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**Keeping Clinically Current and How to Perform Critical Appraisal in Everyday Practice**

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**Objectives:**

1. **Discussed the 6S approach to EBM**
2. **Practiced answering EBM questions using the best mobile sources**
3. **Reviewed one critical appraisal system**
4. **Practiced using that system on a journal article**

**Activity #1: Burn Your Textbooks**

**2 minutes**

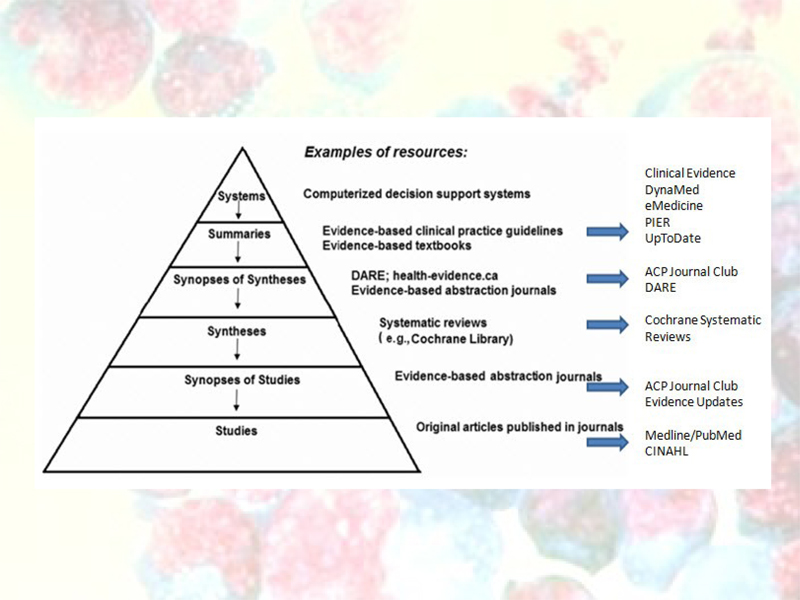
Go to your favorite EBM resources and see if they “pass” these two steps:

1. Text must have in-line references to support each key recommendation
2. References for each key recommendation must be no more than 2-3 years old

**Share your thoughts with a partner (Think-Pair-Share)**

**We will hear a sample**

**Objective 1: Discussed the 6S approach to EBM**

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**Objective 2: The Best Sources of POEMS (According to Dr Maurer!)**

**UpToDate** MDCalc or Qx Calculate

**Dynamed Plus** Dr Steinberg or Dr Brancel Apps

**Essential Evidence Plus** Epocrates or Lexicomp or MicroMedex

Medscape/eMedicine Hopkins or Sanford Guides or IDC

AFP by Topic ASCVD, Aspirin Guide

PubMed4Hh Pedi QuikCalc, PediSTAT, AAP NRP

AHRQ ePSS OB Wheel, GBS, PPH, Pregnancy AtoZ

Prescriber’s/Medical Letter HEART Pathway, SI Sepsis

**Objective 3: Practiced answering EBM questions using the best sources on our mobile devices**

**Work in pairs or in a small group to solve each case. Ideally, use ONLY your Smart Device, but you can use your laptop if you cannot quickly find the answer on your Smart Device. Even if you “know the answer”, I still want you to look up the answer on your device. Let’s see which groups can find the correct answer the fastest. Also take note of what different apps groups use to come up with the correct answer! We will discuss each case in sequence so please don’t skip ahead to the next case!**

**Case 1:**

An 80 y/o male with Type II diabetes, hypertension, and hyperlipidemia has an A1c of 8, and a blood pressure of 145/90.

* + What is his goal A1C and blood pressure?
  + He is on a statin. Should he be?
  + He is not on aspirin. Should he be?

**Case 2:**

A 65 y/o male presents with CAP, PMHx of CHF, a temp of 101.5, RR 35, HR 130, and BUN 35.

* Should the patient be hospitalized?
* When could he be discharged?
* How effective is Pneumovax 23?

**Case 3:**

65 y/o male with lethargy, SOB, T 102.1, HR 108, BP 100/65, RR 24 and SpO2 92% on 4L NC. Cxr shows LLL infiltrate.

* What is your dx and why?
* What rec tx in 1st hr, 3hrs, 6hrs?
* What antibiotics do you prescribe?
* What did ARISE and ProCESS trials show?

**Case 4:**

A 30 y/o G2P101 at 38 wks gestation presents in active labor. NO GBS testing was performed. Membranes just ruptured at home approx 8 hours ago.

* Does this patient require GBS prophylaxis?
* What if the pt’s temp is 100.6?
* What antibiotic would you use if PCN allergic?

**Case 5:**

A 30 y/o G2P101 at 38 wks gestation presents in active labor. NO GBS testing was performed. Membranes just ruptured at home approx 8 hours ago.

* Does this patient require GBS prophylaxis?
* Does your answer change if pt’s temp is 100.6?
* What antibiotic would you use if PCN allergic?

**Case 6:**

12 mo male for WBE and immunizations. Previously received PCV #1 at 8 months and PCV #2 at 11 months.

* When can he receive PCV #3 and #4?
* What social development milestones should he be meeting?
* Should he receive fluoride? How much?

**Case 7:**

A 24 y/o G0P0 presents for f/u of her well woman exam. Her pap revealed LSIL.

* What is the next step of her treatment?
* What if that intervention revealed LSIL?
* When could the patient return to routine screening?

**Recommended Smart Device Apps**

1. Drug Guides
   1. Epocrates: comprehensive, free to pricey! Easy to use.
   2. Lexicomp: comprehensive and free! Not quite as easy or familiar to most.
   3. Micromedex: comprehensive, not that pretty, but free to minimal cost. Some institutions (Madigan) have access to Micromedex Neofax and Pediatrics Essentials.
   4. PediDoser: excellent peds wt based dosing app. $4.99.(not available now)
   5. Prescriber’s Letter: latest drug news with excellent info at your fingertips! $129
   6. The Medical Letter: similar to Prescriber’s Letter but a bit more int med focused. $129
   7. RxFiles: evidence based prescribing in busy chart format. $59.99
   8. Hopkin’s Abx Guide: best ID app available hands down. $29.99!
   9. Sanford Guide: the previous gold standard available for iOS! $29.99!
   10. Infectious Disease Compendium (IDC): humorous take on bugs/drugs! $5.99
   11. Natural Medicines Database: Like RxLetter but on natural meds. Free to military.
   12. About Herbs: free natural med guide from Memorial Sloan Cancer Center.
   13. Nelson’s Abx Guide: great content for peds, clumsy interface,$39.99.
   14. CDC Influenza: recs from CDC on dx/tx of flu. Other CDC apps too, even one on Tickborne dz, STD Guide, PTT guide, Yellow Book, EpiInfo, etc.! ALL are Free!
   15. Vanc Calc: great if you do vanco dosing and don’t have PharmD. $2.99.
   16. FPM Opiod, pHMedical Morphine Equivalence Calculator, eOpiod, and Safe Opioids: none perfect, but OK opioid conversion apps. Free to $4.99.
   17. Polypharmacy: app to assist in deprescribing. Free.
   18. GoodRx: gives local drug prices based on zip/GPS. Free.
2. EBM/General Medicine:
   1. UptoDate: easiest to use and (usually) most up to date. Free or $499.99.
   2. Dynamed/Plus: excellent alternate to UptoDate. FREE via MAMC or UW Healthlinks! $395
   3. Essential Evidence Plus: + EBM, not easiest to use. Free at MAMC on STATRef! $85.
   4. AFP by Topic: collection of “most current” AFP articles. Free!
   5. Medscape: Swiss Army knife ala Epocrates includes eMedicine. Fast/Free!
   6. STATRef!: assortment of ref’s, journals including EEPlus. Cost varies. Free to MAMC!
   7. ClinicalKey: all of Elsevier’s resources in one app. Free to MAMC!
   8. PEPID: a mix of all of the above. Free if you are a PEPID author! $299.99!
   9. AHRQ ePSS: a MUST HAVE app for prevention! Free!
   10. DxSaurus: classic differential diagnosis calculator. $1.99!
   11. Pub Med 4Health: app to search Pub Med in PICO, other formats. Free!
   12. Journal Club: great app for reviewing latest/greatest med trials. $2.99!
   13. ICU Trials by ClinCalc: one of several apps for ICU med trials. $4.99!
   14. First Consult by MDConsult: alternate to above; available code via USU.
   15. Med Pearls: great “reminder” of EBM recs, made by FM doc. Free.
   16. Toolbag, EBPC, Diagnose, MDHero: assorted EBM apps. Free to $9.99.
   17. Boston U. Finding Information Framework: how to ask EBM questions. Free.
   18. CASP: Evidence based worksheets for critical appraisal of articles. Free.
3. Medical Calculators:
   1. MDCalc: most popular website now in app form. Free.
   2. MediMath: classic medical calculator. $4.99.
   3. MedCalc: ditto above. I switch between both. $1.99.
   4. Qx Calculate: rapidly becoming the new gold standard. Free!!
   5. ASCVD Risk: the new (controversial?) ACC lipid calculator. Free!!
   6. QRisk: various apps; UK version of cardiac risk guides. Free to $3.99.
   7. Aspirin Guide: who should get ASA guide per USPSTF. Free!
   8. STATCoder: company with a lot of free apps! Growth charts, CV Risk 2013 (new cholesterol guidelines), Framingham, BMI, Depression, GAD, Adult ADHD, Asthma, insulin dosing, ICD-9/10, etc. Download them all! Free or in app purchase.
   9. Joshua Steinberg: not an app, but a person who makes A LOT of FREE apps! ABG, Pap, warfarin, DVT/PE, Pneumonia, PFT, lead, DepoCalendar, Gout Dx, etc. Download them all! Just type “Joshua Steinberg” into the app store and download!
   10. FRAX: IF you use this to do your osteoporosis screening risk calculation it is pretty handy; other options out there (i.e. free on the web). $5.99!
   11. VTE apps: see above; also IMPROVE trial apps, Preventing VTE. Free.
   12. Blood gas app: lots of these! See Steinberg’s, Blood Gas, etc.
4. Internal Medicine:
   1. Medicine on Call: great for writing admission orders but not much else!
   2. MD on Call: great little app for X-cover/call issues. $4.99.
   3. Lederman’s Internal Medicine: pocket guide by Sanford group. $29.99
   4. NEJM this Week: great way to keep up with high impact factor lit! FREE!
   5. NEJM & JAMA Network Image Challenge: nice image collection. Free/$2.99
   6. Escavo Sepsis: a truly great sepsis app. $3.99! also see “Sepsis Guide”.
   7. Smart Intern Sepsis: great app for new sepsis guidelines. Free!
   8. PFT Eval: nice app that walks you through spirometry interpretation. Free!
   9. COPD GOLD app: GOLD guideline for iPhone. Free.
   10. COPD Pocket Guide: Big pharma guide to latest COPD guidelines, CAT. Free!
   11. ADA Guideline: diabetes guideline app from ADA;?EBM though! Free!
   12. AACE Diabetes algorithm: endocrinologists take on diabetes mgt. Free!
   13. AID Smart Insulin Dosing Guide: how to properly dose insulin in DMII. Free!
   14. Endo Companion: 101 app for all things endo. Free!
   15. ACP Immunizations: alternative to Shots. Free.
   16. Coma App: calculate brain death, need for hypothermia tx. Free!
   17. Ventilator: free “textbook” on mech vent 101. Free!
   18. The Ventilator App: another take on vent mgt/quick settings. Free.
5. Pediatrics:
   1. Pediatric Care Online: most comprehensive peds app, but pricey!! $100!
   2. Kidometer: my FAV peds app. All kiddo info in your pocket! $4.99. (no longer available)
   3. Pedi STAT: this app rules! A Breslow tape and a whole lot more! $2.99!
   4. PalmPEDi: nice alternative to Pedi STAT. Little less info. $4.99!
   5. Pedi QuikCalc: great for wt based dosing and links to BiliTool, etc. $2.99!!
   6. BiliQuikCalc: great if you just want bili. Has apple watch app. $1.99.
   7. WellCheck: great app if you don’t have kids and can’t remember milestones without your EMR! $2.99!
   8. Baby Steps: great video based milestones app! Free!
   9. iGuideline: EBM peds guidelines for Fever w/o Source, Pneumonia, Asthma, etc. FREE!
   10. BiliTool: web app only. The gold standard for eval of hyperbili! Free!
   11. Bilicalc: nice “on phone” bili app. $1.99!
   12. SHOTS: awesome app for immunizations for all ages! Free!
   13. CDC Vaccine Scheduler: free alternate to Shots from the CDC. Free!
   14. Growth Charts: see above from STATCoder. Free and pay versions.
   15. Car Seat Selector: great app for learning about how to select them. Free!
   16. Smiles for Life: GREAT little app for primary care docs about oral health for all ages. FREE!
   17. ADHD Tracker: perform/track Vanderbilt scores on your phone! Free!
   18. Autism Screener: M-Chat for iPhone! Free!
   19. AAP NRP: great app for NRP…has cool metronome feature for resuss. Free!
   20. Healthy Children: great website now w/ a great app! Fab info for parents (and providers) about all things kiddos! Free!
   21. WebMD Baby: great peds app for parents! Free!
   22. CHOP: great parent friendly vaccine app. Free!
   23. BluCard, Pedi Crisis, PALS: reasonable alternatives to PediSTAT. Various.
   24. Change Talk Obesity: motivational interviewing app for peds obesity! Free.
   25. Sprout Baby: app for parents with a new baby; mini-textbook for well child appts up to 2 yrs. Free w/in app purchase.
   26. Eczema Doc: great app for patients/parents of eczema kiddos. Free!
6. OB/GYN:
   1. Pregnancy wheel: many to choose from. I use Perfect Wheel. Also new free one by Joshua Steinberg. Free to $$!
   2. OB/GYN Red Book: classic pocket book in app form. Pricey but handy!
   3. Brancel Guides OB+Newborn: awesome cardboard pocket guides in app form. Can buy multiple ones and save. Most are $2.99 each. App now web app $19.99.
   4. Postpartum Hemorrhage: great app of new ACOG PPH guideline. Free!
   5. AtoZ Pregnancy: DOD Purple Book in app form. Free!
   6. Ilithyia Evidence Based Prenatal Care: EBM pearls by gest age. Free!
   7. WUSM OB Guide: great OB handbook from Wash U. Also have OB Calc and OB Insulin apps.$1.99!
   8. OB App Suite: collection of OB calculators in one app! Free!
   9. ACOG: official ACOG app, not that great, but has some practice bulletins.
   10. ASCCP: THE best pap/colpo app from the ASCCP! $9.99! (worth it!)
   11. Joshua Steinberg: see above. Great FREE EFM guide, GBS, pap guides!
   12. FHR 5-Tier: alternative and cool method of reading FHR tracings. $2.99!
   13. Breastfeed 2: great app to educate you and your patients! $1.99!
   14. Epocrates and Mayo Clinic Pregnancy: patient/provider general preg info apps from Epocrates and Mayo Clinic! Free!
   15. Prevent GBS: most up to date GBS app from the CDC. Free!
   16. VBAC: VBAC calculator. Free!
   17. Contraception: free contraception app from the CDC. Free!
   18. LactMed: lactation and med app from the NIH. Free!
   19. MenoPro: menopause recs for hormone/non-hormone tx’s. Free.
   20. BRCA Risk: free BRCA app funded by Susan Komen Foundation. Free.
   21. Sprout pregnancy: great app for pt’s. Mini pregnancy book for visit by visit info and tracking. Free w/in app purchase.
   22. Depocalendar: help your patients and clinic figure out when next dose due. Free.
   23. Preconception care: how to guide from the VA. Free.
7. ER Med:
   1. WikEM: UCLA Harbor Hospital ER’s very own app! Free!!
   2. AgileMD: FAB “ER cards” on just about everything! Free!/in app purchases.
   3. Critical Care Compendium: ER/CC guide from down under FOAM network. Free!
   4. RSI: great app that walks you through the process of intubation. $4.99.
   5. Peds Airway: RSI app for kiddos. Free!
   6. Brancel Guide: excellent urgent care card now an app! $8.99.
   7. ERes: not bad little home grown app from Einstein ER Res in Philly! Free!
   8. 10SecondEM: similar to ERes, good info but lousy navigation. Free!
   9. EMRA: residency association w/various apps Basics, Abx, pressors, Rashes, peds airway, peds meds. Free-$$
   10. Resuscitation: cool virtual reality ER cases on all sorts of stuff from adults to kids to OB, etc… “Medical Gaming” for the iPhone! Free w/in app purchase.
   11. MyATLS: official ATLS app. Nice but only parts are free…have to be a surgeon to get the whole thing! Free\*
   12. SAS Survival: wilderness med app.??EBM but handy if lost in the woods! $5.99.
   13. UMEM Pearls: assortment of EM pearls form UofMaryland. Free.
   14. Relief Central: app for international travel. Free.
   15. Trauma: see free trauma guides from U of Toronto and UAB.
   16. ACEP Toxicology: official tox guidebook from the ACEP. Also see Poison Control app.
8. Cardiology:
   1. Full Code Pro: “New” AHA app for monitoring/tracking codes. Free!
   2. HEART Pathway: guide to risk stratification from Wake Forest. Free!
   3. ACC Guideline: collection of ACC/AHA CPG’s. Free!
   4. ESC Guidelines: collection of European Cards Guidelines. Free.
   5. ACC Apps: LDL-C Manager, BridgeAntiCoag, Anticoagulation Evaluator: SWEET app for determining risk/benefits of old and new anticoagulants. Free! Also so Anticoag Toolkit from U. of Michigan. Free!
   6. Statin Intolerance: ACC guide to managing statin complaints. Free!
   7. QxConnect: family of multiple cards apps on afib, ekg’s, etc. Various $$.
   8. Littmann Sound Builder: app for cardiac sounds. Free.
   9. ACLS Review: nice app to help w/ACLS prep! $3.99.
9. Orthopedics/Sports Med/OMT:
   1. Clinical Orthopedic Exam (CORE): SWEET instructions and embedded videos of virtually every crazy ortho exam around! Little pricey at $39.99!
   2. UCSF MSK Tutor: outstanding alternate to CORE. $19.99!
   3. Pocket PEx: checklist based app for performing PE, no references. Free.
   4. Visible Body Altas: cool 3-D human body atlas. Various in-app purchases.
   5. Brancel Guides: two excellent ortho pocket guides now for iOS. $2.99!
   6. OMT apps: for the DO’s! ACOFP DO OMT—good videos and only $10! CORE makes 3 separate OMT apps—spine, UE, LE—fabulous but pricey at $39.99 each!
   7. SCAT2: several of these apps out there for doing concussion eval. Free\*
   8. Care Sport: new concussion guideline app. $4.99.
   9. UM Return to Play: app to help decide when concussed athletes return. Free!
   10. Ottawa Rules: pretty app w/lots of info on the Ottawa Rules from their creator. Free!
   11. Ortho Flow: guide for deciding best treatment of broken bones.
10. Derm:
    1. Visual DX: amazing derm app that creates literally a visual diff dx for skin lesions. Now does ANY diff diagnosis using IBM Watson! PRICEY at $100!
    2. Free derm apps: Derm 101 and Doctor Derm. Not bad, not great.
    3. EM Rashes: nice free peds derm app. Free.
    4. Color Atlas of Family Medicine: our specialty via pictures and stories. Beautiful app, but over $125! (I got mine free, not sure I would buy this).
    5. JN and NEJM Image Challenge: big journals play games w/images. Free!
    6. 3M Pressure Ulcer: basic app about pressure ulcers. Free.
11. Neurology/Ophthalmology:
    1. NeuroMind: app by a neurosurgeon but lots of good neuro calculators and info for primary care providers. The one app I actually helped write a little bit of! Free!
    2. Neuro exam tools: app for how to do a neuro exam plus “built in” light, bell, vibration sections to help complete exam. Free!
    3. NIHSS: easy to use version of the NIH Stroke Scale! Free!
    4. 10 Second Stroke Scale: quick version of the NIH Stroke Scale. Free!
    5. Nerve Whiz: high tech “dermatome” chart with nerves, muscles, etc. Free!
    6. Neuro Localizer: same UM folks as Nerve Whiz; helps you find where the neuro “lesion” is based on pt symptoms. Pretty nifty. Free!
    7. TBI apps: VA/DOD free apps on TBI—mTBI, CCT, and Life Armor. OK.
    8. Confusion: delirium and dementia bedside app. Free!
    9. Dermatomes: free dermatome ref app. Free.
    10. EyesHaveIt: great eye compendium from UM. Free!
    11. EyeHandbook: another excellent eye book from beginners to expert. Free!
    12. Eyemanual: nice eye manual from New Zealand for acute eye issues. Free.
    13. OphthoSim: companion app to the ophthosim simulator. Free w/in app purchase.
    14. MySleep 101: great app to learn about sleep disorders. Free!
    15. Confusion: Delirium and dementia guide. Free!
12. Psychiatry:
    1. DSM IV/V: several apps to choose from. Newest is the “official” DSM-V app, nice but $50!
    2. Psychiatry on Demand: nice collection of POC psychiatry screeners on a variety of conditions. Free!
    3. Psych Journal: aggregator app for current articles from top journals on psych. Free!
    4. SBIRT: excellent free guide to POC motivational interviewing and screening forms. Free!
    5. UCSF SBIRT: alternative SBIRT guide for motivational interviewing. Free!
    6. L’Allegro: outstanding POC app for choosing depression tx’s based on pt’s presenting symptoms. Free!
    7. CBT Apps and T2 apps (made at Old Madigan): growing number in app stores—CBT-I Coach, T2 Mood Tracker, Breath2Relax, Optimism, WebMD Pain Coach, Mindfulness, mTBI, Provider Resilience, etc…most are FREE!
    8. SAMSA Suicide Safe: helps with suicidal pts to recognize signs/symptoms and how/when/where to refer. Free!
13. Radiology:
    1. CXR Free: app to help with CXR interpretation. Free!
    2. Symptom Based Radiology: nice free app that recs rad studies based on pt’s symptoms. Has a companion text book too. App is free!
    3. iRadiology: mini version of the Harvard Rad website. Free!
    4. FRAX: overpriced version of the free online calculator. Just make a web app of the Frax website—better on a device w/larger screen. Free!
    5. CAC Age: if you get CAC scores, this apps help interpret them. Free!
    6. Radiology 2.0: really cool ER CT app. Fun to look at the cases, if you like CT scans! Free!
    7. mFRAT: app from USU on dealing w/nuclear/radiation casualties. Free!
14. Procedures:
    1. Procedures Consult: by far the best procedure apps available. Four paid versions that work without internet connection but pricey at $40/each. OR get the free web app via Clinical Key app or web on library homepage.
    2. ER Ultrasound: great app for learning/reviewing US guided procedures. Used to be free, now $5.99.
    3. 1 Minute US: nice POC app for emergency US. Free!
    4. OB US: OB US app from Ohio State, nice pics/test/step by step for AFI, 1st tri US, etc. $2.99.
    5. US Handbook: 3rd Rock US, textbook. Free!
    6. SonoAccess: excellent free US app from SonoSite. Free!
    7. PreOpEval14 or Clearance: both free pre-op clearance apps. Basic but free!
    8. SimMonitor: cool app to make your phone into a “monitor” for doing sim cases!
    9. OtoSim: nice app about otoscopy—works w/simulator but good text to read. Free!
    10. Otoscope sim: fun app that turns your phone into an otoscope simulator. Free!
    11. Medrills: apps of EMT and military medic procedures like needle decompression; various prices or sold in bundles for up to $30.
    12. Arrow EZ-IO: app on how to put in EZ-IO lines. Free!
    13. Team Health Preop Guide: great preop eval app. Free!
15. Wellness (see separate handout on apps for patients!):
    1. WebMD: great app to tell your pt’s about. Free and reliable info.
    2. Lose It!: my personal fav for advising pt’s on wt loss lifestyle changes. Won the US Surgeon General healthcare app contest this year! Free!
    3. Spark People: evidence based weight loss app for patients. Free!
    4. Noom Coach: another evidence based weight loss app. Free!
    5. Fooducate: learn about food and take pics and get info and alternatives. Free!
    6. Use Inhalers: great app to teach pts how to use various inhalers w/ and w/o spacers. Free!
    7. CanQuit: nice app from Texas Academy of Family Physicians on tips for counseling pt’s on smoking cessation.
    8. Quitter: nice calculator to show pt’s how much they spend/can save on smoking/if they quit! Free!
    9. SmartQuit: evidence based tobacco cessation app used in my research. Free!
    10. Breathing: how to relax app via breathing…I need to use this more! Free!
    11. Medical Spanish: several to choose from, free to pricey. Handy sometimes!
    12. Performance Triad: Free app for the US Army’s Performance Triad initiative. Free!
    13. Co-active Thinkpal: Self-coaching app for the iphone. Free!
    14. Canopy: medical translation app in “real time”. Free w/in app purchase.
    15. Tensio: patient tracker app for BP, HR, Wt, etc. Free!
16. CME/Board Review:
    1. Audio Digest: great app for CME on gen fam med, Peds, OB, and ER. Brought to you for free via USAFP and the Education Committee! Free! Or $$.
    2. AAFPMobile: links to some online CME and video CME from the AAFP. Free!
    3. Epocrates CME: nice app w/lots of free CME. Much of it is industry sponsored so beware of undue influence…Free!
    4. ABFM Exam Prep: hundreds of board review questions from the American Board of Family Medicine. Also has exam dates and study tips! Free!
    5. Read by QxMD: great journal herding app. Get all your journal articles in one spot! Free! (requires institutional access for full text).
    6. Browzine: works w/your university access to pull your journals into one app to see/read on iphone/ipad. Free (requires institutional access).
    7. ACP Doctor’s Dilemma: some easy, some tough cases to review and quiz yourself on from the American College of Physicians. Free!
    8. Med Pearls: nice EBM app that “reminds” you of key articles you tell it to email you about periodically. Free.
    9. NEJM FM Review: best board review app hands down. $200-300.
    10. AFP/FPM: apps of the journals AFP and FPM. Free if member/student account.
17. Geriatrics:
    1. Geriatrics at Your Fingertips: classic geri handbook now mobile. $19.99!
    2. iGeriatrics: collection of mini apps for geriatrics. $2.99!
    3. AGS GEMS: collection of 20 geri topics and tools. $9.99/year.
    4. AGC multimorbidity: determine and help tx multimorbidity patients. Free!
    5. Alzheimer’s Association Pocketcard: 101 app/card on Alz Dz. Free!
    6. Dementi Assist: app for caregivers/spouses of Alzh Dz pt’s. Free!
    7. Care4Dementia: alternative app for caregivers of dementia pt’s. Free1
    8. Edmonton Frail Scale: determine and tx if you pt has frailty. Free!
    9. ePrognosis: determine 10 yr life expectancy of geri pt’s. Free!
    10. Doctot: company that makes many standalone geriatrics apps. Various $$.
    11. National Kidney Foundation: makes numerous free apps for acute/chronic kidney disease. Free!
    12. DementiAssist: app for people caring for pt’s w/dementia from Baylor. Focus on behavioral interventions. Free!
    13. AUA guidelines: urology guidelines from the AUA. Free!
    14. Palliate Guide: palliate care app. Free!

**Objective 4/5: Reviewed one critical appraisal system AND practiced using that system on a journal article**

**1. Figure Out If It Meets Your Needs: Abstract**

A. Read the title: does it interest you?

B. What was the comparison?

C. What are the outcomes? DOE or POEM?

D. Look for the duration

E. Read conclusion: game changer?

**2. Search for Bias: Use Article PDF**

A. Random

B. Blind

C. Allocation (concealment)

D. Intent (intention to treat)

E. Follow (follow-up/dropouts)

F. Conflict (conflicts of interest)

**3. Ignore the Rest (of the Paper)**

A. Ignore introduction

B. Ignore rest of methods

C. Ignore statistical testing

D. Ignore discussion

**4. Who Was Studied? (Table 1)**

A. Any major group differences?

B. Who was studied? Like your patients?

**5. What Happened? (Table 2/3)**

A. Outcomes

B. Primary outcome: absolute difference; ARR; RRR; Hazard Ratio; Confidence Interval

C. Adverse events

**6. Who Cares?** Create a Summary Table or Summary PICO

**Keeping Clinically Current Resources:**

* **How to Review an RCT in Ten Minutes**
  + [**https://itunes.apple.com/ca/book/how-to-critically-appraise/id524600667?mt=11**](https://itunes.apple.com/ca/book/how-to-critically-appraise/id524600667?mt=11)
* **Best Science Medicine Podcast**
  + [**http://therapeuticseducation.org/**](http://therapeuticseducation.org/)
* **Critical Appraisal Worksheets**
  + [**http://www.casp-uk.net/#!casp-tools-checklists/c18f8**](http://www.casp-uk.net/)
* **Club J**
  + [**http://www.usafp.org/committees/education/fellowships/madigan-faculty-development/madigan-fac-dev-journal-club/**](http://www.usafp.org/committees/education/fellowships/madigan-faculty-development/madigan-fac-dev-journal-club/)
* **Madigan Faculty Development Fellowship APAN**
  + [**https://apan.org**](https://apan.org/)