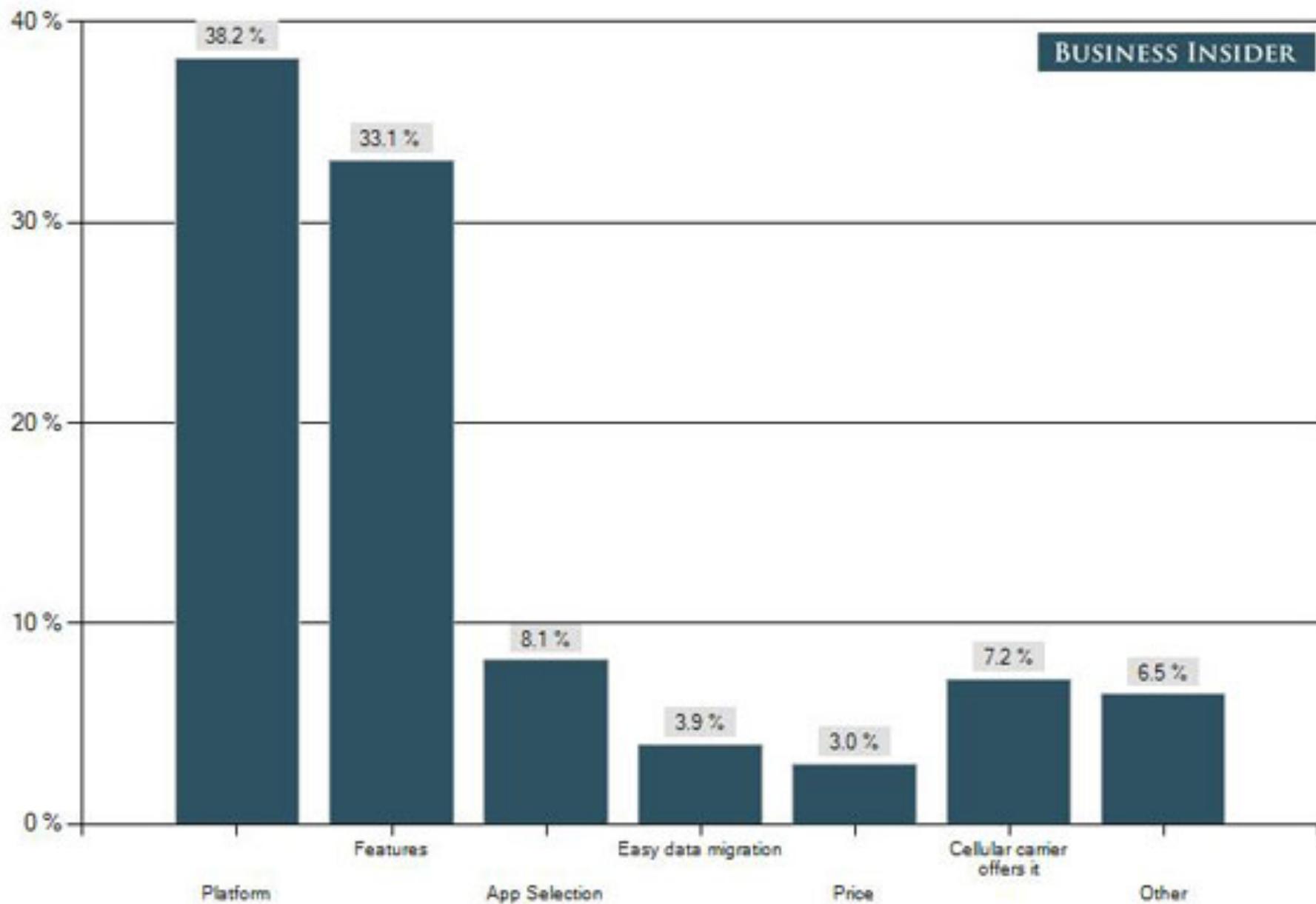
<http://www.androidauthority.com/google-play-vs-apple-app-store-2012-76566/>

# What is the top reason for selecting your current phone?

1. Applications built for device
2. Internet/email access
3. Touchscreen
4. Synchronization
5. Brand / Reliability
6. multimedia capability
7. Keyboard
8. Large screen, easy to read
9. Battery life
10. Small size/weight
11. Price

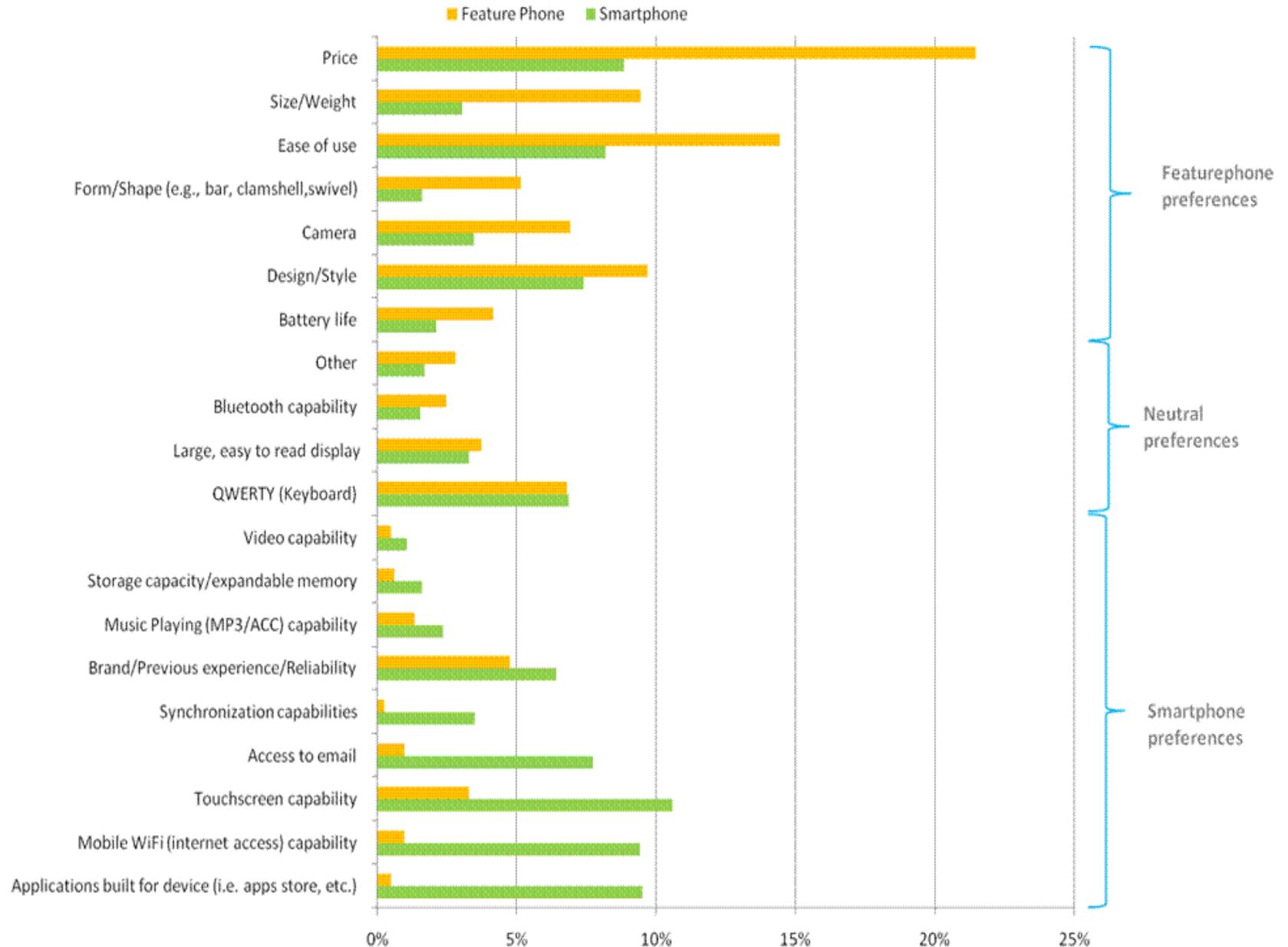


What is the MOST IMPORTANT factor to you in choosing a particular smartphone?



# Top Reasons for Choosing Device -Smartphone vs Feature Phone

Selected as first, second or third reason for choosing, Nielsen Mobile Insights



# Medical professionals values of using smartphone

- \* The fastest approach to the right updated information at the right time in the point-of-care based on the best available evidence to support the best decision for care

# Which Device is better?

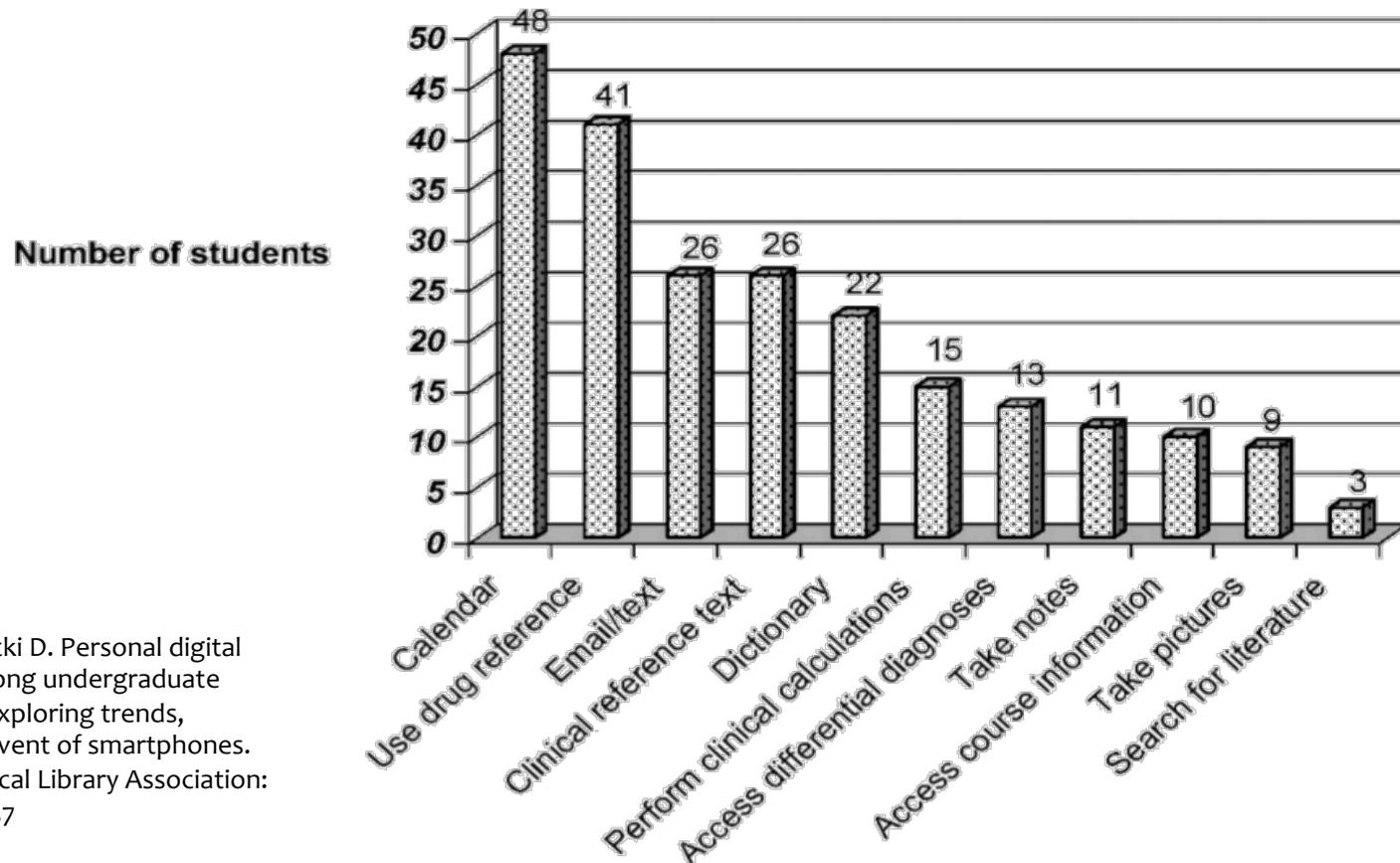
- \* Determine which applications you will need first
- \* Use different devices if possible before purchasing
- \* Prominence of a particular device in your environment
- \* Memory
- \* Wireless / 3G access availability
- \* Your keyboard style
- \* Size & weight

# What do you use your smartphone for in your medical practice?

1. Clinical drug references
2. Medical dictionaries
3. Electronic prescription tools
4. Clinical textbooks
5. Patient tracking
6. Medical Calculators
7. Evidence based references
8. Search for literature

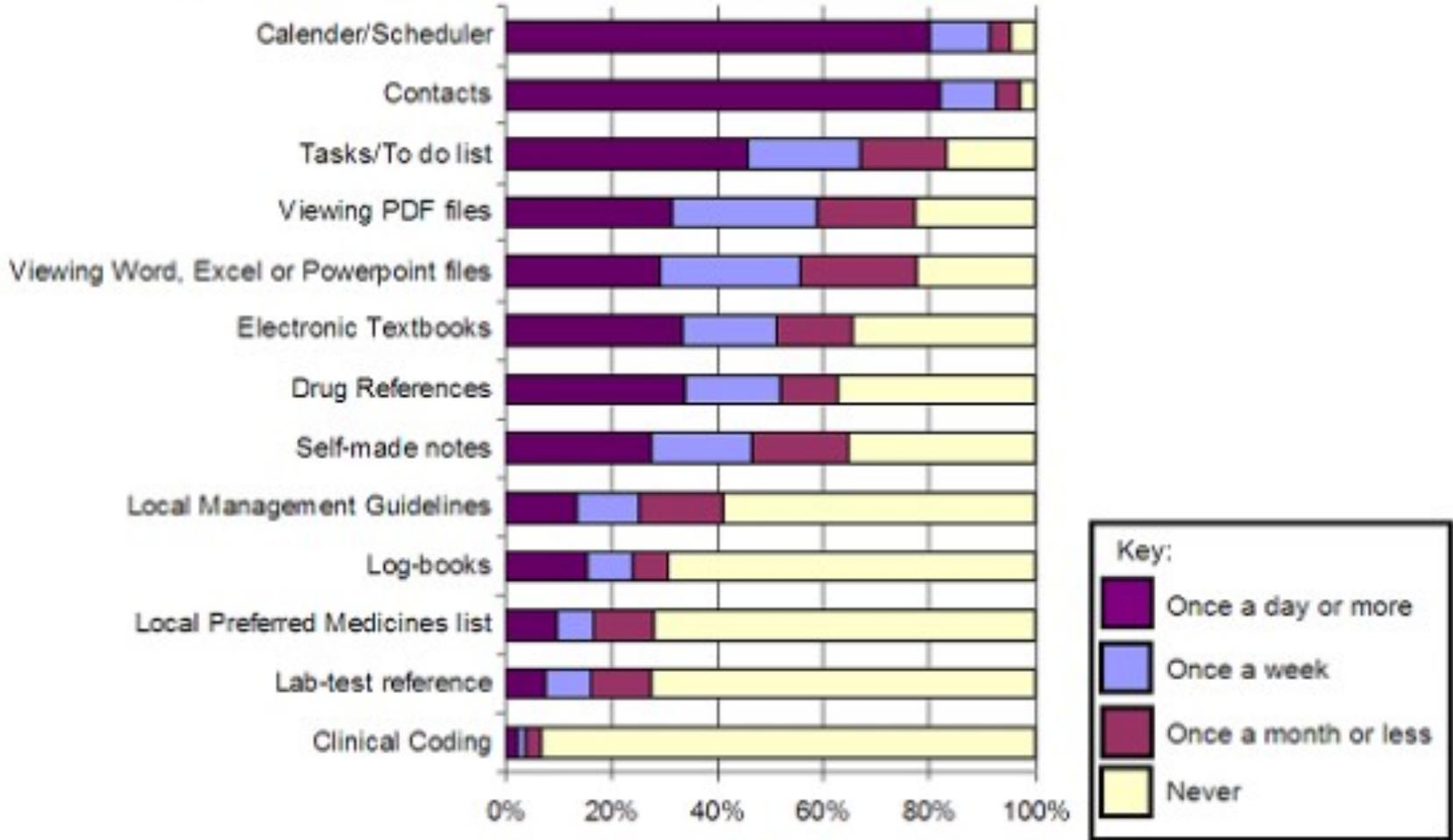
# What do use your smartphone for?

**Figure 1**  
Common uses of personal digital assistants (PDAs) among medical students (n=53)

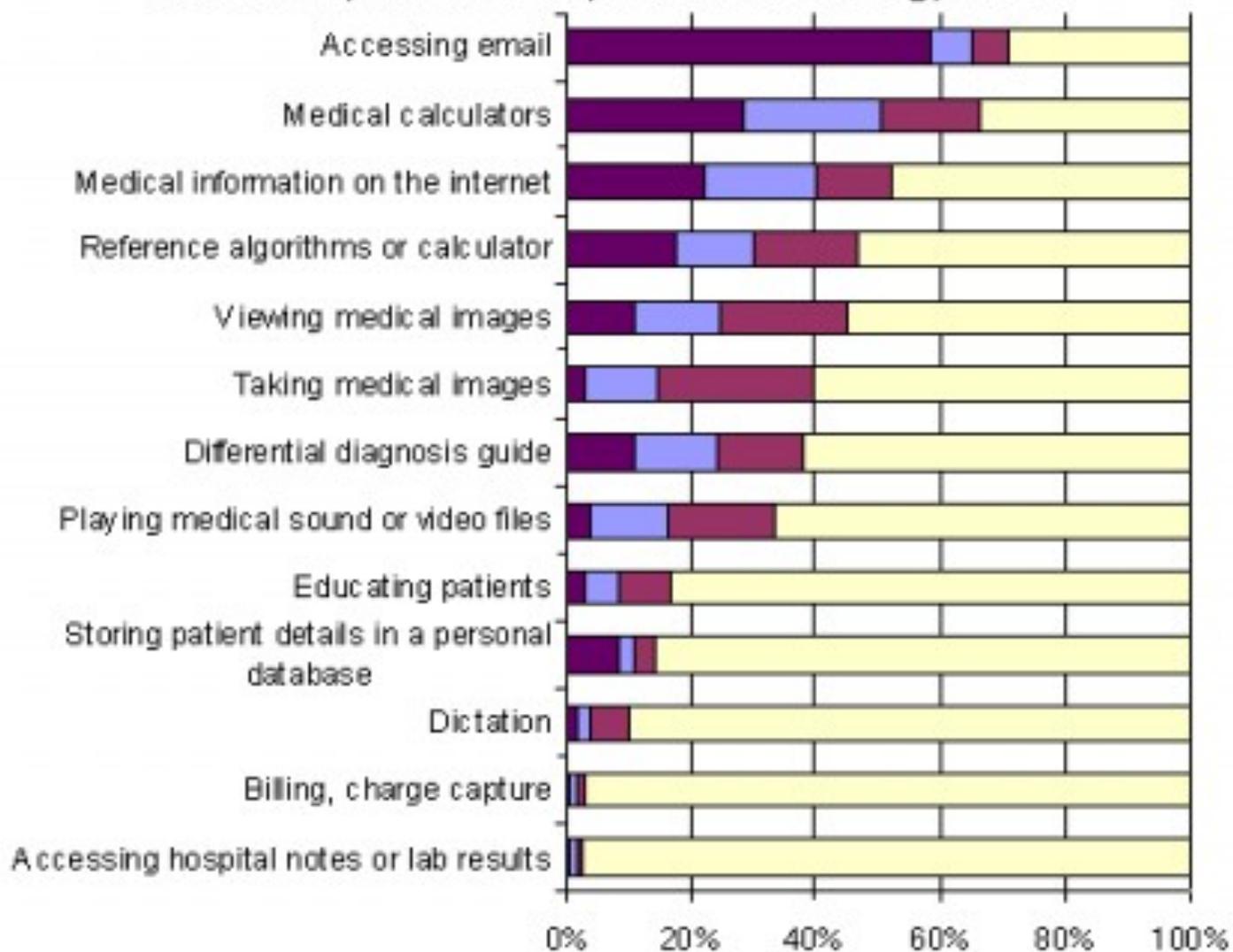


Chatterley T, Chojecki D. Personal digital assistant usage among undergraduate medical students: exploring trends, barriers, and the advent of smartphones. *Journal of the Medical Library Association: JMLA*. 2010;98(2):157

**Organiser, Document Management, Reference**



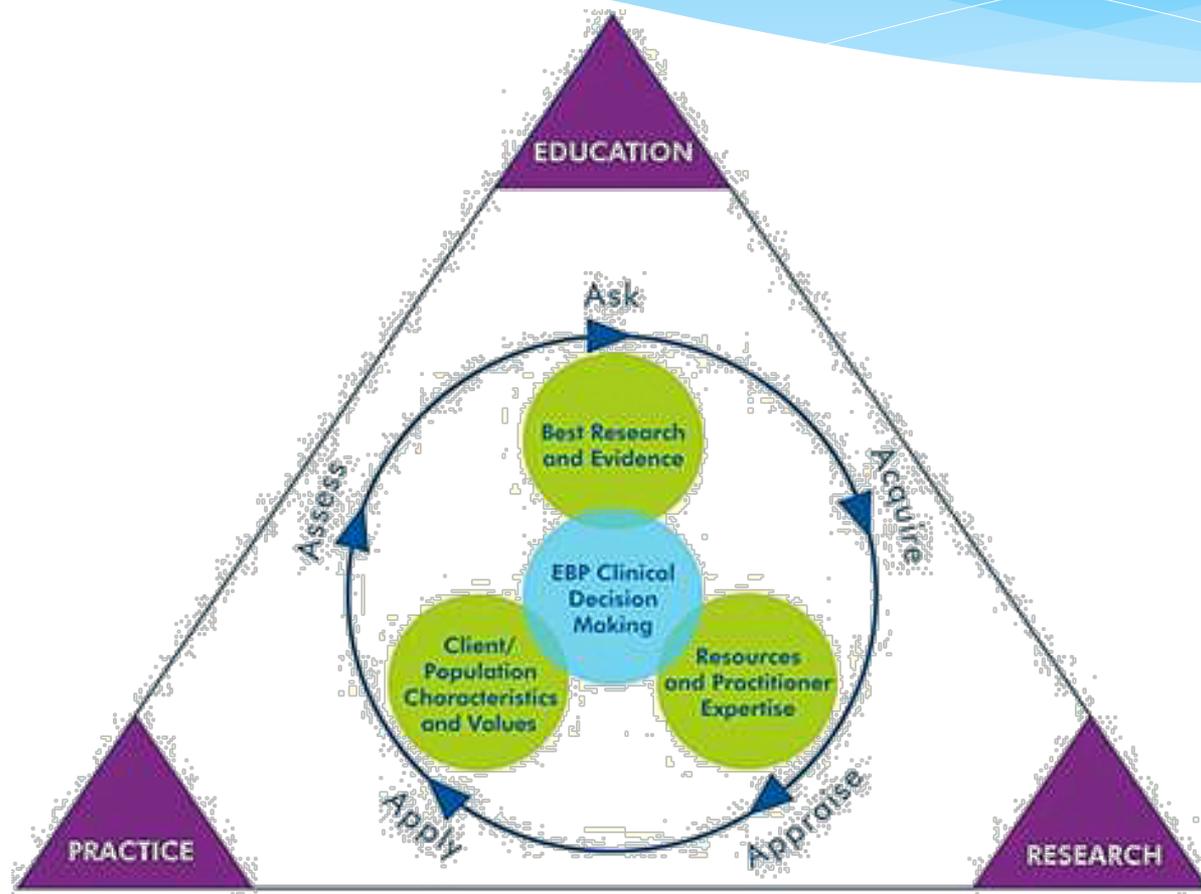
## Education, Multimedia, Patient tracking, Other



# What is the first step in the evidence based practice process?

- A. Applying research to practice
- B. Acquiring available research and evidence
- C. Assessing the impact of change
- D. Asking a clinical question
- E. Appraising the research quality

# 5-step EBM process



# PICO Maker

- \* free Palm OS-based application
- \* create and store queries in the PICO format for later reference.
- \* <http://www.library.ualberta.ca/pdazone/pico/>

**PICO**

**Background** .....

.....

**Population** .....

.....

**Intervention** .....

.....

**Comparison** .....

.....

**Outcome** .....

.....

Prev PICO Next PICO More...

**PICTWO**

Citation .....

Additional Info .....

.....

SavePICO Previous Screen

Delete this PICO Beam PICO

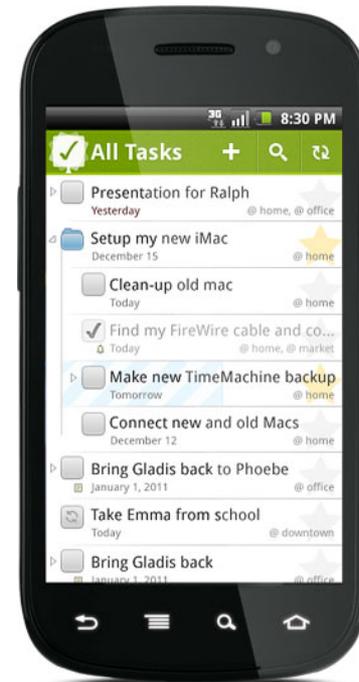
GoTo First Record

GoTo Last Record

Exit PICO

# Use of task apps to control your EMB questions

- \* Cross platforms Sync
- \* Reminders
- \* GTD contexts
- \* Geotagged reminders
- \* Speech recognition



Cancel

# Details

Done

Read about: use of BB after CABG

Remind Me Never >

Due Tue, 2/14/12 12:00 AM >

Repeat Never >

Priority Medium >

List Tasks >

Notes

Folders

# TaskTask

Edit

Search for tasks

▶ Category: @Anywhere (1)

▶ Category: @Calls (8)

▶ Category: @Computer (42)

▶ Category: @Email (8)

▶ Category: @Errands (2)

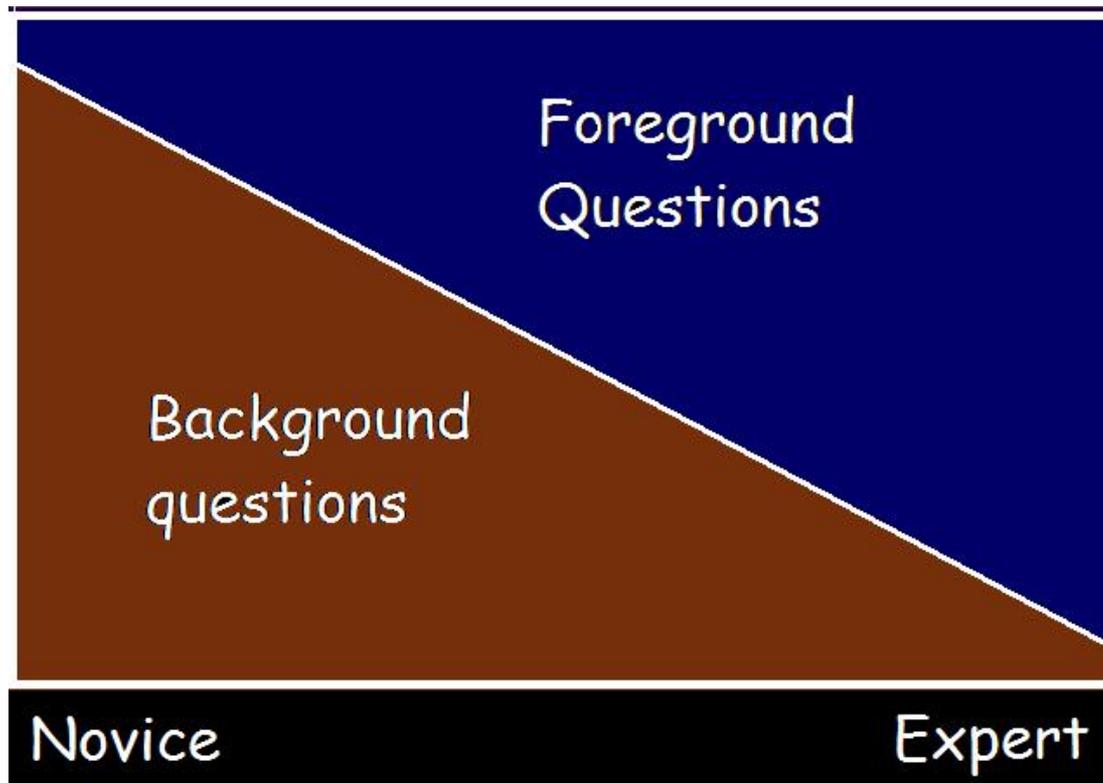
▶ Category: @KKUH (2)

▶ Category: @Read (37)

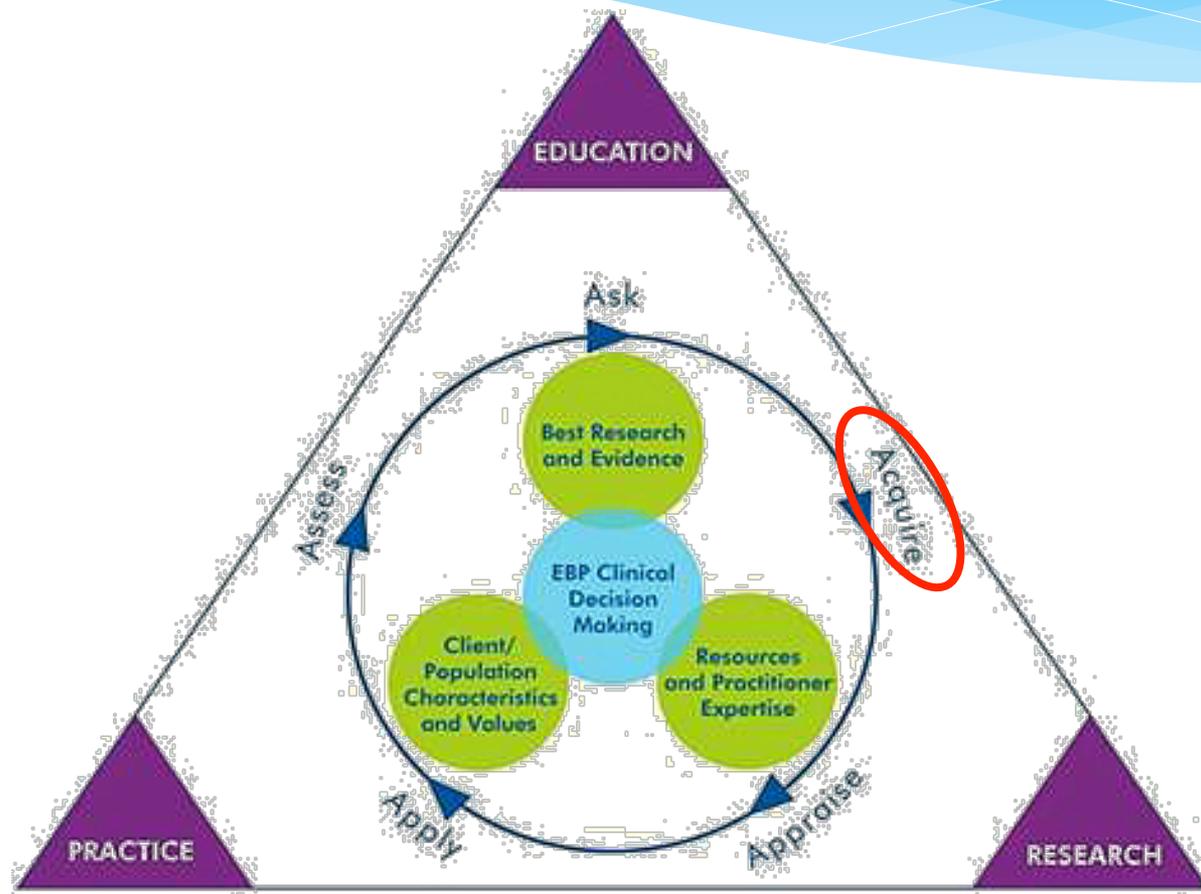
▶ Category: @Waiting For (11)



# Foreground Vs. Background EBM questions



# 2<sup>nd</sup> step: Acquire



# Where do you search for evidence using your smartphone/tablet?

1. BMJ Best Practice/ Clinical Evidence
2. StatRef
3. DynaMed
4. Essential Evidence Plus
5. Medline mobile
6. UpToDate
7. MedScape
8. Skyscape
9. WebMD
10. Unbound Medicine

# Haynes' 5S pyramid of EBM resources

Clinical decision support systems (CDS)

Systems

HER built-in CDSs  
Diagnosis One  
AHRQ ePSS

Evidence based CPG  
Evidence based textbooks

Summaries

BMJ Best Practice  
StatRef

Evidence based journal  
abstracts

Synopses

DynaMed  
PIER  
EE+

Systematic reviews

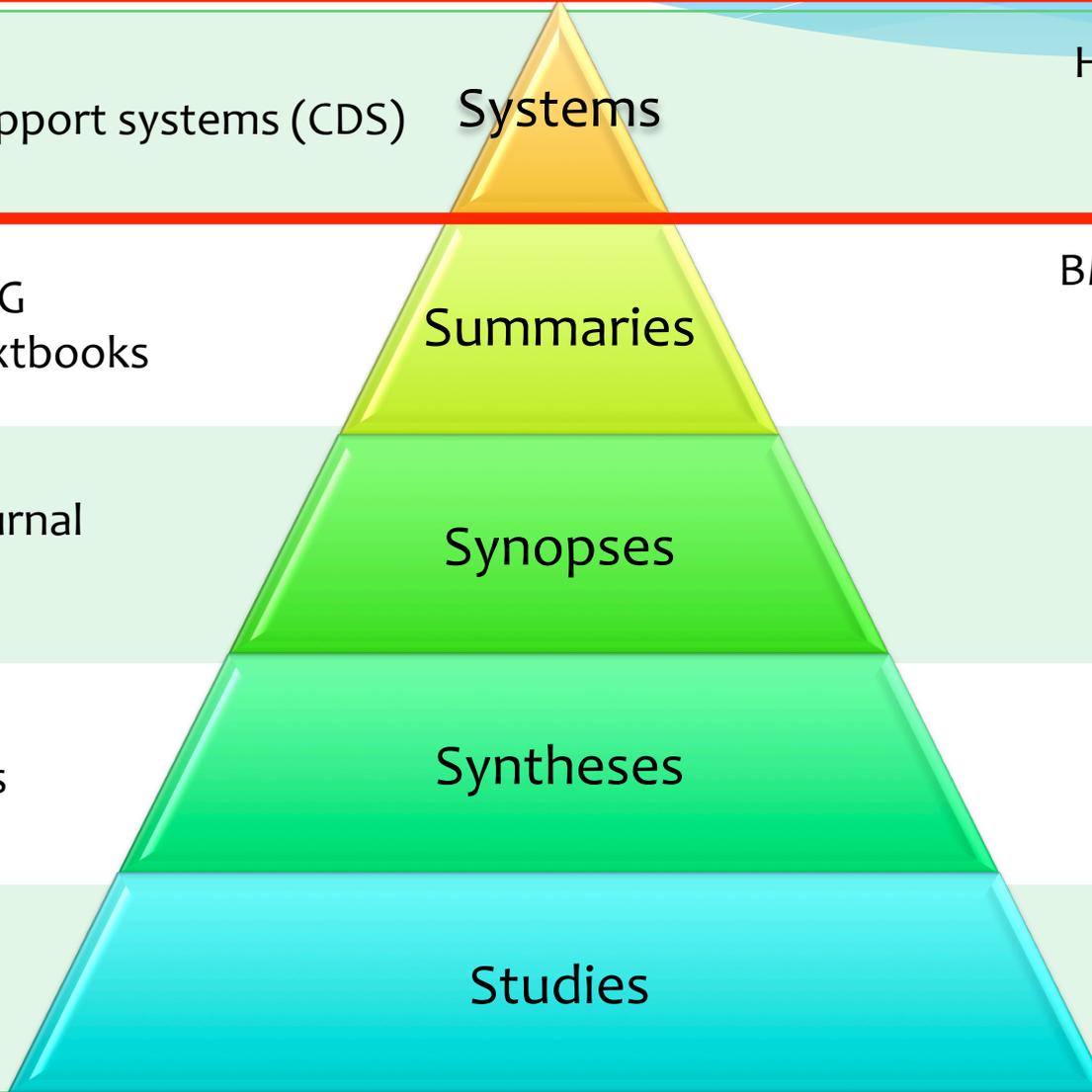
Syntheses

Cochrane library  
Trip Database

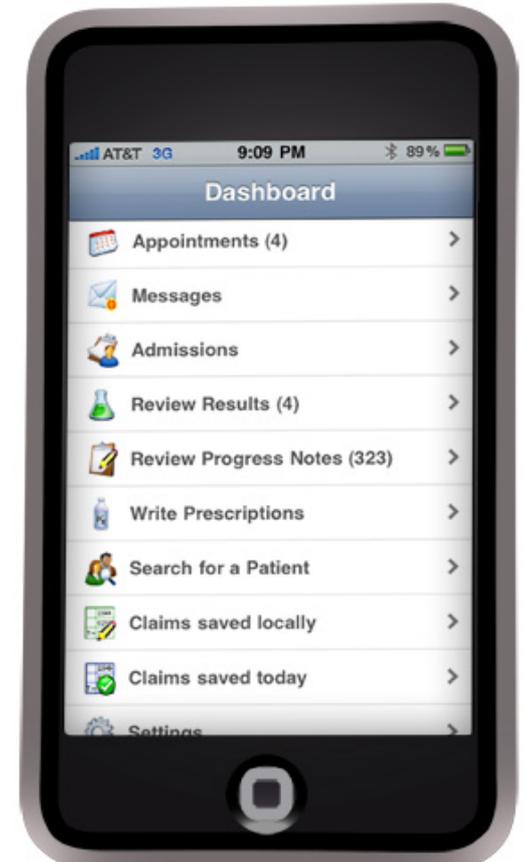
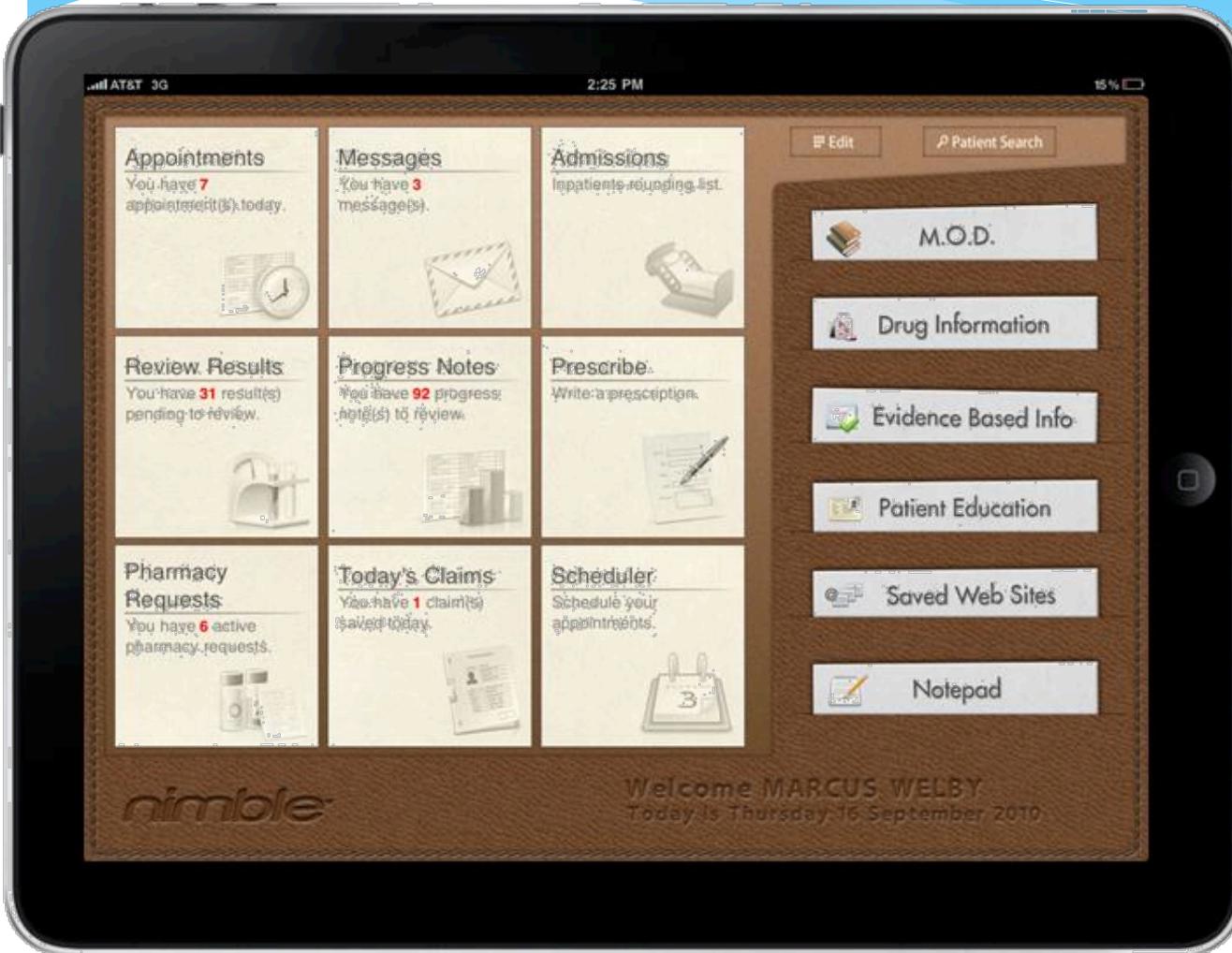
Original journals

Studies

Medline mobile



# CDSS on mobile platforms



# AHRQ ePSS

- \* Designed by the US Department of Health and Human Services to assist primary care clinicians in identifying what screening, counseling, and preventive services are appropriate for their patients.
- \* AHRQ ePSS allows the input of a patient's age and other demographic variables, generating the USPSTF-appropriate screening and counseling guidelines for the patient.

# AHRQ ePSS

Reset Search Start >

Enter the following information to retrieve recommendations from the USPSTF Preventive Services Database.

Age:  Years

Sex:  Both  Female  Male

Pregnant:  No  Yes

Tobacco User:  N/A  No  Yes

Sexually Active:  N/A  No  Yes

Search Browse Tools Update More

Back

Aspirin to Prevent CVD: Preventive Medication -- Adults, Increased Risk

Recommendation 

Risk Factor Information 

Search Browse Tools Update More

# Where do you search for guidelines?

1. TRIP database
2. DynaMed
3. Medline
4. EMBASE
5. BMJ Best Practice
6. National guideline Clearinghouse
7. Cochrane
8. Essential Evidence Plus
9. CMA Infobase

# Skyscape

- \* Many titles are free through the SDL library
- \* Can purchase Harrison's Manual of Medicine, 5-minute Clinical Consult, Merck Manual, Journal Watch and Pocket Medicine
- \* Free version includes: Outlines in Clinical Medicine (OCM), RxDrugs, Archimedes.
- \* OCM provides disease monographs with ~800 entries
- \* Cumbersome user interface, iTunes and Android





Smart Search



Archimedes...



DrDrugs®



Ferri's Clinic...



Harriet Lane



Labs 360°



Medical Epo...



Netter's Atla...



Outlines in...



RxDrugs™



Home



Store



MedAlert



History



Tools



# Merck Manual Professional Edition

- \* 3,000 page version
- \* The Medical Encyclopedia
- \* \$34.99, itunes



# MERCK MANUAL

Browse by Section >  
 Explore the Index >  
 Find by Symptom >

Find what you need...

MEDICALLY SPEAKING:

**Renovascular hypertension is BP elevation due to partial or complete occlusion of one or more renal arteries or their branches. It is usually asympt...**

[Learn more](#)

Info   
 Random   
 History   
 Favorites

## Index

Filter

Ozone

P

P wave

P&O&O2

p53 gene

Pace's maneuver

Pacemaker

Pachydermoperiostosis

Pachymetry

Pachyonychia congenita

Paclitaxel

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

## Systemic Lupus Erythematosus (SLE)

Of all cases, 70 to 90% occur in women (usually of child-bearing age). SLE is more common among blacks and Asians than whites. It can affect patients of any age, including neonates. Increased awareness of mild forms has resulted in a worldwide rise in reported cases. In some countries, the prevalence of SLE rivals that of RA. SLE may be precipitated by currently unknown environmental triggers that cause autoimmune reactions in genetically predisposed people. Some drugs (eg, hydralazine, procainamide, isoniazid, and minocycline) can cause lupus-like syndrome.

**SOME TRADE NAMES**

APRESOLINE

### Symptoms and Signs

Clinical findings vary greatly. SLE may develop abruptly with fever or insidiously over months or years with episodes of arthralgias and malaise. Vascular headaches, epilepsy, or psychoses may be initial findings. Manifestations referable to any organ system may appear. Periodic exacerbations (flares) may occur.

## Metabolic Acidosis

### Etiology

Metabolic acidosis is acid accumulation from increased acid production or acid ingestion; decreased acid excretion; or GI or renal HCO<sub>3</sub><sup>-</sup> loss. Acidemia (arterial pH < 7.35) results when acid load overwhelms respiratory compensation. Causes are classified by their effect on the anion gap (see [Acid-Base Regulation and Disorders: The Anion Gap](#) and [Acid-Base Regulation and Disorders: Causes of Metabolic Acidosis](#)).

**Causes of Metabolic Acidosis**

### High anion gap acidosis

The most common causes of a high anion gap metabolic acidosis are

- Ketoacidosis,
- Lactic acidosis

## Bayes' Theorem

When interpreting a test result, the clinician converts a pre-test or prior probability of disease into the appropriate post-test or posterior probability. Clinicians must use their best judgment—from all clinical data available—to assign reasonable estimates of pre-test probabilities. To illustrate this process in a clinical context, consider a 25-yr-old woman who presents with dysuria. Assume that the clinician thought the probability of UTI was moderately low (30%) based on the patient's history and physical examination. Before sending the patient's urine for microscopic examination of the sediment and for culture, the clinician does a dipstick leukocyte esterase test, which has a positive result. To determine the post-test probability of UTI, the clinician must know the sensitivity (71%) and specificity (85%) of the test. [Clinical Decision Making: Interpretation of leukocyte esterase test result in a woman with a 30% prior probability of a UTI, simulating a cohort of 100,000 identical women](#) considers

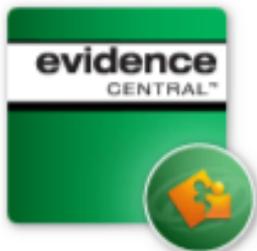


# UpToDate-The Gold Standard?

- \* Pricing \$195/year (.53 cents per day) for trainee and \$495/year (\$1.36 per day)
- \* Free throw SDL
- \* Peer-reviewed, comprehensive, #1 most used resource
- \* 8,500 medical topics, 385,000 total references
- \* Good search function
- \* **Slow to load topics**



# www.unboundmedicine.com



## Evidence Central

Integrated, Evidence-Based Solution

**Evidence Central** supports effective evidence-based medical practice by integrating analysis with the latest research. Access Evidence-Based Medicine Guidelines, Cochrane Abstracts, EE+ POEMs (Patient-Oriented Evidence that Matters from Essential Evidence Plus), and MEDLINE Journals anytime, anywhere on the web or your mobile device. Connect to related entries with Cross Links.

**\$79.95**

[Details](#)



## Clinical Evidence For PDA

With Auto-Updates

The best available evidence for the treatment of common clinical conditions, Clinical Evidence for PDA covers more than 200 medical conditions and over 2,000 treatments. Includes the entire Clinical Evidence database from the BMJ with references to the underlying medical literature. Updated monthly!

**\$49.95**

[Details](#)



## Unbound MEDLINE for Web + Mobile Web

Access more than 18 million articles from MEDLINE and PubMed from your PC, laptop, or on-device web browser!

[Search Unbound MEDLINE](#)



# Haynes' 5S pyramid of EBM resources

Clinical decision support systems (CDS)

Systems

HER built-in CDSs  
Diagnosis One  
AHRQ ePSS

Evidence based CPG  
Evidence based textbooks

Summaries

BMJ Best Practice  
StatRef

Evidence based journal  
abstracts

Synopses

DynaMed  
PIER  
EE+

Systematic reviews

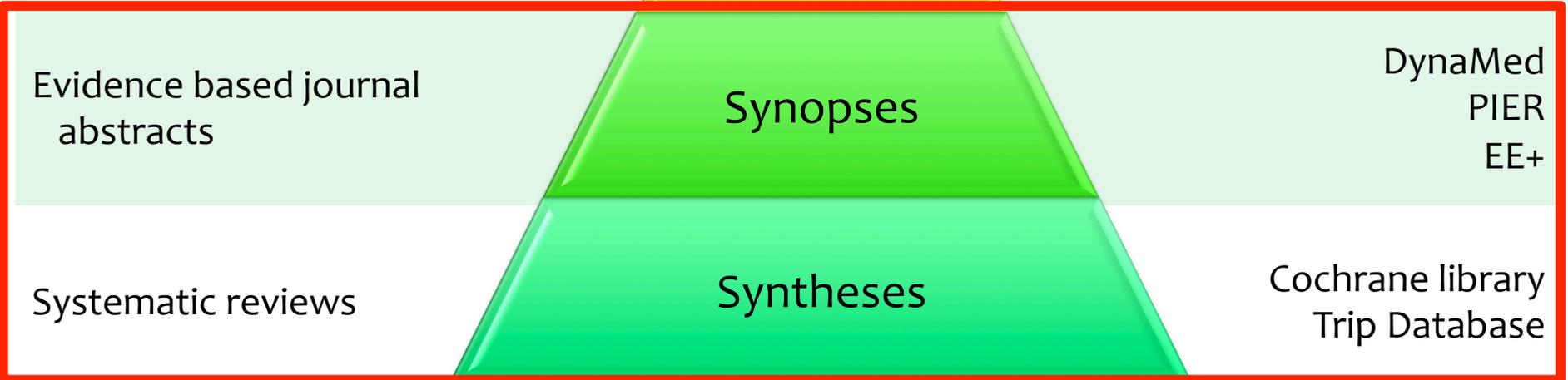
Syntheses

Cochrane library  
Trip Database

Original journals

Studies

Medline mobile





# BestPractice



My A-Z

My Categories

Buy More

## A

Abdominal injury

Abdominal pain in children

Abdominal pain in pregnancy

Abdominal pain, chronic

Abdominal trauma

Abnormal LFTs

Abnormal liver function tests

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
R  
S  
T  
U  
V



Symptoms



Diseases



Search



Saved



Settings





# Mastitis and breast abscess



## Summary

Breast infection (including infectious mastitis and breast abscess) typically affects women 15 to 45 years of age, especially those who are lactating. Neonates and adolescent girls may also be affected.

*Staphylococcus aureus* is the most frequent pathogen isolated.



Diagnosis



Treatment



Prevention



Follow Up

Basics

Overview



Back

# Mastitis and breast abscess

## Treatment

Step-by-step >

Details >

Guidelines >

Emerging >





*Clinical Evidence* is one of the world's most authoritative medical resources for informing treatment decisions and improving patient care.

## Latest updated reviews

- \* [Skin cancer](#) (updated)
- \* [Impacted wisdom teeth](#) (updated)
- \* [Colorectal cancer treatment](#) (updated)
- \* [Acute anterior uveitis](#) (updated)
- \* [Chlamydia \(uncomplicated, genital\)](#) (updated)
- \* [Constipation in children](#) (updated)
- \* [Stroke management](#) (updated)
- \* [Basal cell carcinoma](#) (updated)
- \* [Dementia](#) (updated)
- \* [Summary of all updates](#)



Summary of all updates

## Guest editorial

At *Clinical Evidence*, we present an overview of the best available evidence, with a view to answering clinical questions of interest. Frequently, the evidence we identify includes systematic reviews that have meta-analysed data from RCTs. Synthesising data from multiple small RCTs can improve confidence in the effects, or confirm the believed lack of effect, of a particular intervention, thereby accelerating acceptance or rejection of that treatment. However, as Carl Heneghan and Rafael Perera outline in their Editorial, producing a reliable meta-analysis may not always be as simple as combining all the RCTs for the treatment



May 7, 2010

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-  [Sign up for email alerts](#)

## Clinical Evidence Userguide



The *Clinical Evidence* Userguide, available in over a dozen languages (now including Finnish), features illustrations and examples of how to get the most out of our site.

## Swine flu patient leaflet now free online

 [Swine flu patient leaflet](#)

## Articles and Research section

[Access the latest independent research on \*Clinical\*](#)

# ESSENTIAL EVIDENCE PLUS

Essential Evidence Plus, formerly InfoPOEMs/InfoRetriever, is a powerful electronic resource packed with all of the medical evidence you need to make critical patient care decisions.



Start Searching with EE+ Online

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Download EE+ for PDA

[DOWNLOAD](#)



Manage CME Credits

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## Essential Evidence Plus

Essential Evidence Plus features must-have content, tools, calculators, and daily email alerts for clinicians who deliver first-contact care.

[Learn More](#)

Recommend Essential Evidence Plus to your institution's library



[MORE DETAILS](#)

## News

- ▶ Wiley-Blackwell to Relaunch InfoPOEMs with InfoRetriever as Essential Evidence Plus [Read the Press Release](#)
- ▶ The Society of Hospital Medicine and Wiley to Launch InfoPOEMs for Hospitalists [Read the Press Release](#)
- ▶ Wiley Expands Partnership with Skyscape [Read the Press Release](#)
- ✦ [View All News](#)

## Events

Come see us at:

- ▶ [STFM Annual Conference](#)  
April 30-May 4, 2008  
Baltimore, MD

[View All Events](#)

## Product Support

- ▶ [Getting Started](#)
- ▶ [Downloads/Updates](#)
- ▶ [FAQs](#)
- ✦ [View All](#)

# EE+

◀	▶	Home	CME	Menu ▼
---	---	------	-----	--------

**Welcome to Essential Evidence Plus**

**Search the complete EE+ collection**

**SEARCH**

**Browse the complete EE+ collection**

**BROWSE**

**Browse selected resources**

▼

# EE+

Navigation: << >> Home CME Menu ▾

**Search Results** [New Search](#)

Your topic selection produced 174 results [?](#)

-- refine by type of result -- ▾

-- refine by type of resource -- ▾

-  Chronic obstructive lung disease (acute exacerbation) ▾
-  Chronic obstructive lung disease (chronic mgmt) ▾
-  Action plans for chronic obstructive pulmonary disease (LOE = 1a or 2a)
- ES** Action plans for chronic obstructive pulmonary disease (LOE = N/A)
-  Ambulatory oxygen for COPD (LOE = 1a) ▾

Page: << **1** 2 3 4 5 6 7 8 >>

# EE+

◀ ▶ Home CME Menu ▾

In this article: Go To: ▾ Next >

## Chronic obstructive lung disease (chronic mgr ...)

### Overall Bottom Line

- Consider chronic obstructive lung (pulmonary) disease (COPD) in patients with chronic and progressive dyspnea, cough, and sputum production, [7] and obtain spirometry. SORT C
- Consider arterial blood gas (ABG) measurement for patients with forced expiratory volume in 1 second (FEV1) less than 50% or clinical signs of respiratory

↑AA ↓AA

# DynaMed™

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## Superior evidence-based results

DynaMed is a medical information database with nearly 3,000 clinical topic summaries. Designed for use at the point-of-care, providing best available evidence and **updated daily.**

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⋮ Subscribe Now

⋮ Free Trial



The American Academy of Family Physicians (AAFP) has determined that DynaMed may be of assistance to family physicians in answering clinical questions with high-quality evidence.

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Medical Schools

Residency Programs

Additional Users

# American College of Physicians

## ✓ Health Information Technology

- Electronic Health Records
- e-Prescribing
- Informatics
- PDA & Mobile Computing
  - Bioterrorism
  - Clinical References
  - Uniform Requirements for MS
  - Teaching in Your Office
  - Ethics Manual
  - Audio
  - PIER PDA

- \* **Calorie Savings Food List**
- \* **Normal Lab Values from MKSAP 15**
- \* **Vaccine Specific Information**
- \* **USPSTF Preventive Services Guidelines**
- \* **NCEP ATP III Guidelines**
- \* **ADA Guidelines**
- \* **Drugs Used in the Treatment of HIV Infection**
- \* **Table of Normal Physiological Changes During Pregnancy**
- \* **Pharmacotherapies for Acute Major Depression**
- \* **Differential Diagnosis Between Allergic and Nonallergic Rhinitis**

**ACP** AMERICAN COLLEGE OF PHYSICIANS  
INTERNAL MEDICINE | *Doctors for Adults*<sup>SM</sup>



## Welcome

PIER: The Physicians' Information and Education Resource.  
Find authoritative, evidence-based guidance to improve clinical care.  
[Register for access](#) (ACP members only)

### Browse a Topic Type:



[Diseases](#)



[Screening and Prevention](#)



[Complementary/Alternative  
Medicine](#)



[Ethical and Legal Issues](#)



[Procedures](#)



[Quality Measures](#)



[Drug Resource](#)

The information included herein should never be used as a substitute for clinical judgment and does not constitute a recommendation of the American College of Physicians.

### Enter a Keyword to Search:

Find:  within  go

Entire site

For more options try [Structured Search](#).

### What's New

**QUALITY MEASURES:** The PIER Quality Measures [page](#) has been updated to include the 179 2010 Physician Quality Reporting Initiative (PQRI) measures. The PQRI administrative criteria for each measure is given, and, where applicable, links are provided to PIER modules to help physicians fulfill the PQRI.

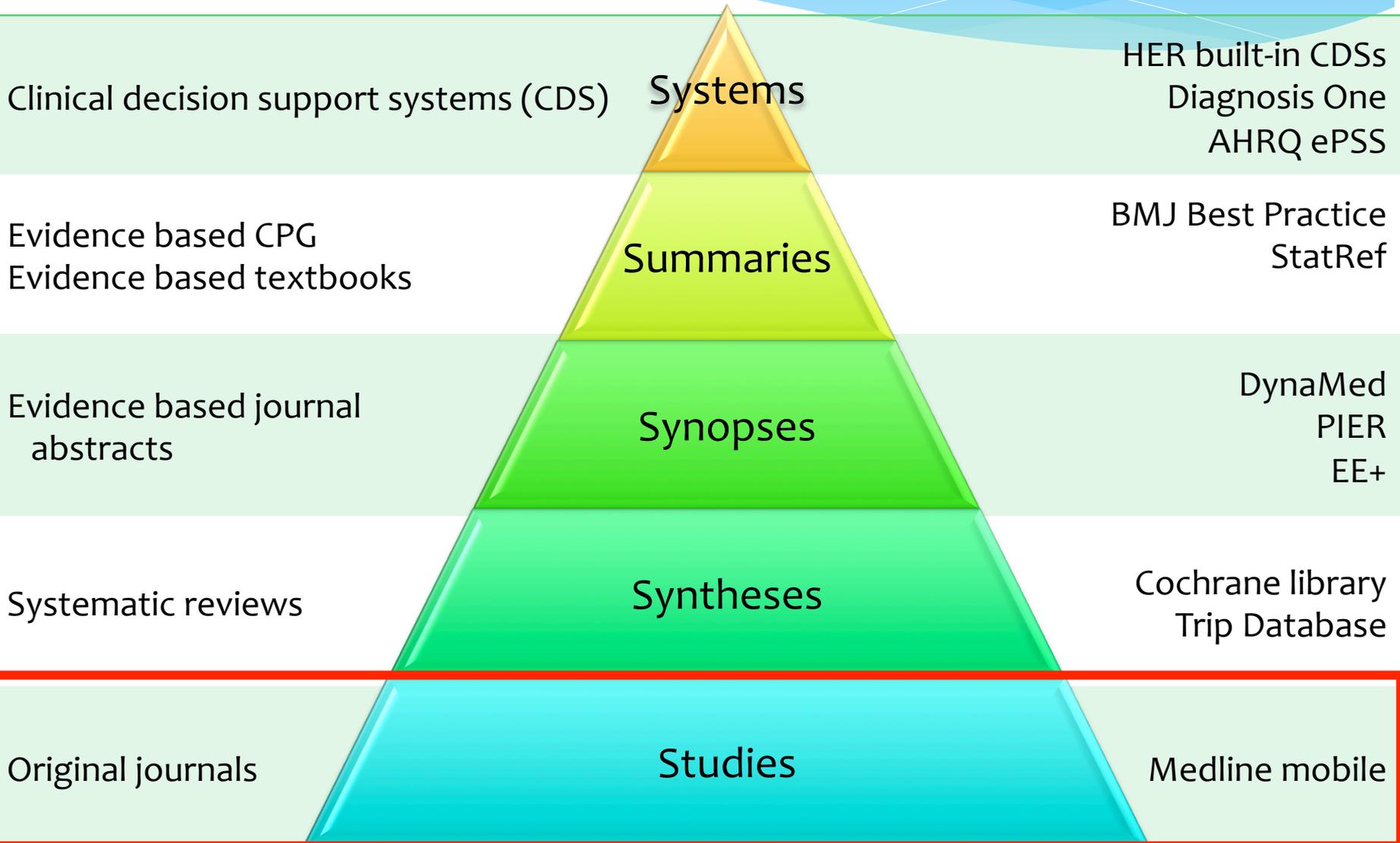
**UPDATED MODULES:** The following modules were updated the week ending April 30:  
[Cirrhosis](#)  
[Gonorrhea](#)  
[Group A Streptococcal Pharyngitis](#)  
[Hip Fracture](#)  
[HIV in Pregnancy](#)

# National Guideline Clearinghouse

- \* <http://www.guideline.gov/>
- \* directly access the entire site using PDA browser
- \* download all NGC guideline summaries as PDF or MS Word documents

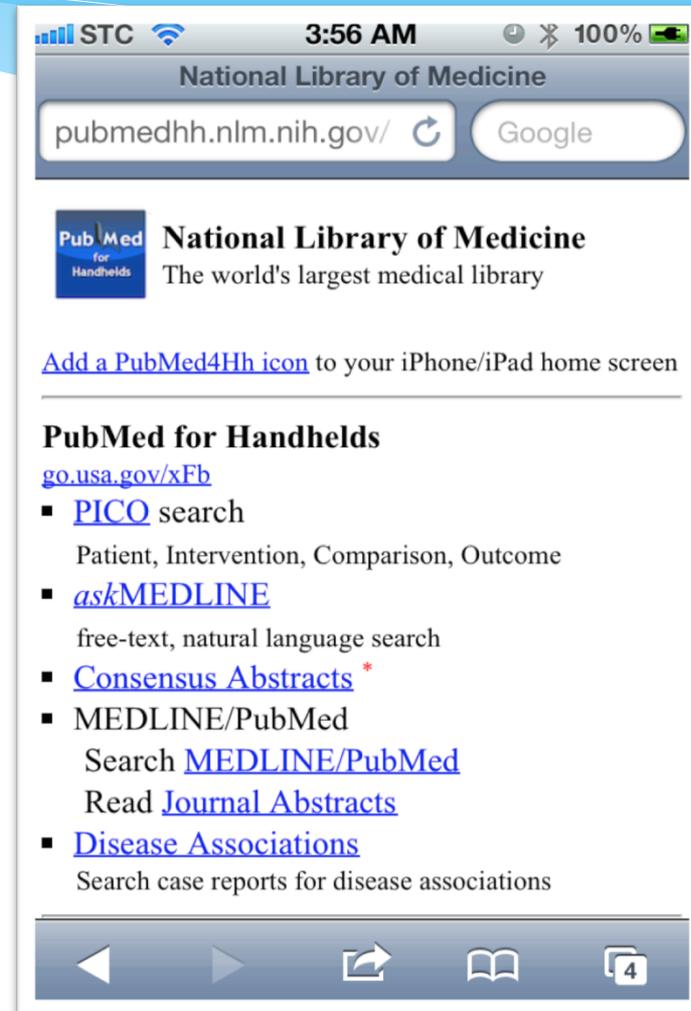


# Haynes' 5S pyramid of EBM resources



# Primary Evidence Resources mobile websites

- \* [CINAHL](#)
- \* [PubMed](#)
- \* [MedlinePlus](#)



# PubMed searching apps

PubMed Clip ✓

PubMed on Tap ✓

PubGet

PubMed Mobile

# PubMed Mobile

- \* Basic searches
- \* Limit to free articles
- \* Locate primary literature on your handheld
- \* Free
- \* itunes and Android
- \* <http://www.ncbi.nlm.nih.gov/m/pubmed/>



# PubMed® for handhelds Web site

\* <http://pubmedhh.nlm.nih.gov/nlm/pubmed/index.html>

## Search MEDLINE/PubMed

### ◆ Search with no filters

Enter term(s):

### Or Use Filters:

### ◆ Systematic Reviews

Enter term(s):

OR

### ◆ Clinical Queries

Indicate Category and Emphasis below  
(for Clinical Queries only):

#### Category:

- therapy  diagnosis  
 etiology  prognosis  
 clinical prediction guides

#### Emphasis:

- specific search (narrow)  sensitive search (broad)

Enter term(s):

# PICO search

\* <http://pubmedhh.nlm.nih.gov/nlm/pico/piconew.html>

## Search PubMed/MEDLINE via PICO

*Patient, Intervention, Comparison, Outcome*

Patient/Problem:

Age Group:

Not specified

Gender:

Not specified

Medical condition:

Intervention:

(therapy, diagnostic test, etc.)

Compare to:

(same as above, optional):

Outcome:

(optional)

Select Publication type:

Not specified

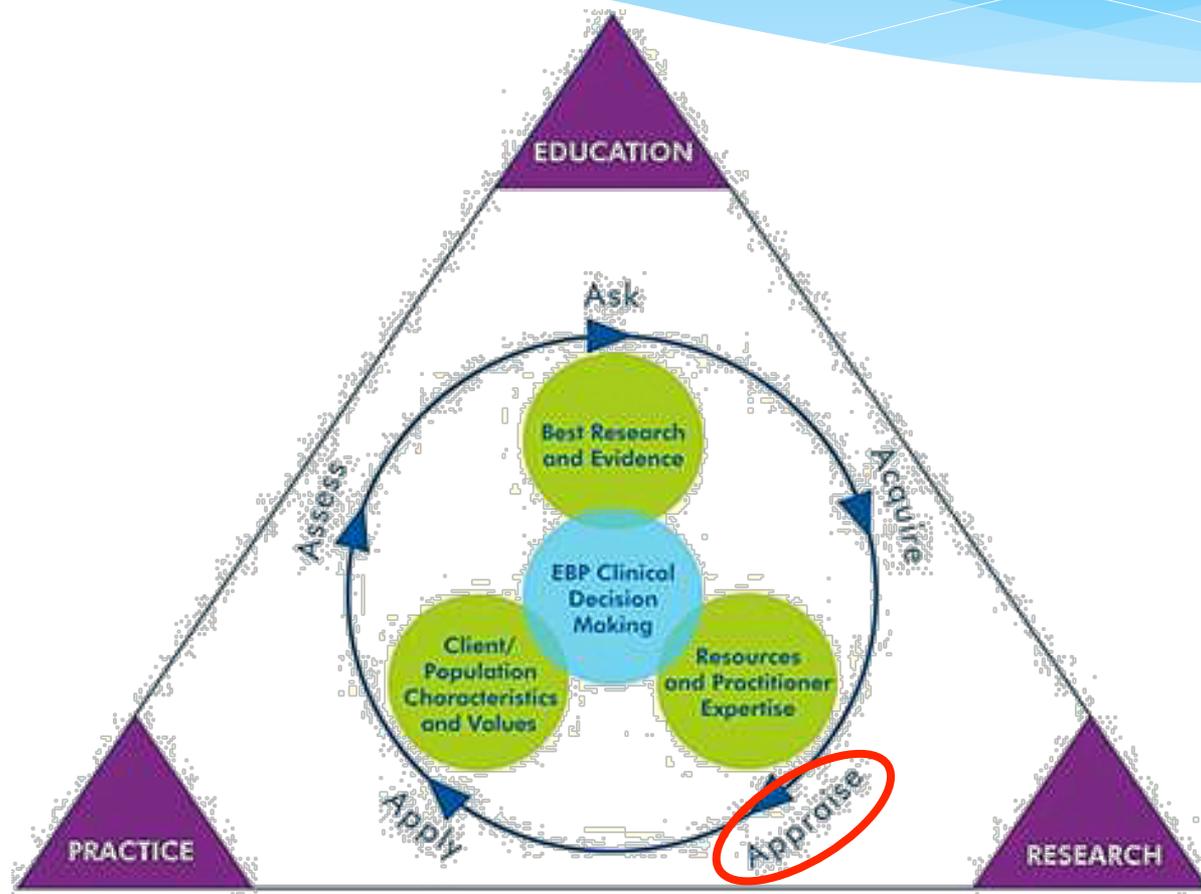
Submit

Clear

[\[Home\]](#) [\[MEDLINE/PubMed\]](#) [\[Feedback\]](#)

(with GSpell spelling checker: click [here](#))

# 3<sup>rd</sup> step: Appraise



The EBM Process	PDA Resources
Ask	PICO-maker from the University of Alberta <a href="http://www.library.ualberta.ca/pdazone/pico/">http://www.library.ualberta.ca/pdazone/pico/</a>
Acquire	<p><b>Background questions</b>            Textbook-type materials (e.g., <u>5-Minute Clinical Consult series</u>)  <a href="http://skyscape.com">http://skyscape.com</a>, et.al.            Drug resources (e.g., <u>Epocrates; CPOnHand</u>)</p> <p><b>Foreground questions</b>            National Guideline Clearinghouse  <a href="http://www.ngc.gov">www.ngc.gov</a>            Clinical Evidence  <a href="http://www.clinicalevidence.com/ceweb/products/PDA.jsp">http://www.clinicalevidence.com/ceweb/products/PDA.jsp</a>            NLM Mobile  <a href="http://www.nlm.nih.gov/mobile/">http://www.nlm.nih.gov/mobile/</a></p>
Appraise	EBM Calculator from the University of Toronto's Centre for Evidence-Based Medicine <a href="http://www.cebm.utoronto.ca/palm/eb">http://www.cebm.utoronto.ca/palm/eb</a>

# What Medical Calculator do you use?

1. Skyscape Archimedes/ Archimedes 360
2. [Doctorcalc](#)
3. [Thompson Clinical Xpert \(formerly MobileMicromedex\)](#)
4. [ABG Pro](#)
5. [AgileMedCalc](#)
6. [EBM Calculator](#)
7. [National Heart and Lung Institute](#)
8. Other
9. None





Smart Search



Archimedes...



DrDrugs®



Ferri's Clinic...



Harriet Lane



Labs 360°



Medical Epo...



Netter's Atla...



Outlines in...



RxDrugs™



Archimedes 360°

**Back** **No. Needed to Treat**

- Ctrl.Gr. (Total)
- Ctrl.Gr. (w/  
Cond)
- Act.Tx Grp.  
(Total)
- Act.Tx Grp. (w/  
Cond)

clear

No. needed to treat

---

**Precision** [0.00] ▼

No. Needed to Treat =

The number of patients you need to treat in order to prevent condition



Archimedes 360°  
Back Probability from Odds

Odds

proportion 

clear

---

Probability that a particular event will occur is the ratio of the number of ways the event can occur to the total number of possible outcomes.

Odds are the number of ways an event can occur divided by the number of ways an event cannot occur.

An illustrative example is given below:

Q. Find the probability of randomly selecting the letter *p* in the word "Mississippi."



look for

\*

- 6 H's - 6 T's
  - A
  - A-a gradient
  - Aa gradient (Alveolar gas equation)
  - ABCD stroke score
  - ABG analyzer
  - ABI (Periph vasc dz)
- A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X



Archimedes 360°  
Arterial Blood Gas (Abg) Analyzer

pH (nl 7.36-7.44)

pCO(2) (nl 36-44 mmHg)

HCO(3) (nl 22-26 mEq-mmol/L)

Po(2) (mmHg)

Fio(2) (0.21-1.00)

Anion-Gap Analysis Data (Optional)

Na+ (nl 135-145 mEq-mmol/L)

0

Cl- (nl 96-108 mEq-mmol/L)

0

clear

ABG Analyzer



# Which mobile drug reference app should I use?



- A. ePocrates
- B. Micromedex
- C. Medscape
- D. Lexi drugs
- E. Skyscape DrDrugs
- F. Skyscape AHFS Drug Information
- G. Medical Letter
- H. Other

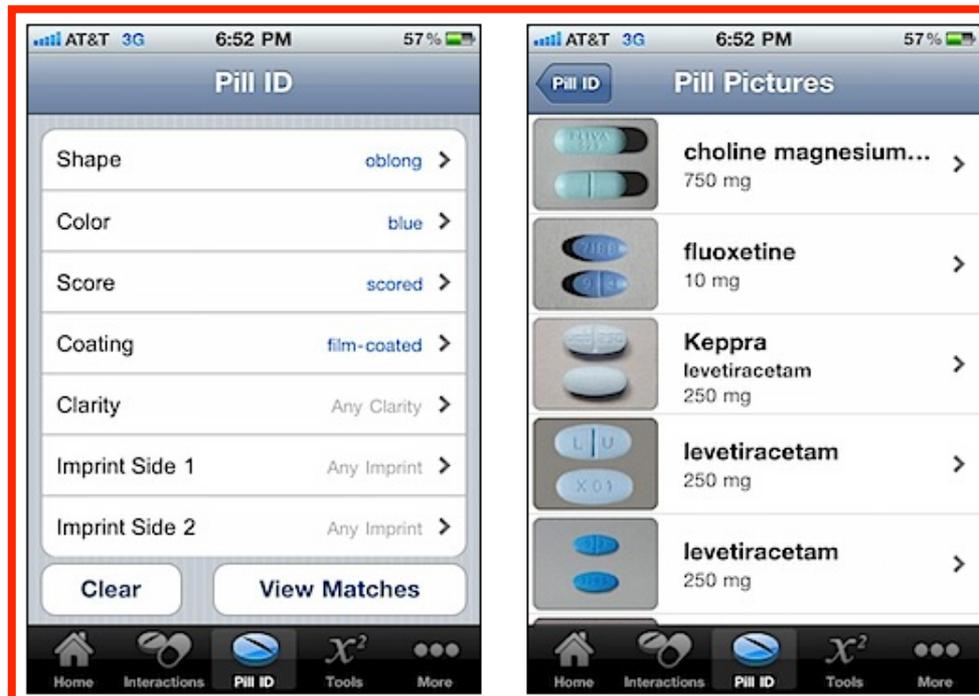
# PDA vs Online Drug Information Databases

Medscape® www.medscape.com										
Question Category (no. of questions)	CP		EF		EP		LC		MM	
	PDA	Online								
No. of Questions Answered Correctly										
Dosage, schedule (17)	15	16	12	12	12	13	13	13	14	15
Drug interactions (17)	14	14	12	12	13	13	13	13	13	15
Methods of administration (13)	12	12	10	10	10	12	12	12	11	13
Adverse drug reactions (13)	10	13	9	9	9	9	12	12	9	13
Over-the-counter products (13)	5	11	4	4	4	4	9	9	0	6
Indications, unlabeled uses (11)	11	11	6	6	6	6	10	10	7	10
Identification, content (10)	5	10	5	5	5	7	6	9	5	8
Pharmacokinetics (10)	2	8	3	3	5	5	7	8	5	9
Compatibility, stability (9)	4	8	1	1	4	4	9	9	4	8
Contraindications (9)	6	9	5	5	6	6	7	7	9	9
Dietary supplements (8)	7	8	0	0	7	7	1	6	7	8
Pharmacology, MOA (8)	4	8	7	7	7	7	8	8	5	7
Pregnancy and lactation (8)	5	7	6	6	6	6	8	8	7	8
Foreign drug identification (7)	0	1	0	0	0	0	0	3	0	3
Cost and economics (5)	0	1	4	4	4	4	4	4	0	0
Percentage of Total Questions										
Total questions (158)	63.3	86.7	53.2	53.2	62.0	65.2	75.3	82.9	60.8	83.5

CP = Clinical Pharmacology OnHand and online; EF = Epocrates Rx Free and Online Free; EP = Epocrates Rx Pro and Online Premium; LC = Lexi-Drugs and Lexi-Comp Online; MM = *mobile*Micromedex and Micromedex; PDA = personal digital assistant; MOA = mechanism of action.

# Epocrates

- \* Premium version runs \$99-199 yearly
- \* Itunes and Android
- \* Free version offer Pill ID feature



# Epocrates

- \* Also offers Medication interactions check, but MedScape is more inclusive



# Downsides to Epocrates Free version

- \* Medical Calculator lacks content compared to MedCalc
- \* Paid version includes disease monographs with treatment options, infectious diseases and IV compatibility checker
- \* Bottom line: Pill ID function is unique and useful



# Lexi-Comp

- \* Library subscribes to web version of Lexi-Comp (no mobile access)

The image displays three screenshots of the Lexi-Comp mobile application interface, illustrating the search and interaction analysis process.

**Screenshot 1 (6:59 PM):** Search results for Amiodarone. The interface shows the search bar with "Amiodarone" entered. The results include:

- Amiodarone**
- Brand Names: U.S.**
  - Cordarone®
  - Pacerone®
- Pharmacologic Category**
  - Antiarrhythmic Agent, Class III
- Dosing: Adult**
- Note:** Lower loading and maintenance doses are preferable in women and all patients with low body weight.
- Indication:** Atrial fibrillation pharmacologic cardioversion (ACC/AHA/ESC)

**Screenshot 2 (7:00 PM):** Lexi-Interact screen. The interface shows the "Add Drug / Herb / Food" button and a list of drugs added for interaction analysis:

- Amiodarone
- Ciprofloxacin
- Ritonavir
- Warfarin

**Screenshot 3 (7:00 PM):** Interactions screen. The interface shows the "Interactions" list with the following results:

- Amiodarone Ritonavir (X)
- Warfarin Amiodarone (D)
- Amiodarone Ciprofloxacin (C)
- Ciprofloxacin Ritonavir (C)
- Warfarin Ciprofloxacin (C)
- Warfarin Ritonavir (C)

ison's



www.uptodate.com/cont

Google

Log In

UpToDate

New Search



Search

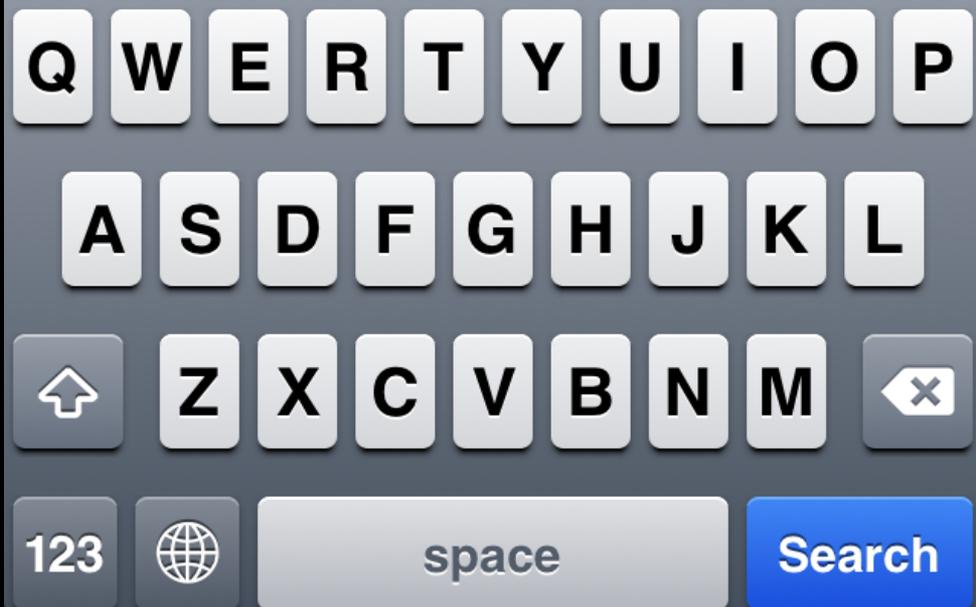




Januvia

Search

السابق التالي التدوين الآلي تم



Search

# Search Results

## Search Results for "Januvia"

Sitagliptin: Drug information >

Sitagliptin: Patient drug information >

Glucagon-like peptide-1-based therapies for the treatment of type 2 diabetes mellitus >

Sitagliptin and metformin: Drug information >

Sitagliptin and metformin:



Previous

Outline

New Search

# Sitagliptin: Patient drug information

Brand Names: U.S. >

Brand Names: Canada >

Mexican Brand Names >

Pharmacologic Category >

What key warnings do I need to know about before using this drug? >

When is it not safe to use >



## Adverse Reactions Significant

As reported with monotherapy:

1% to 10%:

Cardiovascular: Peripheral edema (2%)

Endocrine & metabolic: Hypoglycemia (1%)

Gastrointestinal: Diarrhea (4%), constipation (3%), nausea (2%)

Neuromuscular & skeletal: Osteoarthritis (1%)

Respiratory: Nasopharyngitis (5%), pharyngitis (1%), upper respiratory tract infection (viral; 1%)

10% (limited to important only)



## Pregnancy Risk Factor B ([show table](#))

**Pregnancy Implications** Adverse events have not been observed in animal reproduction studies; therefore, sitagliptan is classified as pregnancy category B. There are no adequate and well controlled studies in pregnant women. Maternal hyperglycemia can be associated with adverse effects in the fetus, including macrosomia, neonatal hyperglycemia, and hyperbilirubinemia; the risk of congenital malformations is increased when the Hb A<sub>1c</sub> is above the normal range. Diabetes can also be associated with adverse effects in the mother. Poorly-treated diabetes may cause end-organ damage that may in turn negatively affect obstetric outcomes. Physiologic glucose levels should be



## Pricing: U.S. (www.drugstore.com)

### Tablets (Januvia)

25 mg (90): \$645.98

50 mg (30): \$220.99

100 mg (30): \$223.99

**Monitoring Parameters** Hb A<sub>1c</sub>,  
serum glucose; renal function prior to  
initiation and periodically during treatment

**Reference Range** Recommendations  
for glycemic control in adults with diabetes:

Hb A<sub>1c</sub>: <7%

Preprandial capillary plasma glucose: 70-



## How does this drug work?

- Sitagliptin raises insulin secretion from the pancreas and lowers sugar.
- It lowers sugar.

## How is this drug best taken?

- This drug may be used alone or with other high blood sugar (diabetes) drugs.
- Take as you have been told, even if you are feeling better.
- Take with or without food. Take with food if it causes an upset stomach.
- Follow the diet and workout plan that your doctor told you about.

## What do I do if I miss a dose? (does not apply to patients in



januv Cancel

- J
  - Janumet 50/500
  - Januvia
  - Japanese Encephalitis Virus Vaccine
- \*  
D  
I  
M  
Q  
V  
Z

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M ↵

123 globe space Search



DrDrugs®  
**Sitagliptin**

**Indications**

[See Pronunciation](#)

- Adjunct to diet and exercise to improve glycemic control in patients with type 2 diabetes mellitus; may be used as monotherapy or combination therapy with metformin, a thiazolidinedione, a sulfonylurea, or insulin.

**Contraind./Precautions**

**Contraindicated in:**

- Type 1 diabetes mellitus.
- Diabetic ketoacidosis.
- Hypersensitivity.

**Use Cautiously in:**

- Renal impairment (dose ↓ required for CCr < 50 ml /min)



# MedScape

- \* Highly ranked mobile application
- \* Best: medication reference (drug interactions), procedure guide, and clinical reference.
- \* Over 7,000 medication and continuously updated
- \* As clinical reference does lack detail for specific illnesses
- \* A must have application! itunes and Android



# Medscape



Reference Search



News



Reference



Education



**EMA Recommends New Warnings on Osteoporosis Drug**  
*News Alert*



# Medscape



Home



News



Reference



Education





# Medscape REFERENCE

Search Reference

-  **Drugs, OTCs & Herbals** >
-  **Diseases & Conditions** >
-  **Procedures** >

-  **Interaction Checker** >
-  **Health Directory** >
-  **MEDLINE** >





Search Education

Featured CME

A Silent Epidemic: Why Chronic Hepatitis B Matters >

Treatment Initiation >

Family Medicine

ESA Therapy and Quality of Life: The Management of ESRD-Related Ane... > Fri, Mar 16, 2012

Population-Based Study Links Migraine and Restless Legs > Fri, Mar 16, 2012

Determinants for Autopsy After Unexplained Deaths Possibly Resulting From Infectious Causes,... > Fri, Mar 16, 2012



Home



News



Reference



Education



Back

# Browse by Class

**Herbals & Supplements** >

**Imaging Agents** >

**Immunologics** >

**Metabolic & Endocrine** >

**Neurologics** >

**Nutritionals** >

**Oncology** >

**Ophthalmics** >

**Otics** >



Home



News



Reference



Education



Back

# sitagliptin

Saved

## sitagliptin (Rx)

- Januvia >
- *Class:* Antidiabetics, Dipeptyl Peptid...

**Adult Dosing & Uses** >

**Pediatric Dosing & Uses** >

**Drug Interactions** >

**Adverse Effects** >

**Contraindications & Warnings** >

**Pregnancy & Lactation** >



Home



News



Reference



Education



Back

# sitagliptin

Saved

- Pharmacokinetics & Pharmacodynamics
- Drug Interactions
- Adverse Effects
- Contraindications & Warnings
- Pregnancy & Lactation
- Pharmacology
- Pricing & Images
- Add to Interaction Checker



Home



News



Reference



Education



[Back](#)

# sitagliptin

## Adverse Effects

### 1-10%

Abdominal pain

Diarrhea

Headache

Nasopharyngitis

Nausea

URI

Generally comparable to placebo

### Frequency Not Defined

Increased creatinine phosphokinase

Idiopathic thrombocytopenic purpura



Home



News

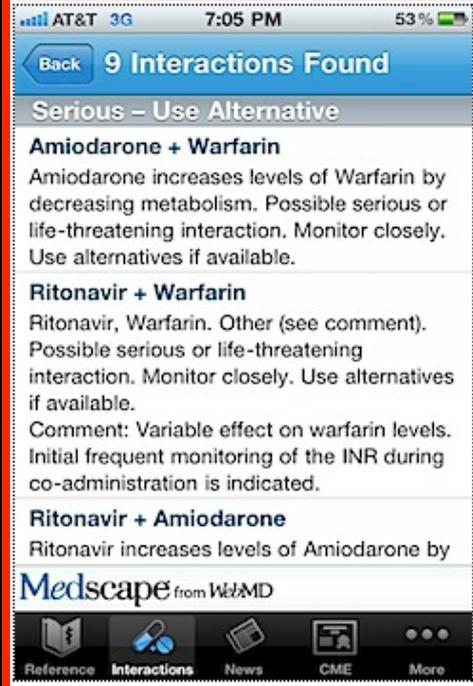
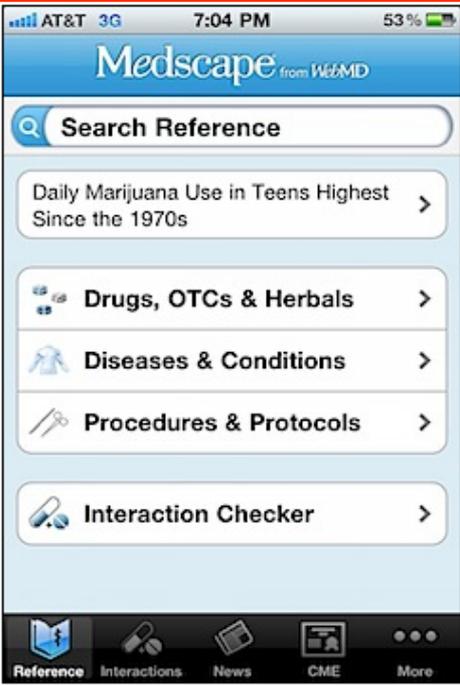


Reference



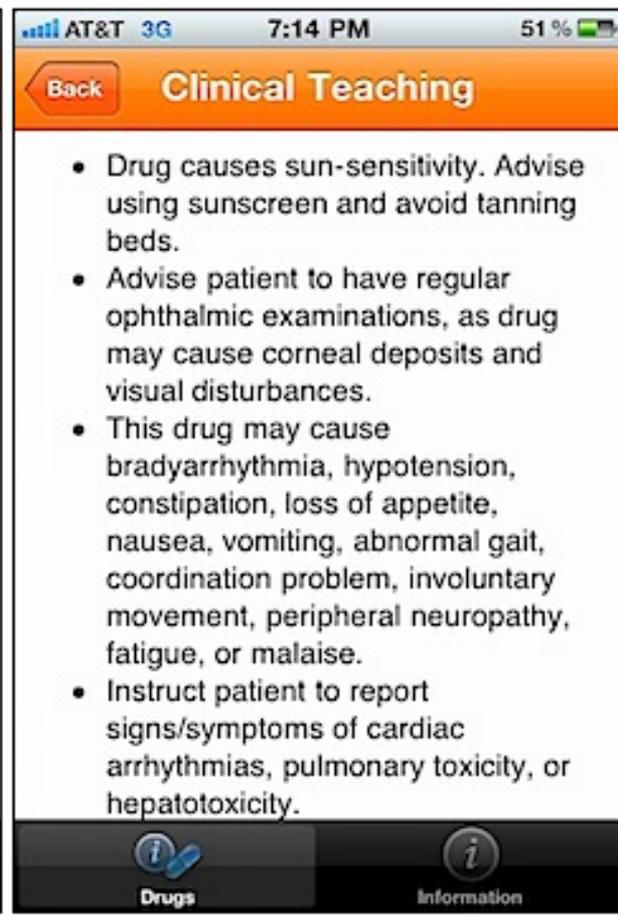
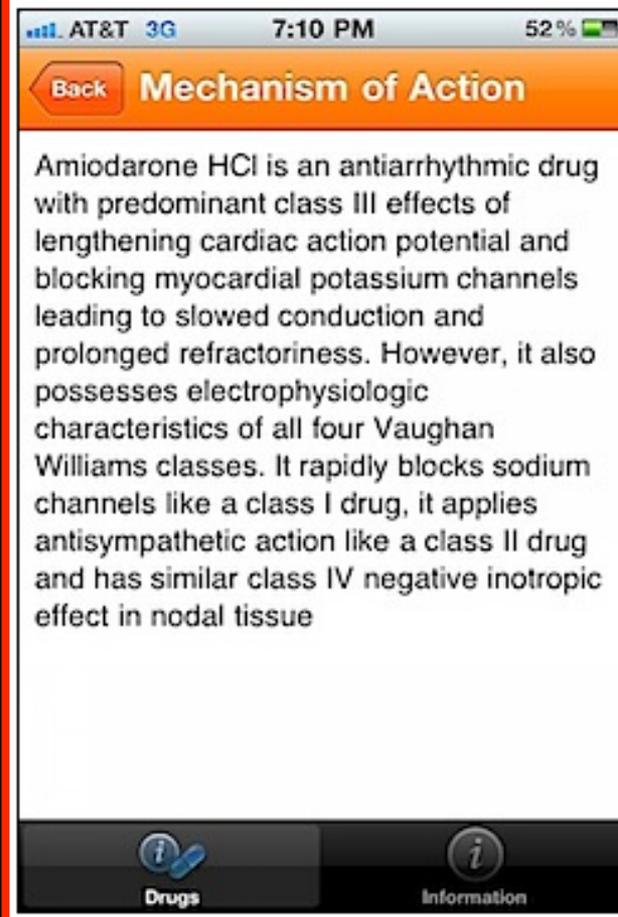
Education





# Micromedex

- \* Straightforward user interface, not include references from desktop version
- \* Includes mechanism of action and clinical teaching section
- \* Contains the Saudi national formulary
- \* Explains how a given medication works, how to take medication, side effects or toxicity alerts
- \* Lacks strong drug interaction, itunes and Android, free



# How can I choose the best drug reference app for me?

- \* Try the free version or the free trial
- \* Ask your librarian about available paid resources
- \* Do a few searches across all the apps
- \* Get a feel for their interfaces, quality, organization
- \* Keep multiple apps, different databases have different strong points

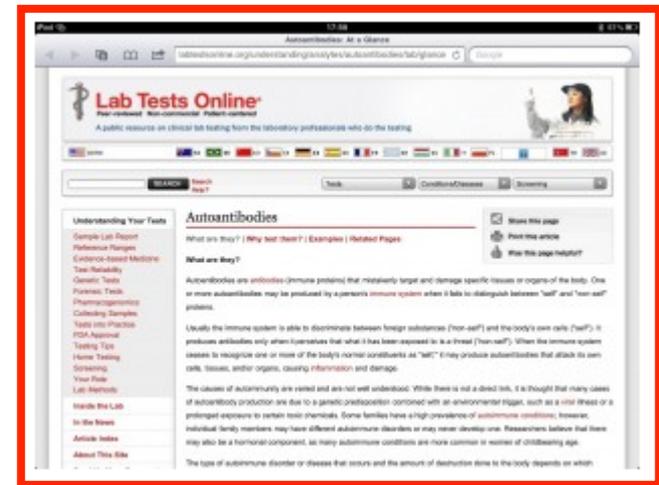
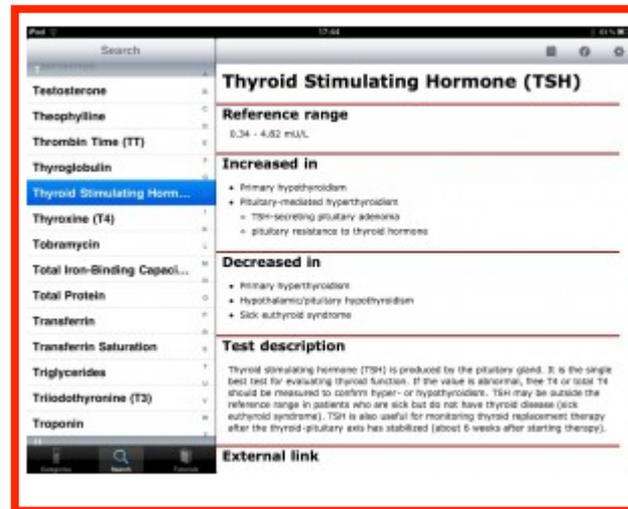


# Labs

- \* Lab 360 from Skyscape (free through SDL)
- \* LabDx

# LabDx

- \* 27 categories with ~200 laboratory tests
- \* Includes links to labtestsonline.org
- \* Downside: No pediatric values
- \* \$9.99, itunes



# What social media do you use in your mobile device?

1. Facebook
2. Flickr
3. Google Plus
4. LinkedIn
5. Twitter
6. Word press
7. YouTube
8. Other



# What social media do you use in your medical practice?

1. Facebook
2. Flickr
3. Google Plus
4. LinkedIn
5. Twitter
6. Word press
7. YouTube
8. Other



# Web 2 Apps

## Collaborating Tools:

- Social Networking tools (Facebook, Myspace , Orkut, LinkedIn,
- Wiki( Hawaiian language) meaning 'Quick'

## Contributing to the Web Tools

- Blogging & Microblogging tools( Blogger, Wordpress Twitter)
- Video & Image Sharing tools: Youtube, Flickr

## Aggregating and Marking Tools

- Feed Readers: ( Google Reader, Bloglines, Netvibes
- Social Bookmarking : Delicious. Connotea ( Design for Scientists to bookmark, tag and share )

# Medical RSS feeds

- \* [American Journal of Hypertension](#)
- \* [CNN.com - Health News](#)
- \* [eDrugSearch.com's Healthcare 100](#)
- \* [JAMA](#)
- \* [Medical News Today](#)
- \* [Medscape News](#)
- \* [Nature medicine - AOP](#)
- \* [Nature Webfeeds](#)
- \* [NewsIsFree: Sources in Category Health](#)
- \* [NLM RSS Feeds for News, Podcasts, and Webcasts](#)
- \* [Reuters: Health News](#)
- \* [ScienceDaily: Health & Medicine News](#)



# What is are podcasts?

- \* Podcast = iPod + broadcast (audio file)
- \* Podcast is a downloadable audio file  
You can subscribe via RSS or iTunes
- \* You can listen when you commute to work or exercise



# Medical Podcasts examples



- \* [Cochrane](#)
- \* [Essential Evidence Plus, POEM of the Week](#)
- \* [Centre for Evidence Based Medicine, Oxford University](#)
- \* Most of the medical journals
- \* [freemedicalpodcast.com](#)
- \* [LearOutLoud.com](#)

# YouTube medical channels



- \* [CEBM Education Channel](#)
- \* [KFSHHealthEdu](#) ي
- \* [30 Youtube.com Medical Video Channels](#)

Sign Out More Edit

Most Recent

Top Rated

History

My Videos

Subscriptions

Playlists

Subscriptions cebmed Unsubscribe



A Clinical Introduction to a Pre-Clinical Cou... 100% 2,789 views 09:45 cebmed



Evidence-Based Medicine in Practice... 100% 3,240 views 07:07 cebmed



Evidence-Based Medicine in Practice... 100% 2,268 views 07:37 cebmed



Evidence-Based Medicine in Practice... 100% 1,951 views 06:06 cebmed





**heart disease** @heartdisease3 6h  
Alternative Medicine [bit.ly/zIEZbl](http://bit.ly/zIEZbl)



**MedlinePlus.gov** @medlineplus 6h  
Impatience, irritability & aggression may be linked to high trans fat diets, according to researchers [1.usa.gov/FOb1g0](http://1.usa.gov/FOb1g0)



**WebMD** @WebMD 6h  
Is your #pet as healthy as possible? See our pet health evaluator to help before you make a trip to the #vet. [bit.ly/FPCr18](http://bit.ly/FPCr18)



**Medscape** @Medscape 7h  
#AAD2012: Vitamin D deficiency "epidemic" not from too little sun exposure; sun protection efforts should continue. [bit.ly/xVehkt](http://bit.ly/xVehkt)



Home



Connect



Discover



Me



# iTunes U



- \* Examples

- \* [School of Medicine, Yale University](#)

- \* [School of Medicine, Ohio State University](#)

# Manage Your References

## \* RefWorks - RefMobile

RefWorks's mobile site allows you to view references in your account, search within RefWorks and add new references and notes.



# EndNote for iPad

The screenshot displays the EndNote iPad application interface. At the top, the title bar reads "ENDNOTE" with navigation icons for Web, Downloads, and settings. Below the title bar is a search bar and a "Sort" button. The main content area is divided into two columns. The left column shows a list of journal articles, each with a thumbnail, title, and authors. The right column shows a detailed view of a selected article, including fields for Groups, Author, Year, Title, Journal, Volume, Issue, Date, and Short Title. A context menu is overlaid on the right side of the detailed view, listing five options: "Copy citation", "Copy temporary citation", "E-mail citation", "E-mail with attachment", and "Move reference to trash".

**ENDNOTE** Web Downloads (0) +

Search Sort

**Journal Article** ❤️ ↗️ ✎️ 🗑️

Groups  
Echolocation- Dolphins, V...

Author  
Elliott, R. G.; Dawson, S. M.; Henderson, S.

Year  
2011

Title  
Acoustic monitoring of habitat use by bottlenose dolphins in Doubtful Sound, New Zealand

Journal  
New Zealand Journal of Marine and Freshwater Research

Volume  
45

Issue  
4

Date  
Dec

Short Title  
Acoustic monitoring of habitat use by bottlenose dolphins in

**Copy citation**

**Copy temporary citation**

**E-mail citation**

**E-mail with attachment**

**Move reference to trash**

**The Ecological Conditions That Favor Tool Use and Innovation in Wild Bottlenose Dolphins**  
Patterson, Eric M.; Mann, Janet  
Plos One 2011

**Hearing Sensation Levels of Emitted Biosonar Clicks in an Echolocating Atlantic Bottlenose**  
Li, S. H.; Nachtigall, R. E.; Breese, M.; Supin, A. Y.  
Plos One 2012

**Listening for a needle in a haystack: passive acoustic detection of dolphins at very low**  
Rayment, William; Dawson, Steve; Scall, Silvia; Sloo...  
Endangered Species Research 2011

**Beaked whale and dolphin tracking using a multichannel autonomous acoustic recorder**  
Wiggins, Sean M.; McDonald, Mark A.; Hildebrand, ...  
Journal of the Acoustical Society of America 2012

**Directional properties of bottlenose dolphin (*Tursiops truncatus*) clicks, burst-pulse, and**  
Branstetter, Brian K.; Moore, Patrick W.; Finneran, J...  
Journal of the Acoustical Society of America 2012

**Acoustic basis for fish prey discrimination by echolocating dolphins and porpoises**  
Au, Whitlow W. L.; Branstetter, Brian K.; Benoit-Bird, ...  
Journal of the Acoustical Society of America 2009

**Acoustic monitoring of habitat use by bottlenose dolphins in Doubtful Sound, New Zealand**  
Elliott, R. G.; Dawson, S. M.; Henderson, S.  
New Zealand Journal of Marine and Freshwater Research 2011

Echolocation- Dolphins

Echolocation- Marine

# Reference / News applications

**NEJM ✓**

**Harvard Public Health ✓**

**MedPage Today ✓**

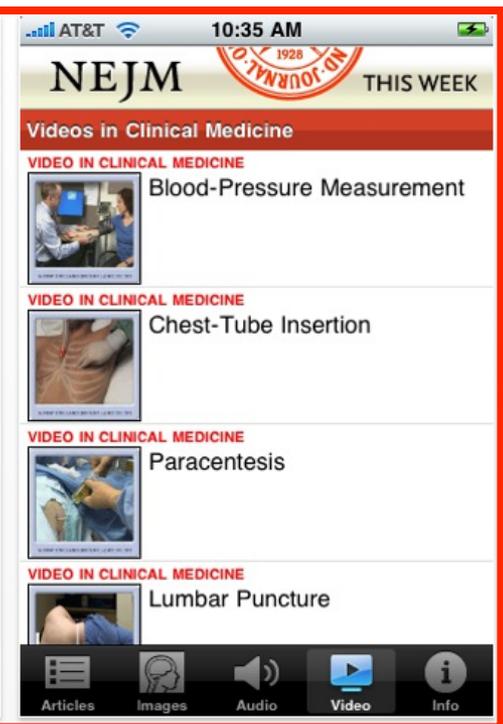
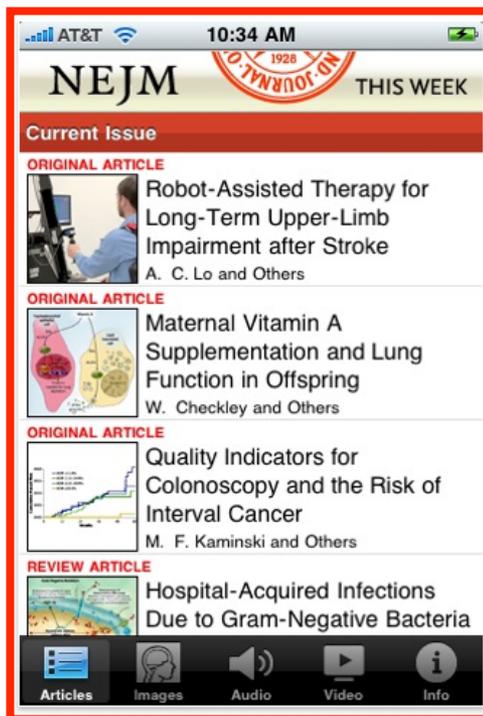
**Medscape ✓**

**Internal Medicine News ✓**



# NEJM This Week

- \* Weekly audio summaries, itunes
- \* Videos of common procedures (paracentesis and lumbar puncture)
- \* Free



# Harvard Public Health

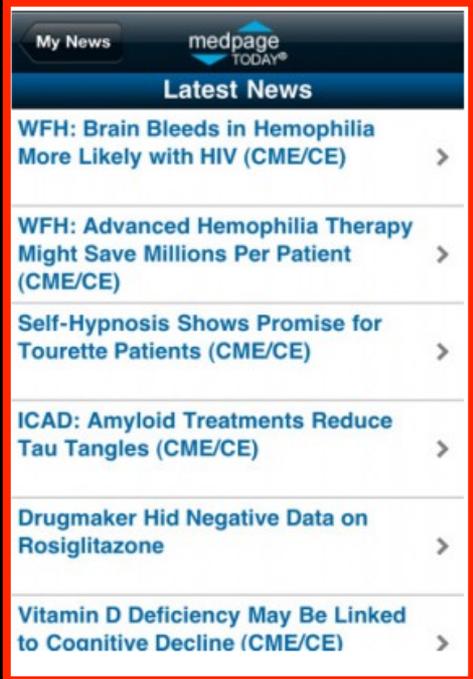
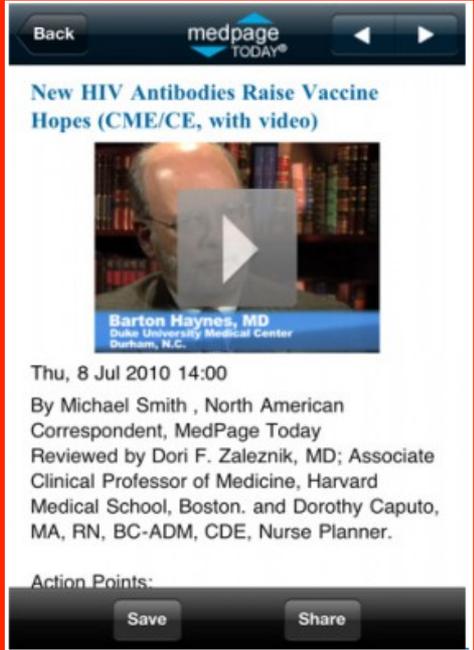
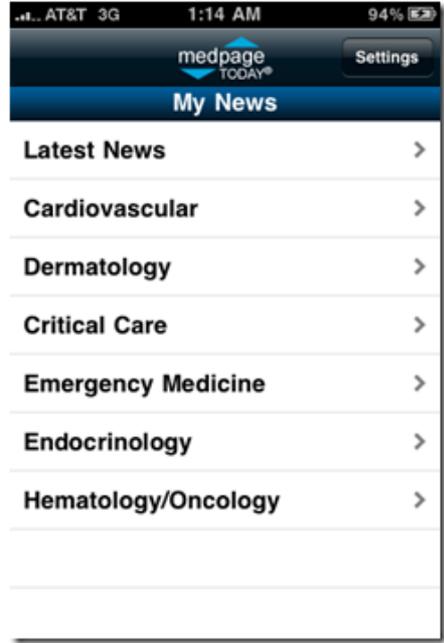
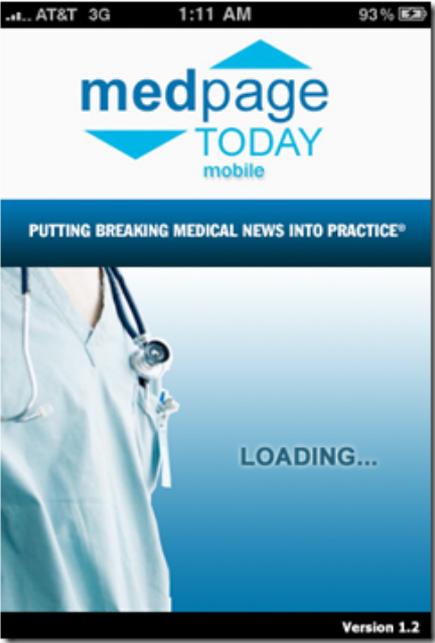
- \* Videos
- \* Podcasts
- \* Breaking News
- \* Free
- \* itunes and Android



# MedPage Today

- \* Designed University of Pennsylvania School of Medicine
- \* Access to up-to-date news sorted by field
- \* Custom select favorite channels
- \* Audio and video-education on the go!
- \* Free
- \* itunes and Android





# Internal Medicine News

- \* Independent bimonthly newspaper founded in 1968
- \* Iphone and Itouch, No Android
- \* Free
- \* Options include: News, specialty focus, blogs, videos, Facebook
- \* Include study citations for further reading
- \* Stories can take time to load depending on connection
- \* No “most popular” listing yet



# Point of care applications

**Wikipanion ✓**

**Calculate by QxMD ✓**

**OB (Pregnancy) Wheel by Quatertone ✓**

**Scutsheet-tracking patients**

**Eponyms ✓**

# Scutsheet-tracking patients

- \* \$9.99, itunes
- \* Android, beta, free
- \* Track multiple patients
- \* Add events for each patients
- \* Calculate important parameters
- \* Does not offer ranges
- \* Does not screen for erroneous inputs
- \* No print or email feature just yet



# Eponyms

- \* \$1.99 in itunes, 1,700, 28 categories, Android, free
- \* Fully searchable from Andrew J. Yee  
([www.eponyms.net](http://www.eponyms.net))



23:38

fracture Done

Eponym

A

**Antley-Bixler syndrome**

B

**Barton's fracture**

**Battle's sign**

★ **Bennett's fracture**

**Bjork-Shiley valve**

**boxer's fracture**

C

**clay shoveler's fracture**

**Colles's fracture**

★ **Collet-Sicard syndrome**

**Cooper nail's sign**

D

**Destot's sign**

**Deutschlander's fracture**

G

**Galeazzi fracture**

H

**LeFort III fracture**

Complete craniofacial separation; different from LeFort II in that it extends through the nasofrontal suture and frontozygomatic sutures.

ENT, ORTHO

Created: 28.02.00  
Updated: 28.02.00

Random Eponym Random Title

Q W E R T Y U I O P

A S D F G H J K L Search

Z X C V B N M ! ?

.?123

23:33

Categories All Eponyms

Eponym

A

**Abernethy malformation**

**Achenbach's syndrome**

**Adamkiewicz, artery of**

**Adamson's fringe**

**Addison's disease**

**Adie's pupil**

**Adler sign**

**Adson's sign**

**Ahumada-del Castillo syndrome**

**Aicardi syndrome**

**ainhum disease**

**Alagille syndrome**

**Albers-Schönberg disease**

**Albert's test**

**Albright's hereditary osteodystr...**

**Alder-Reilly anomaly**

**Alexander's disease**

**Alexander's law**

**Allen's sign**

**Allen's test**

**Allis sign**

**Abernethy malformation**

Congenital anomaly of the splanchnic vasculature, arises from defects in vitelline vein formation; in type 1, portal vein completely diverted into IVC and complete absence of formation of intrahepatic portal vein; in type 2, portal venous system is formed, but there is an abnormal communication with systemic veins, usually IVC; associated with hepatic encephalopathy and hepatopulmonary syndrome; more common in dogs, particularly Yorkshire terriers.

ANAT, GI, PEDS

Created: 17.01.05  
Updated: 22.06.09

Random Eponym Random Title



# Productivity Applications

**Feedly ✓**

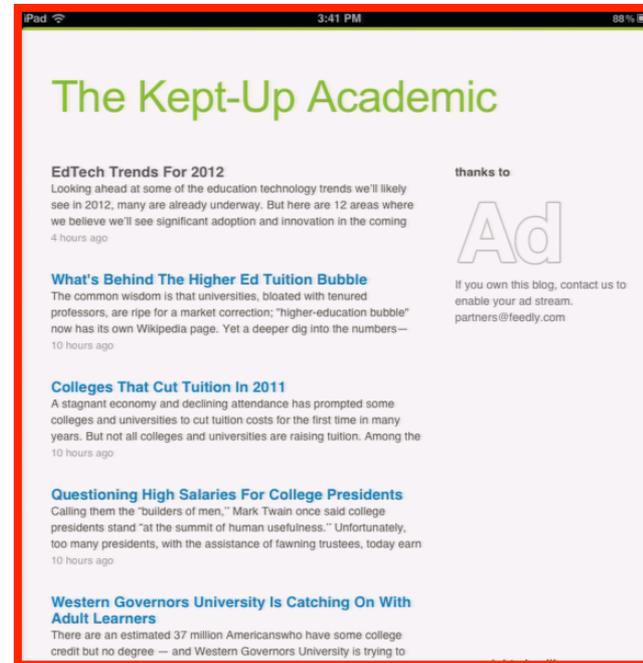
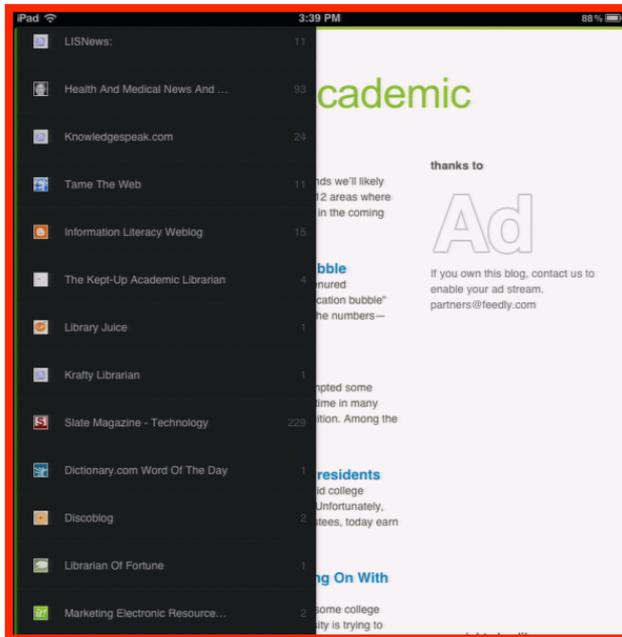
**Dropbox ✓**

**Evernote ✓**

**Goodreader ✓**

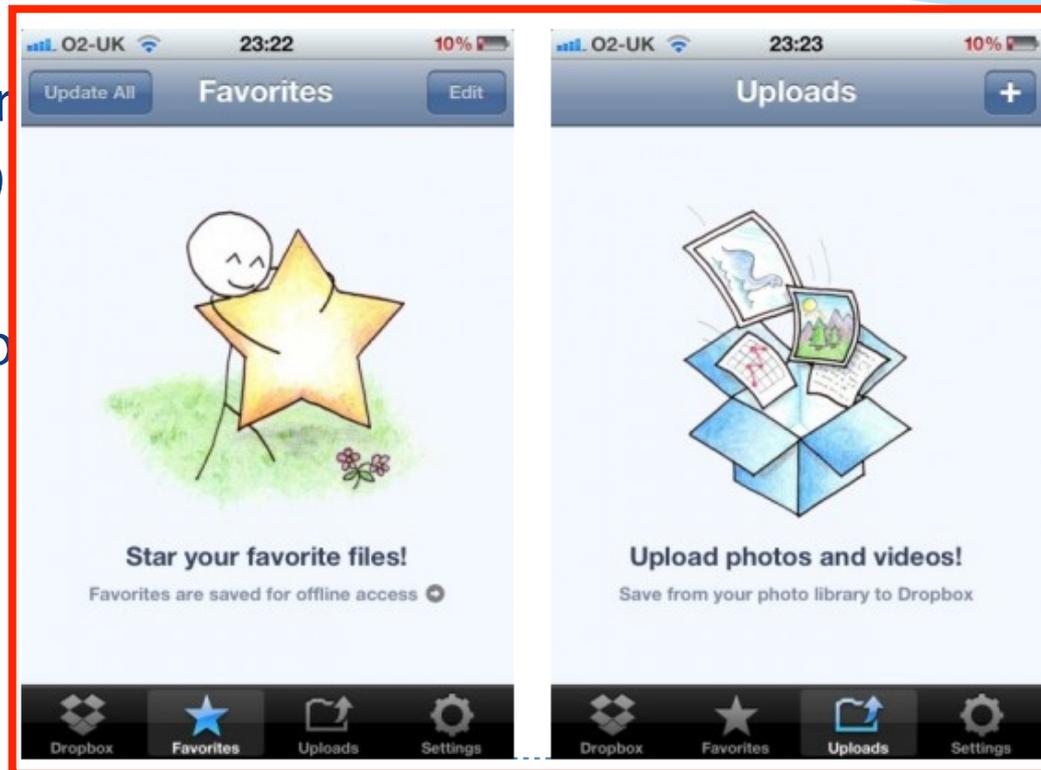
# Feedly-RSS reader

- \* Free, itunes and Android, highly rated
- \* Read all your favorite blogs and web sites in one place



# Dropbox

- \* 2GB free or \$19
- \* Store Andro



9.99/mn

d

# Evernote

- \* Premium \$5 per month or \$45 per year, Free monthly 60MB
- \* Premium: Search within PDFs, Android and itunes
- \* Premium: Monthly upload allowance increased to 1GB



Remember everything.

**Capture anything.**  
Save your ideas, things you like, things you hear, and things you see.

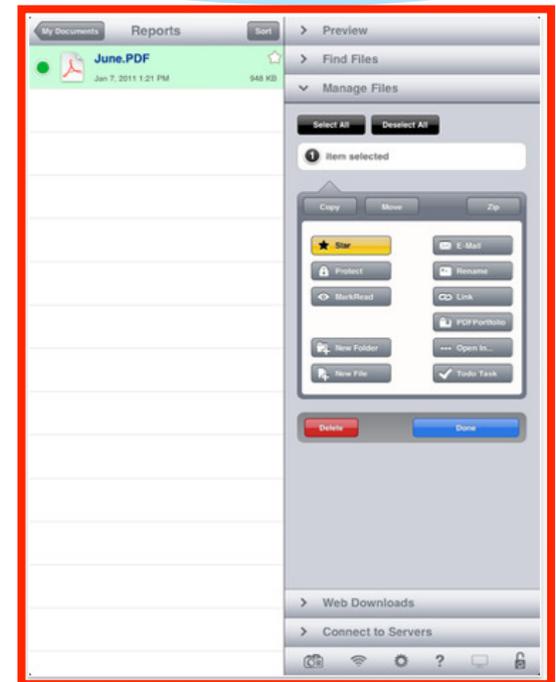
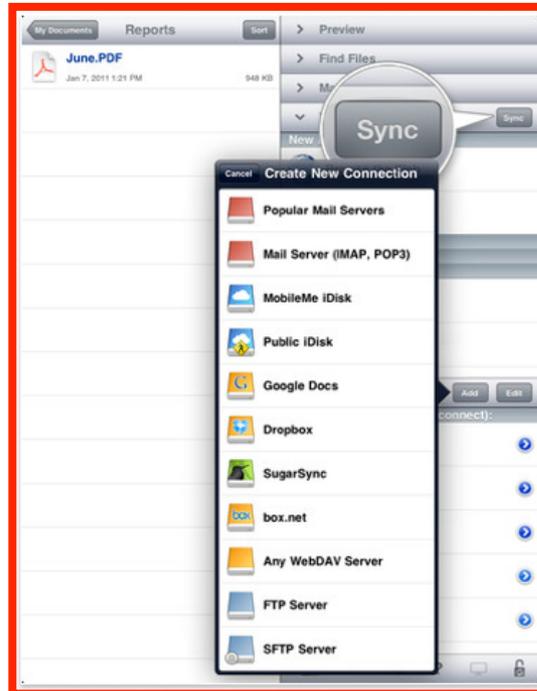
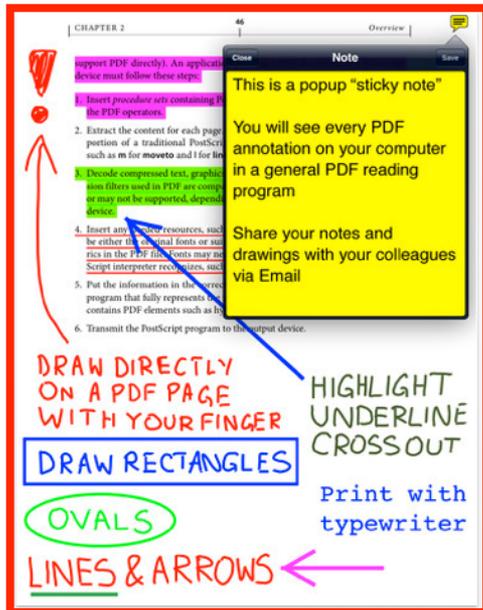
**Access anywhere.**  
Evernote works with nearly every computer, phone and mobile device out there.

**Find things fast.**  
Search by keyword, tag or even printed and handwritten text inside images.

The advertisement features a green background with a red border. It is divided into three vertical sections. The left section shows a laptop with a shopping list and a recipe on the screen, with a speech bubble icon above it. The middle section shows a tablet and a smartphone with a cloud icon above them. The right section shows a search bar with the text 'salty ramen' and a recipe card with an image of ramen.

# Goodreader

- \* \$4.99, iTunes only
- \* “a Swiss army knife of awesome”
- \* PDF reader on androids



# How do you plan to discover new EBM apps?

1. Ask your institute librarian
2. Search for medical apps websites
3. Follow twitter medial apps hash tags
4. Search app store / android market
5. other

# Categories



Finance



Games



Health & Fitness



Lifestyle



Medical



Categories

# Medical

Top Paid    Top Free    Release Date



Drugs.com

**Pill Identifier by Dr...** + \$0.99 >

★★★★★ 12 Ratings



Danike, Inc.

**PocketPharmacist...** + \$1.99 >

★★★★★ 232 Ratings



Red Hammer Software

**Sleep** + \$0.99 >

★★★★★ 92 Ratings



iAnesthesia LLC

**Instant ECG: An Ele...** \$0.99 >

★★★★★ 332 Ratings



Seacloud Software

**Baby Connect: track...** \$4.99 >



# Your institute library

- \* Examples:

- \* [OHSU](#)

- \* [Harvard Medical School](#)

- \* [Stanford School of Medicine](#)

- \* [UNC](#)

- \* [BU Medical school](#)



# Review Sites

## **iPhone Medicine Blog**

- \* Created and maintained by Dr. Salvatore Volpe. Not updated as often as other pages on this list, but Dr. Volpe does have a Twitter feed on related topics. iPhone only, but links to related sites.
- \* <http://iphonemedicine.blogspot.com/>



# Review Sites

## **iMedicalApps**

- \* The most widely read of all medical app review sites, receiving over 400,000 page views per month. Content is written by a team of doctors and medical students. iPhone, iPad, Android and Blackberry reviews.
- \* <http://www.imedicalapps.com/>



# Review Sites

## **MobiHealthNews**

- \* A newsletter that chronicles the healthcare sector's adoption of mobile technology
- \* <http://mobihealthnews.com>



# In summary,

- \* What is the best App to use?
- \* *It depends on the question you ask and information you need*

 It's question time 