Technology for the busy NP: What’s in your pocket?

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Objectives for today

1. Describe how to find appropriate clinical resources for the practice setting
2. Identify two mobile health applications for common clinical questions
3. Apply knowledge of mobile applications to two areas of patient care (eg. diagnosis, patient education, patient self-management)

Warning

• This is a BASIC introductory lecture
• If you are the go-to tech support for all your friends and family, see me at the end of the lecture
• I could use your help!
Confessions of a non-geek:
In regard to this presentation, I have no commercial or financial relationships to disclose.

Multiple roles
- Nurse practitioner
- Nurse educator
- Volunteer in Guatemala

SO:
- I needed info right away
- My students were "googling" everything
- My patients were bringing in reams of printouts from the internet

Technology is here to stay
Some definitions

• E-health: The use of electronic processes, the internet, and communication technology for delivery of health services and information
• M-health: a subset of e-health where the above are delivered using a mobile smart device such as a phone or tablet.
• WHO definition: The use of mobile and wireless technologies to support the achievement of health objectives
(Oh, Rizo, Enkin & Jadad A., 2005; World Health Organization, 2011)

Some statistics

• In 2012, 85% of US adults owned a mobile phone; 53% were smartphones
• 1/3 of the smartphone users report using their cellphones to look up health or medical information on line
• 77% of all physicians use a smartphone; similar statistics for NP’s
(Butcher, MacKinnon, Gadd & Le-Blanc, 2015)

There’s an app for that

• Mobile application (app): a stand-alone software that exists on a smart device
• There are 4 major stakeholders in mobile apps
  • (Apple, Google, Microsoft, Blackberry)
• Apple iOS and Google Android have the most with 800,000 apps APIECE
(Aungst, Clauson, Misra, Lewis & Husain, 2014)
Medical apps

20,000 available for iOS
9000 available for Android

How do we use Apps?

- References
- Information and time management
- EHR maintenance and access
- Communication and consulting
- Clinical decision making
- Patient monitoring
- Continuing education and training
- Patient education and self care

(Ventola, 2014)
Are these regulated?

- "For purposes of this guidance, a “mobile medical app” is a mobile app that meets the definition of device in section 201(h) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) 4; and either is intended: - 7 -
  - to be used as an accessory to a regulated medical device; or
  - to transform a mobile platform into a regulated medical device.”
  
(FDA, 2015)

Full information here


Meantime

- How do we know which apps to choose?
Strategies

1. Review the scientific literature
   Systematic reviews and RCT are scarce

   (Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014; Mosa, et al, 2012)

2. Search App Clearinghouse websites

   NHS Health App Library
   http://apps.nhs.uk

   iMedicalApps
   www.imedicalapps.com

   HealthTap’s AppRx
   www.healthtap.com

   (Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014)

More clearinghouses

- IMS Health’s App Script

- Eat Right
  www.eatright.org/appreviews

- American Association of Family Physicians

   (Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014)
Beware

• Happtique
• https://www.happtique.com/home/

3. Search App stores

• This is where it gets tricky
• Use key words to narrow your search.
• Use the SPPACES criteria

(Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014; Lin, 2013)

SPPACES

• S- Source or developer of app
• P- Platforms available
• P-Pertinence to primary care (or specialty care practice)
• A-Authoritativeness/accuracy/ currency of information
• C-Cost
• E-Ease of use
• S- Sponsor

(Lin, 2013)
Go to your device

- Open the app store of your choice
- Do a search
- Let’s look at the apps

4. Review app description

- Look at user ratings and user reviews
- Usability
- Functionality
- Efficacy

5. Ask around

- Twitter: #name of app
- Facebook: search box

- Sermo: FOR MD’s only--- but take a look
- http://www.sermo.com

- Symplur.com
  (Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014)
6. Pilot the apps

- Download the app yourself and TRY it
- Have your friends who are not health professionals or providers try the app
- A few days is usually enough time to get the sense if the app will work for YOUR patient

(Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014)

7. Elicit feedback from patients

- Have the patient bring the device to the next appointment
- Ask for honest appraisals:
  - Was it useful?
  - Will you continue to use it?
  - Would you recommend the app to others?

(Boudreaux, Waring, Sadasivam, Mullen & Pagoto, 2014)

Let’s start searching:
Clinical reference

- Dynamed
- Epocrates
- Essential Evidence Plus
- Medscape
- Micromedex
- Omnio
- Skyscape
- Stat! Ref
- UnboundMedicine
- UptoDate

**NOTE:** All of the above sites are in alphabetical order
Clinical reference: specialty care

- **Dermatology**: Visual Dx, DermConsult, First Derm
- **Orthopedics**: Orca Health collection (Knee Decide, Shoulder Decide, Spine Decide)
- **Pediatrics**: Pediatrics, Pediatric Quick Reference, CDC Vaccination Schedule App
- **Women's Health**: Perfect OB Wheel, Mommy Meds, CDC STD 2015

Patient Care and Self-Management

- **Weight loss**: MyFitnessPal, Loseit!
- **Diabetes**: Diabetes Logbook, Fooducate, Carb Counting with Lenny U.S
- **Hypertension**: HeartWise Blood Pressure Tracker
- **Mental health**: MindShift, PTSD Coach, Breathe2Relax, T2MoodTracker

Patient Education

- drawMD
- Assist Me With Inhalers
- Many MANY more: use the clearinghouses to vet any app before you prescribed
Take-away for today

• Ever-changing
• We are not going back to the world as we knew it

References


References


References


Questions/Comments


