Evidence Based Medicine at the Point of Care: Maurer's Mobile POEMS

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Objectives:

- 1. Distinguished between DOEs / POEMs
- 2. Learned the best sources of POEMS
- 3. Solved problems using EBM and Smart Devices
- 4. Improved the utility of your Smart Device

Objective 1: DOE versus POEM

- a. DOE: Disease-Oriented Evidence
 - Etiology, pathophysiology, pharmacology
 - Intermediate outcomes/surrogate markers
- b. POEM: Patient-Oriented Evidence that Matters
 - Morbidity, mortality, quality of life
 - The "so-what" questions
- c. Identifying POEMS
 - Will this information have a direct bearing on the health of my patients?
 - Is the problem common to my practice?
 - If true, will it require me to change my current practice behavior?

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

UpToDate	MDCalc or Qx Calculate or EBMCalc
DynaMedex	Any Dr Joshua Steinberg App
Essential Evidence Plus	Epocrates or Lexicomp or MicroMedex
BMJ Best Practice	PubMed or Ovid
Medscape/eMedicine	Hopkins or Sanford Guides or IDC
QxMD Read	ACC, CDC, WHO, VA, UM apps
Prescriber's Letter	Pedi QuikCalc, PediSTAT
AHRQ ePSS	OB Wheel, GBS, PPH, Pregnancy A-Z
The Medical Letter	HEART Pathway, SI Sepsis

Objective 3: Solve Problems Using EBM and Smart Devices

Work in pairs or small groups to solve each case. Ideally, use ONLY your Smart Device, but you can use your laptop if you cannot 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:

A 57 y/o black male with hypertension (145/90 on diuretic), total cholesterol 250, HDL 40, LDL 180, no diabetes, former smoker presents for follow-up.

- What is his 10-year and lifetime ASCVD risk?
- Should he be on statin? If so which one/dose?
- He is not on aspirin. Should he be?
- What is his goal BP?
- How would your answers change if he had diabetes?

Case 2:

A 65 y/o male presents with CAP, PMHx of Afib, CHF, Tmax 101.5, RR 35, HR 130, BP 110/70, O2 sat 93%. He has never received any pneumonia vaccines. Using the 2019 ATS/IDSA or other pneumonia guideline:

- Should the patient be hospitalized?
- · What diagnostic tests should you obtain?
- What antibiotics to use?
- What immunizations should he receive prior to discharge?

Case 3:

A 35 y/o AA female, sexually active, smoker with Type 2 diabetes and hypertension presents for a well visit.

- What Grade A/B preventive services should this patient receive?
- What Grade C/D/I services?
- · She reports food scarcity and difficulty paying her rent. What resources could you provide?

Case 4:

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

- Did this patient require GBS prophylaxis?
- What work-up does the infant require?
- What if the newborn is ill appearing/febrile?
- The next day, the 24 hr serum bilirubin is 13 mg/dL
 - What would you do next?

Case 5:

A 47 y/o male presents to ER with chest pain: left-sided, worse with exertion, no nausea, diaphoresis, or radiation. PMHx sig for HTN, Fam hx of CAD 1st relative at 56. EKG wnl.

- How would you manage this patient?
- Admit and rule-out? GXT in ER?
- Would you do serial troponins? How many?
- What if patient was 65? Female?

Objective 4: Improve the Utility of Your Smart Device/Maurer's Recommended Apps

1. Drug Guides

- a. Epocrates: comprehensive, free to pricey! Easy to use.
- b. Lexicomp: comprehensive and free! Not quite as easy or familiar to most.
- c. Micromedex: comprehensive, not that pretty, but free to minimal cost. Some institutions have access to Micromedex Neofax and Pediatrics Essentials.
- d. PediQuikCalc: excellent peds wt based dosing app and more. \$4.99.
- e. Prescriber's Letter: latest drug news with excellent info at your fingertips! \$143/free
- f. The Medical Letter: similar to Prescriber's Letter but a bit more int med focused. \$159
- g. RxFiles: evidence-based prescribing in busy chart format. \$95
- h. Hopkin's Abx Guide: best ID app available hands down. \$29.99!
- i. Sanford Guide: the previous gold standard available for iOS! \$39.99 or Free!
- j. Infectious Disease Compendium (IDC): humorous take on bugs/drugs! \$5.99
- k. Natural Medicines Database: Like RxLetter but on natural meds. Free to military.
- I. About Herbs: free natural med guide from Memorial Sloan Cancer Center.
- m. Nelson's Abx Guide: great content for peds, clumsy interface, \$29.99.
- n. 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!
- o. Vanc Calc: great if you do vanco dosing and don't have PharmD. See website.
- p. CDC Opioid, Opioids, eOpiod, and Quick Start: none perfect, but OK opioid conversion apps and OUD med starter. Free to \$4.99.
- q. Polypharmacy: app to assist in deprescribing. Free.
- r. GoodRx: gives local drug prices based on zip/GPS. Free.
- s. Sanford HIV: same quality as regular Sanford, just for HIV. \$29.99.
- t. Sanford Hepatitis: same quality as regular Sanford, just Hepatitis. \$29.99.
- 2. EBM/General Medicine:
 - a. UptoDate: easiest to use and (usually) most up to date. Free or \$499.99.
 - b. DynaMedex: excellent alternate to UptoDate. FREE via DOD! \$395
 - c. Essential Evidence Plus: great EBM, not easy to use. Free on STATRef! \$96.
 - d. Medscape: Swiss Army knife ala Epocrates includes eMedicine. Fast/Free!
 - e. STATRef!: assortment of ref's, journals including EEPlus. Cost varies. Free to DOD!
 - f. ClinicalKey: all of Elsevier's resources in one app. Free to DOD!
 - g. AHRQ ePSS: a MUST HAVE app for prevention! Free!
 - h. DxSaurus: classic differential diagnosis calculator. \$4.99!
 - i. Journal Club: great app for reviewing latest/greatest med trials. \$6.99!
 - j. ICU Trials by ClinCalc: one of several apps for ICU med trials. \$4.99!
 - k. Med Pearls: great "reminder" of EBM recs, made by FM doc. Free.
 - I. Toolbag, EBPC, Diagnose, MDHero: assorted EBM apps. Free to \$9.99.
 - m. Boston U. Finding Information Framework: how to ask EBM questions. Free.
 - n. CASP: Evidence based worksheets for critical appraisal of articles. Free.
 - o. Choosing Wisely: Summary of campaign for providers/patients. Free.
 - p. TeamSTEPPS: all the steps and mnemonics in an app! Free.
 - q. WHO apps: variety of topics from TB to austere pediatrics. Free.
 - r. CDC apps: variety of topics from opioids to vaccines. Most free.
 - s. VA apps: variety of topics, mostly psych. Free.
 - t. What's Covered: free app from CMS on what is covered by Medicare. Free.
 - u. DocLogica: EBM info on common tests, signs/symptoms plus DDx. Free.
- 3. Medical Calculators:
 - a. MDCalc: most popular website now in app form. Free.
 - b. MediMath: classic medical calculator. \$4.99.
 - c. MedCalc: ditto above. I switch between both. \$1.99.
 - d. Qx Calculate: rapidly becoming the new gold standard. Free!!

- e. EBMCalc: comprehensive medical and EBM calculators. \$9.99.
- f. ASCVD Plus: ACC lipid calculator. Free!!
- g. CV Risk: Dr Steinberg take on lipid calculator; includes data not in ACC app. Free
- h. QRisk: various apps; UK version of cardiac risk guides. Free to \$3.99.
- i. Aspirin Guide: who should get ASA guide per current USPSTF. Free!
- j. 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!
- k. FRAX: webapp to do your osteoporosis screening risk calculation. Free!
- I. VTE apps: see above; also IMPROVE trial apps, Preventing VTE. Free.
- m. Blood gas app: lots of these! See Steinberg's, Blood Gas, etc.
- 4. Internal Medicine:
 - a. Lederman's Internal Medicine: pocket guide by Sanford group. \$29.99
 - b. Hospitalist Handbook: UCSF "house officer" guide. Free.
 - c. Escavo Sepsis: a truly great sepsis app. Free also see "Sepsis Timer"-Free!
 - d. Smart Intern Sepsis: great app for new sepsis guidelines. Free!
 - e. PFT Eval: nice app that walks you through spirometry interpretation. Free!
 - f. COPD GOLD app: GOLD guideline for iPhone (not updated yet for 2023). Free.
 - g. ADA Guideline: 2023 diabetes guideline app from ADA! Free!
 - h. AID Smart Insulin Dosing Guide: how to properly dose insulin in DMII. Free!
 - i. Endocrine Society CPG app: 101 app for all things endo. Free!
 - j. CDC Immunizations: alternative to Shots. Free.
 - k. Coma App: calculate brain death, need for hypothermia tx. Free!
 - I. Ventilo: easy to use app for initial and optimized settings. \$3.99.
 - m. Ventilator: free "textbook" on mech vent 101. Free!
 - n. The Ventilator App: another take on vent mgt/quick settings. Free.
 - o. ACP CPGs: all of the ACP CPG's in one place! Free.
 - p. Covid: Brigham Covid Protocol app, Hopkins Covid Control
- 5. Pediatrics:
 - a. Pediatric Care Online: most comprehensive peds app, but pricey!! \$100!
 - b. Pedi STAT: this app rules! A Breslow tape and a whole lot more! \$4.99!
 - c. Pedi QuikCalc: great for wt based dosing and links to BiliTool, etc. \$4.99!!
 - d. BiliQuikCalc: great if you just want bili. Has apple watch app. \$1.99.
 - e. Milestones: another great CDC app on peds milestones. Free.
 - f. Baby Tools: lots of handy peds Steinberg apps collected together. Free.
 - g. iGuideline: EBM peds guidelines for Fever w/o Source, Pneumonia, Asthma.FREE!
 - h. BiliTool: web app only. The gold standard for eval of hyperbili! Also see BiliStop. Free!
 - i. SHOTS: awesome app for immunizations for all ages! Free!
 - j. CDC Vaccine Scheduler: free alternate to Shots from the CDC. Free!
 - k. Car Seat Selector: great app for learning about how to select them. Free!
 - I. Smiles for Life: GREAT little app for primary care docs about oral health for all ages. FREE!
 - m. Headsss: walks you through adolescent history. Free.
 - n. ADHD Tracker: perform/track Vanderbilt scores on your phone! Free!
 - o. AAP NRP: great app for NRP...but 7th not 8th edition. Free!
 - p. Healthy Children: great website now w/ a great app! Fab info for parents (and providers) about all thing's kiddos! Free!
 - q. WebMD Baby: great peds app for parents! Free!
 - r. CHOP: great parent friendly vaccine app. Free!
 - s. BluCard, Pedi Crisis, PALS: reasonable alternatives to PediSTAT. Various.
 - t. Change Talk Obesity: motivational interviewing app for peds obesity! Free.
 - u. Sprout Baby: app for parents with a new baby; mini textbook for well child appts up to 2 yrs. Free w/in app purchase.

- 6. OB/GYN:
 - a. Pregnancy wheel: many to choose from. I use the one by Joshua Steinberg. Also consider OB Patients, OB Tracker, OB Wheel. Free to \$\$!
 - b. Brancel Guides OB+Newborn: awesome cardboard pocket guides in web app form. Can buy multiple ones and save. Most are \$2.99 each or buy all for \$19.99!
 - c. AtoZ Pregnancy: DOD Purple Book in app form. Free!
 - d. WUSM OB Guide: great OB handbook from Wash U. Also have OB Calc and OB Insulin apps. \$1.99! (looks out of date now)
 - e. ACOG: official ACOG app, not that great, but theoretically has all guidelines, practice bulletins but need to be ACOG member for access to everything.
 - f. ASCCP: THE best pap/colpo app from the ASCCP! \$9.99! (worth it!)
 - g. Joshua Steinberg: see above. Great FREE apps on Contraception, Preconception Counseling, 1st Trimester Bleeding, EFM guide, Bishop score, Depo Calendar!
 - h. FHR 5-Tier: alternative and cool method of reading FHR tracings. \$6.99!
 - i. Breastfeed 2: great app to educate you and your patients! \$1.99!
 - j. Prevent GBS: most up to date GBS app from the CDC. Free!
 - k. VBAC Calculator: 3 diff VBAC calculators. \$2.99!
 - I. Contraception: free contraception app from the CDC. Free!
 - m. VA Preconception: preconception counseling 101 from the VA. Free!
 - n. LactMed: lactation and med app from the NIH. Not updated anymore. Free!
 - o. Sprout pregnancy: great app for pt's. Mini pregnancy book for visit-by-visit info and tracking. Free w/in app purchase.
 - p. Depo calendar: Steinberg app to help your patients and clinic figure out when next dose due. Free.
 - q. Natural Cycles: 1st FDA approved contraception app. Subscription only.
 - r. Decide + Be Ready: outstanding contraception selector app by DHA. Free!
 - s. Women's Prevention: web app of suggested women's prevention recommendations. Free!
 - t. OB Risk Calc: induction calculator. Free!
 - u. Safe Motherhood Initiative: ACOG sponsored app covering OB complications. Free
 - v. Mommy Meds: most up to date info on meds in pregnancy and breast feeding from the Infant Risk Center at Texas Tech. \$3.99!

7. ER Med:

- a. WikEM: UCLA Harbor Hospital ER's very own app! Free!!
- b. RebelEM: official FOAM app from UTHSCA. Free.
- c. Critical Care Compendium: ER/CC guide from Australia FOAM network. Free!
- d. The Difficult Airway App: great app the steps RSI/difficult airways. \$3.99.
- e. Brancel Guide: excellent urgent care card/trauma webapp! \$8.99.
- f. EMRA: residency association w/various apps Tox, Ortho, Pain, Basics, Abx, Pressors, Rashes, Airway, Splinting, Trauma, etc. Free-\$\$
- g. MyATLS: official ATLS app. Nice but only parts are free...must be a surgeon to get the whole thing! Free*
- h. Bedside EM: covers a lot of EM topics, but last updated 2 yrs ago! \$14.99.
- i. SAS Survival: wilderness med app.??EBM but handy if lost in the woods! \$5.99.
- j. UMEM Pearls: assortment of EM pearls form UofMaryland. Free.
- k. Relief Central: outstanding app for international travel. Free.
- I. ACEP Toxicology: official tox guidebook from the ACEP. Also see Poison Control app, Poison Antidotes by Agile MD, and Toxicology. Free to \$9.99.
- m. Deployed Medicine: text and videos for TC3 combat trauma medicine. Free!
- n. Cardiotox: app on drug induced cardiotoxicty of all types. Free!
- o. PEMSoft Mobile: EBSCO POC Peds EM and all things Peds app. Free!

- 8. Cardiology:
 - a. ACC: worth checking out all of the ACC apps as large collection. Free
 - b. Full Code Pro: "New" AHA app for monitoring/tracking codes. Free!
 - c. HEART Pathway: guide to risk stratification from Wake Forest. Free!
 - d. ACC Guideline: collection of ACC/AHA CPG's. Free!
 - e. ESC Guidelines: collection of European Cards Guidelines. Free.
 - f. Anticoagulation Evaluator: SWEET app for determining risk/benefits of old and new anticoagulants. Free! Also, consider Anticoag Toolkit from U. of Michigan. Free!
 - g. Statin Intolerance: ACC guide to managing statin complaints. Free!
 - h. ECG guides: many out there, consider ECG Guide, ECG, ECG Interpretation, UM EKG. Various Free to \$\$.
- 9. Orthopedics/Sports Med/OMT:
 - a. Clinical Orthopedic Exam (CORE): SWEET instructions and embedded videos of virtually every crazy ortho exam around! Little pricey at \$39.99!
 - b. TherexRx: great set of PT/OT exercises based on location/injury. Free/in-app \$\$.
 - c. Pocket PEx: checklist-based app for performing PE, no references. Free.
 - d. Visible Body Altas: cool 3-D human body atlas. Various in-app purchases.
 - e. Brancel Guides: two excellent ortho pocket guides now for iOS. \$2.99!
 - f. 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! Also see free ICOMTVIDS—free collection of OMT videos.
 - g. SCAT5: No good app, so create webapp of current version on website. Free*
 - h. Ottawa Rules: pretty app w/lots of info on the Ottawa Rules from their creator. Free!
 - i. Ortho Flow: guide for deciding best treatment of broken bones. \$4.99.
 - j. Taping Handbook: medical and kineseo taping. \$6.99.
 - k. Johns Hopkins Muscle Anatomy: high quality atlas of body muscles. \$9.99.
 - I. CHAMP: collection of diagnosis/rehab for all MSK. no app but can create webapp from site. Also, can access OPSS (operation supplement safety). Free.
- 10. Derm:
 - a. 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! May be free depending on your institution/library.
 - b. Free derm apps: AOCD Derm and ACD Derm A-Z, not bad, not great. Free!
 - c. 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).
 - d. JN and NEJM Image Challenge: big journals play games w/images. Free!
- 11. Neurology/Ophthalmology:
 - a. NeuroMind: app by a neurosurgeon but lots of good neuro calculators and info for primary care providers. Free with in-app purchase!
 - b. Neuro exam tools: app for how to do a neuro exam plus "built in" light, bell, vibration sections to help complete exam. Free!
 - c. Neuro tool kit: like neuro exam tools, but more calculators. \$4.99.
 - d. Stroke apps: VA Stroke Code, Stroke Keep the Brain Alive, and NIHSS Calc, each free and easy to use covering current VA guidelines, calculators for stroke; one is a game. Free.
 - e. Nerve Whiz: high tech "dermatome" chart with nerves, muscles, etc. Free!
 - f. Neuro Localizer: same UM folks as Nerve Whiz; helps you find where the neuro "lesion" is based on pt symptoms. Pretty nifty. Free!
 - g. TBI apps: VA/DOD free apps on TBI-mTBI, CCT, and Life Armor. OK.
 - h. Confusion: delirium and dementia bedside app. Free!
 - i. Dermatomes: free dermatome ref app. \$1.00.
 - j. Trigger Points: app outlining all the common trigger points for tx. \$2.99.

- k. DizzyFix: app the walks you/pt through Epley tx for BPPV. Now connected to buying FDA approved device on Amazon! \$59.95!!
- I. EyesHaveIt: great eye compendium from UM. Free!
- m. EyeHandbook: another excellent eye book from beginners to expert. Free!
- n. Eyemanual: nice eye manual from New Zealand for acute eye issues. Free.
- o. EyeTest: Snellen eye chart for your phone! Free.
- 12. Psychiatry:
 - a. DSM V: the "official" DSM-V app, nice reference to have on device, but \$50!
 - b. Psychiatry on Demand: nice collection of POC psychiatry screeners on a variety of conditions. Free!
 - c. Antidepressant Proposer: medication selection based on symptoms. Free!
 - d. Columbia Psychiatry Depression: validated ASAP protocol for med mgt. \$19.99/yr
 - e. OHN SBIRT: alternative SBIRT guide for motivational interviewing. Free!
 - f. CBT Apps and all VA/T2 psych apps: growing number in app stores—CBT-I Coach, Mood Tracker, Breath2Relax, Optimism, WebMD Pain Coach, Mindfulness, Provider Resilience, Virtual Hope Box, Concussion, etc...most are FREE!
 - g. UCLA Mindfulness: basics of mindful awareness meditations. Free!
 - h. Mindshift: top rated in published review of mindfulness apps. Free!
 - i. MySleep 101: great app to learn about sleep disorders. Free!
 - j. SAMSA Suicide Safe: helps with suicidal pts to recognize signs/symptoms and how/when/where to refer. Free!
 - k. Pain and Opioid Safety: NCR pain/opioid app with screeners, CPGs. Free!

13. Geriatrics:

- a. Geriatrics at Your Fingertips: classic geri handbook now mobile. \$19.99/yr!
- b. iGeriatrics: collection of mini apps for geriatrics. \$9.99/yr!
- c. AGS GEMS: collection of 20 geri topics and tools. \$9.99/yr.
- d. AGS multimorbidity: determine and help tx multimorbidity patients. Free!
- e. Alzheimer's Association Pocketcard: 101 app/card on Alz Dz. Free!
- f. Care4Dementia: app for caregivers of dementia pt's. Free!
- g. Delirium/Dementia Calcs: numerus apps for UB-CAM, DST,
- h. Edmonton Frail Scale: determine and tx if you pt has frailty. Free!
- i. ePrognosis: determine 10 yr life expectancy of geri pt's/various settings. Free!
- j. Doctot: company that makes many standalone geriatrics apps. Various \$\$.
- k. National Kidney Foundation: numerous free apps for acute/chronic KD. Free!
- I. AUA guidelines: urology guidelines from the AUA. Free!
- m. Palliate Guide: palliate care app. Free!
- n. AlzDxRx: algorithm to dx and mgt Alzheimer's disease. Free!
- o. What's Covered: medicare.gov app described what is/isn't covered. Free.
- p. Kegel Nation: UCSF app on how to do Kegel's. Free!
- q. Medstopper: deprescribing website (make a webapp). Free!
- r. MyDirectives: allows patients to create/port advance directives. Free!
- s. Prepare for Your Care: website for completing free advance directives. Free!
- t. Palliative Care Fast Facts: quick ref guide from Dana Farber Cancer. Free!
- 14. Radiology:
 - a. Rad Consult: uses the ACR appropriateness criteria to order correct study. Well worth the price to ensure you order the correct study/includes ACR criteria. \$14.99.
 - b. ACR Criteria: can't get app w/o being rads but can make webapp from website of the ACR appropriateness criteria. Free!
 - c. FRAX: No official app. Just make a web app of the Frax website—better on a device w/larger screen. Free!
 - d. mFRAT: app from USU on dealing w/nuclear/radiation casualties. Free!
 - e. Sublux app: teaches the basics of plain film radiology interpretation. Free!

15. Procedures:

- a. Procedures Consult: one of the best procedure apps available. Can access via Clinical Key app or web on library homepage. Requires institutional subscription.
- b. Lippincott Procedures: like Clinical Key procedures videos. Requires institutional subscription.
- c. SonoSupport: basics of POCUS in an app. Free!
- d. POCUS OSU: Ohio state basics of POCUS. Free!
- e. ER Ultrasound: great app for learning/reviewing US guided procedures. Used to be free, now \$5.99.
- f. US Handbook: 3rd Rock US, textbook. Free!
- g. PreOpEval: Steinberg App covers most pre-op clearance issues. Basic but free!
- h. AvoMD Preoperative Eval: focus on cardiac eval; fast, intuitive interface. \$19.99/yr
- i. STAR: collection of simulation cases covering most specialties. Free!
- j. SimMonitor: cool app to make your phone into a "monitor" for doing sim cases! Also, a free Vent Sim ventilator app.
- k. OtoSim: nice app about otoscopy—works w/simulator but good text to read. Free!
- I. Otoscope sim: fun app that turns your phone into an otoscope simulator. Free!
- m. Medrills: apps of EMT and military medic procedures like needle decompression; various prices or sold in bundles for up to \$30.
- n. Deployed Medicine: get smart and practice your TC3 trauma skills/ICTLs. Free.
- o. WHO Surgical Safety Checklist: think Checklist Manifesto by Dr Gawande. Free.
- p. MAGIC: MI state app covering proper selection of IV catheters—PICC, etc. Free.
- 16. Wellness/Sleep:
 - a. AAFP Neighborhood Navigator: website incorporating the EveryONE Project to find resources for patients to address healthcare disparities. Make it a webapp. Free!
 - b. VA/DHA/T2 Apps: address a mix of topics addressing wellness and mental health issues. All are Free! (see list above in Psychiatry)
 - c. WebMD: great app to tell your pt's about. Free and (mostly) reliable info.
 - d. Lose It!: my personal fav for advising pt's on wt loss lifestyle changes. Won the US Surgeon General healthcare app contest several yrs ago! Free or \$20/yr premium.
 - e. Noom Coach: another evidence-based weight loss app. Free/\$98 x 2 mo!
 - f. Fooducate: learn about food and take pics and get info and alternatives. \$50/yr
 - g. PCRM's Nutrition Guide for Clinicians: the basics of nutrition education for providers. CME available. Free!
 - h. FODMAP: Monash University app on how to implement/follow FODMAP. Free!
 - i. Inhalerpedia: great app to teach pts how to use various inhalers w/ and w/o spacers. Free!
 - j. Quitter: nice calculator to show pt's how much they spend/can save on smoking/if they quit! Free!
 - k. SmokerStop/QuitMedKit/StayQuitCoach/QuitStart: apps for tobacco cessation for providers/patients. Free.
 - I. SmartQuit/iCANQUIT: acceptance and commitment therapy (ACT) evidence-based tobacco cessation app used in my research. Requires employer/institutional subscription.
 - m. Breathing Zone: how to relax app via breathing...I need to use this more! Free!
 - n. Medical Spanish: several to choose from, free to pricey. Handy sometimes!
 - o. Performance Triad: Free app for the US Army's Performance Triad initiative. Free!
 - p. Co-active Thinkpal: Self-coaching app for the iphone. Free!
 - q. Canopy: medical translation app in "real time". Free w/in app purchase.
 - r. Tensio: patient tracker app for BP, HR, Wt, etc. Free!
 - s. Brain HQ and Peak: apps with "evidence" to prevent/tx dementia via brain games. Subscription/price varies. \$14/mo, \$95/yr

- t. ACGME Aware: well-being app from the ACGME for faculty/trainees. Free!
- u. dMinder: app to track/remind about adequate Vitamin D. Free!
- v. hearWHO: WHO app to check your hearing! Free!

17. CME/Board Review:

- a. 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 \$\$.
- b. HIPPO Education: excellent primary care CME app. Prev discount for USAFP. Also have EMRAP and PedsRAP. Annual subscription.
- c. AAFP Mobile: one stop shop to do CME from AAFP journals/products/podcasts and report/track CME. Free with AAFP membership!
- d. Podcasts: really a separate talk, but free CME available via The Curbsiders (internal medicine), Frankly Speaking (Dr Domino), Best Science Medicine (Canadian primary care), others!
- e. ABFM Exam Prep: hundreds of board review questions from the American Board of Family Medicine. Also has exam dates and study tips! Free!
- f. ABFM CKSA: do your MOC quarterly exams on your smart device! Free!
- g. Read by QxMD: great journal herding app. Get all your journal articles in one spot! Free! (requires institutional access for full text).
- h. Browzine: works w/your university access to pull your journals into one app to see/read on iphone/ipad. Free (requires institutional access USU or other).
- i. NEJM FM Review: best board review app hands down. \$200-300.
- j. UWorld: comprehensive board review (n of 1 success!). Cost based on length of subscription.
- k. Libraries: create webapps of any libraries you have offsite access—USU, AMEDD, institution, university, etc. can access via Open Athens.