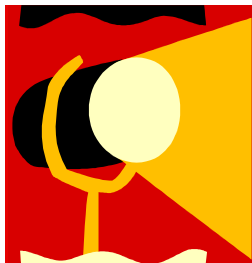


AIHA Internet Resources Digest

Supporting Access to the High Quality Online Resources

July 2014



Spotlight on: Apps for Evidence-based Practice

Smartphones and tablets are used more often in clinical practice, as the quality and variety of medical apps has improved greatly in recent years. This digest provides examples of free and low-cost apps that help clinicians find evidence-based answers to their questions at a point-of-care.

Data bases

PubMed for Handhelds



For iPhone, iPad, Android. Multiple ways to search PubMed/MEDLINE for evidence-based publications: PICO (Patient, Intervention, Comparison, Outcome); ask MEDLINE, a free-text, natural language search; and Consensus Abstracts. Apple iOS app includes these options as well as BabelMeSH which has search options in 13 languages. Price: Free

<http://pubmedhh.nlm.nih.gov/>

LactMed App



For iPhone, iPad, Android. Find information about maternal and infant drug levels, possible effects on lactation and on breastfed infants, and alternative drugs to consider. Price: Free

<http://toxnet.nlm.nih.gov/help/lactmedapp.htm>

Medscape Mobile

The logo for Medscape Mobile, with the text "Medscape Mobile" in a blue serif font inside a black rectangular border.

For iPhone, iPad, Android. Searches MEDLINE and Medscape News. Offers an evidence-based reference with images and video, a drug reference and interaction checker. Can save articles, email articles and share articles. Medical news and critical alerts available.

One of the best features is the ability to download reference data and drug interactions when there is no Internet connection. Medscape tracks the latest FDA announcements and journal articles and offers clinical presentation, workup and treatment information for more than 4,000 diseases and conditions. Price: Free

<http://www.medscape.com/public/mobileapp>

Point-of-Care Tools

Diagnosaurus 2.0 DDx PDA Tool



For Palm, Windows Mobile, Blackberry, iOS, Android, Windows Phone 7. Diagnosaurus provides differential diagnoses (DDx) of symptoms, signs, and diseases. By using the pulldown menu, you can choose to view entries by organ system, or select to view the list of symptoms only, the list of diseases only, or all of the entries.

For example, if you wish to review the causes of a patient's chief complaint, simply select the symptom or sign from the alphabetical listing. If you have made a diagnosis and wonder what other disorders to consider,

select your diagnosis from the list to see its DDx. Users can browse through approximately 1,000 diagnoses by organ, system, symptom and disease. There's also a special etiology section for referencing possible causes of disease. Price: \$1.99

<http://books.mcgraw-hill.com/medical/diagnosaurus/index.html>

Evidence Central



For Blackberry, iOS, Android. Evidence Central is an integrated, evidence-based solution that supports effective medical practice by delivering the latest research and analysis

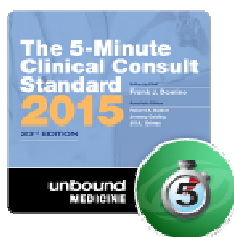
to mobile devices and the web.

Evidence Central helps clinicians answer questions about etiology, diagnosis, treatment, and prognosis commonly encountered in practice by providing evaluated, validated, and graded information from Cochrane Abstracts and Evidence-Based Medicine Guidelines (EBMG). Arranged by topic, EBMG and Cochrane Abstracts are useful for problem-based questions and include links to MEDLINE Journals for the latest medical literature.

Evidence Central also keeps you up to date by delivering a graded and validated EE+ POEM to your mobile device each day and providing instant access to the latest medical literature with MEDLINE Journals. Price: \$80.00 for one year subscription. If you decide not to renew your subscription, you can still access the content on your current mobile device.

http://www.unboundmedicine.com/products/evidence_central

5-Minute Clinical Consult



For iPhone, iPad, Android . 5-Minute Clinical Consult (5MCC) delivers fast, up-to-date guidance on 900+ medical conditions on your mobile device and the web. Bonus features include 200 pediatric topics, 130+ dermatology images, McGraw-Hill Medical's Diagnosaurus®, and Medical News RSS feeds.

For medical conditions typically found in a primary care practice. Allows users to search by disease or symptom without Internet connection. Works in conjunction with McGraw-Hill Medical Diagnosaurus, which includes more than 1,000 differential diagnoses. Price: Free Application requires a current paid subscription to the online 5-Minute Clinical Consult service - \$99 per year

http://www.unboundmedicine.com/products/5-minute_clinical_consult_5mcc?svar=a/ub&svar=c/5mcchp

QMDT (Quick Medical Diagnosis & Treatment)



For iPhone, iPad, Android. QMDT offers evidence-based diagnoses and guidance on 950 diseases "when every second counts" according to its description. Based on the CMDT (Current Medical Diagnosis & Treatment) medical textbook.

Headings include clinical findings, diagnosis, treatment, outcomes and evidence. For the spelling-challenged physician, the application also offers a "fuzzy filter" when the spell-

ing is uncertain, wild card search, quick type ahead and a learn-a-new-word-a-day feature. Price: \$9.99

<https://itunes.apple.com/hr/app/quick-medical-diagnosis-treatment/id792671616?mt=8>

ACP Clinical Guidelines from the American College of Physicians



For iPhone, iPad, Android. ACP evidence-based guidelines targeted to internal medicine physicians and other clinicians. Includes clinical recommendations and guidance statements, as well as the rationale for recommendations, summary tables and algorithms. Price: Free

http://www.acponline.org/clinical_information/guidelines/mobile.htm

Guideline Central



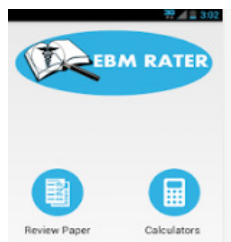
For iPhone, iPad, and Android. Digital version of the 2600 National Guideline Clearinghouse (NGC) summaries. Provides summaries indexed by organization, profession and specialty and categories from worldwide medical associations. Provides offline access of content and ability to share, store and annotate. Price: Free

<https://www.guidelinecentral.com/about-us/digital-formats>

<https://www.guidelinecentral.com/guideline-library/summaries>

EBM Tools

EBM Rater



For Android. EBM Rater is a simple, easy-to-use tool for students and clinicians to critically appraise a variety of clinical studies and to rapidly perform common EBM calculations.

Each critical appraisal question is fully explained so that even EBM novices can easily read and appraise a study.

Features:

"Evaluation" feature that summarizes the risk of bias in the appraised study

Contains appraisal criteria for all major study designs

Contains criteria to appraise composite endpoints, subgroup effects, and surrogate endpoints

Contains EBM calculators including NNT, NNH, patient specific NNT & NNH, post-test probability, and patient risk due to exposures (from observational studies)

Intuitive interface

Full featured offline mode so no internet connection necessary

- Developed in collaboration with a board-certified Internal Medicine physician and EBM expert Price: \$0.99

<https://play.google.com/store/apps/details?id=com.ebmrater&hl=en>

EBM Tools



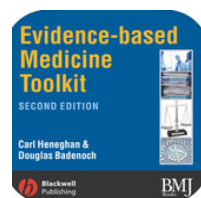
For iPhone and iPad. Provides simple ways to calculate post-test probability and related statistics. For healthcare providers and researchers needing a tool to calculate post-test probabilities.

The app could potentially help decide whether a test is ordered or not. Price: Free

<http://www.imedicalapps.com/2013/05/ebm-tools-app-calculate-post-test-probability/>

<https://itunes.apple.com/hr/app/ebm-tools/id619617536?mt=8>

Evidence-based Medicine Toolkit, 2nd Ed



For iPhone and iPad. This bestselling pocket guide to the skills of evidence-based medicine succeeds in demystifying the terminology

and processes in a handy and easy-to-follow format. Price: \$35.99

<https://itunes.apple.com/hr/app/evidence-based-medicine-toolkit/id421127133?mt=8>

Qx Calculate



For iPhone, iPad, Android. Provides a wide range of calculators to help determine prognosis, treatment, management, staging, classifications. Price: Free

<http://www.qxmd.com/apps/calculate-by-qxmd>

Reviews of EBM Apps

10 mobile applications for evidence-based medicine *by Ephraim Schwartz*

„Evidence-based medicine has quickly moved from the background to the forefront as a determiner of treatment pathways, and the mobile health app marketplace has responded in kind. Dozens of EBM apps are available in Apple's App-Store and Google's Android Play for smartphones and tablets, many from major medical institutions and most of them free or for a nominal fee. ...When doctors are overwhelmed with data points and don't have the time or bandwidth to read through all the journals and abstracts, these programs can separate the signal from the noise and allow them to focus on the most relevant information, as well as making sure they answer the right questions.”

<http://www.mhealthnews.com/slideshow/10-mobile-apps-evidence-based-medicine>

Use of handheld computers in clinical practice: a systematic review. *S. Mickan, H. Atherton, Nia Wyn Roberts et al. BMC Medical Informatics and Decision Making 2014, 14:56*

„ Contemporary research suggests that handheld computers may support aspects of clinical diagnosis and management. This systematic review was designed to synthesise high quality evidence to answer the question; Does healthcare professionals' use of handheld computers improve their access to information and support..

clinical decision making at the point of care?.. Conclusion: Healthcare professionals' use of handheld computers may improve their information seeking, adherence to guidelines and clinical decision making. Handheld computers can provide real time access to and analysis of clinical information. The integration of clinical decision support systems within handheld computers offers clinicians the highest level of synthesised evidence at the point of care. “ <http://www.biomedcentral.com/content/pdf/1472-6947-14-56.pdf>

EBM apps that help you search for answers to your clinical questions.

D.Windish. Evid Based Med 2014;19:3 85-87

This article reviews smartphone and tablet applications that can help a clinician search for evidence to support the practice of EBM. There are many apps available and this review provides examples of the breadth of available apps; it is not meant to be comprehensive and does not provide app ratings.

<http://ebm.bmj.com/content/19/3/85.full>

About the AIHA Internet Resources Digest

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If you have a suggestion for a Digest topic, or would like to contribute information about Internet resources, please contact [ibra\[at\]zadar.net](mailto:ibra[at]zadar.net).

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