

Valuable Decision Making Apps for NP Learning

ELLEN D. JONES

Mr. Jones is a 55 year old male who presents for a 15 minute office visit for a “complaint of fatigue and frequent urination.” Mr. Jones has not been seen in the office for 18 months. He stated he usually was seen in a convenient urgent care on the road while traveling as an Executive Salesman. He stated that he was in a hurry because he had a plane to catch in 4 hours. He said his wife told him he had a UTI and needed antibiotics.

V.S. from the CNA: Temp 98.F; BP 150/90; P 72; R 18; BMI 30; UA negative for WBC, Blood, or Nitrites

The NP Student has 15 minutes to determine the appropriate history including Family; ROS; Physical Exam; Labs; Assessment; Plan; and Follow up. The clock is ticking. Mr. Jones is getting irritable with the questions because he has a plane to catch and a simple UTI. He only came in because his wife stated he needed antibiotics.

The NP student reaches for her iPad. Seem all too familiar? NP students are aware that software, reference books, and healthcare applications software (Apps) are readily available and affordable to assist in patient decisions. Software providers, healthcare organizations, specialty groups, and entrepreneurs are creating Iphone/Ipad/Android and point of care digital Apps and releasing them quickly to the public. Since there is little industry control regarding the release of software Apps that is similar to the critique found in evidenced based textbooks, journal manuscripts, and online software such as Up to Date and Dynamed, it can be difficult to recommend Apps that are safe for use in healthcare decisions. Reliable sources in healthcare are often very expensive and may be available to NP students at discounted rates or available from their university or practice site; but, they are attached with cumbersome logins and passcodes. Apps are downloadable to the individual hardware unit making them easy to access and are often offered free of charge or inexpensively, making them very attractive for the NP student user.

Select Apps that have been designed based on quality healthcare information. Was the App produced from a quality healthcare organization? Has the App been endorsed by reputable healthcare organizations? It can be difficult to determine the development of an App. The best practice is to be directed to an App from the Official Website of the organization. For example, if you go to the US Department of Health and Human Services, Agency for Healthcare Quality and Research Official Website at <http://www.ahrq.gov/clinic/ppipix.htm> and select the [Electronic Preventive Services Selector \(ePSS\)](http://epss.ahrq.gov/PDA/index.jsp) you will be directed to following webpage <http://epss.ahrq.gov/PDA/index.jsp> that details how the AHRQ preventative services App can inform patient decision making by offering useful information in respect to an individual's individual health promotion and prevention needs. This App is a reliable and useful resource for NP students and providers (iMedical Apps Team, 2010; Steinberg, 2011).

Companies that offer decision making Apps with a degree of confidence to the provider are Skyscape products <http://www.skyscape.com/index/home.aspx> and the Medscape App <http://itunes.apple.com/us/app/medscape/id321367289?mt=8> (iMedical Apps Team, 2010). An excellent resource to review medical applications based on professionals before you download is iMedical Apps (2010) that can be found at <http://www.imedicalapps.com/>. Pharmacy resources can be found online at Pharmacy Times <http://www.pharmacytimes.com/web-exclusives/8-Must-Try-Apps-for-Pharmacists> (Enderle, 2011). Online Nurse Practitioner Education (2012) has listed 20 revolutionary applications for Nursing on their website. These applications

range in price and degree of usability for the NP student. To search and download Apps on a device the user must have an account with an online store such as iTunes. Go to the online store on the device and search categories such as medical for the top selling and highest rated Apps. If you cannot find for what you are looking, you may search the field based on key words for available Apps. Remember that price does not necessarily reflect quality in the App world. Images are expensive and Apps that have the ability to illustrate in 3 D will be more expensive to develop and purchase (Skiba, 2010; Steinberg, 2011).

Below Tables 1, 2, 3, and 4 list examples of applications that NP educators may suggest with confidence for students to use in the clinical area for point of care patient decisions. Depending on the NP specialty, there may be more specific Apps for certain areas such as Cardiology or Women's Health. Explore. There are hundreds of Apps. Just make certain it is from a reputable source.

Table 1. Pharmacy Applications

Application	Product Description from Source	Approximate Cost
ePocrates	ePocrates offers free to more costly medical PDA software including drug interactions and infectious disease databases	Free to \$300
Lab Values Pro	Lab Reference	\$2.99
Learn Muscles: Anatomy Quiz and Reference	A great reference, testing and education tool. Includes 141 beautiful muscle images with name, action, origin, insertion and comments, plus audio pronunciation guide, a quiz maker, an action viewer and 6 short videos to create a rich learning experience.	\$2.99
LexiComp	Lexicomp, the most trusted and comprehensive resource for mobile drug and clinical information for pharmacists, and healthcare providers.	\$50 to \$300
MedScape	Medscape from WebMD (medscape.com) is the leading medical resource most used by physicians, medical students, nurses and other healthcare professionals for clinical information.	Free
Micromedex Drug Information	Thomson Reuters Micromedex is the most reliable, trusted name in evidence-based clinical reference.	Free
OTC Guide	As the most accessible health care provider, pharmacists are in a unique position to help consumers make the most educated choices about which over-the-counter (OTC) products to use for the whole family.	\$3.99
PocketPharmacist	The Tool for Prescription Drugs and Medications	\$1.99
Shots by STFM	Updated with 2012 CDC Immunization Schedule	Free
Tarascon Prescriber Essentials	Tarascon contains vital information on thousands of drugs and antimicrobials to help clinicians make better decisions at the point-of-care.	\$59.00

Table 2. Assessment and Diagnosis

Application	Product Description from Source	Approximate Cost
AHRQ ePSS	The ePSS application was developed to assist primary care clinicians identify the screening, counseling, and preventive medication services that are appropriate for their patients.	Free
Calculate (QxMD software)	Calculate is a next-generation clinical calculator and decision support tool for iPhone, iPad, Android and BlackBerry, freely available to the medical community.	Free
Contraception i-Pocketcards	Nuts and bolts of Contraception.	\$3.99
Eponyms	Webster's definition of Eponym is: one for whom or which something is or is believed to be named. This app contains over 1700 of these medical eponyms with short descriptions of each – A nice learning tool for students.	Free
Infectious Disease Compendium	A hyperlinked guide to Infectious Diseases. Over 600 pages of information on antibiotics, organisms and diseases.	\$5.99
iRadiology	iRadiology App, a free learning tool that provides over 500 radiologic cases to learn from.	Free
iTriage	iTriage is a free medical app that allows you to check symptoms, find the closest doctors, and research diseases and medical procedures.	Free
LabDx	LabDx is the application for medical students, doctors, nurses and other healthcare professionals who need quick access to information on over 200 laboratory tests.	\$9.99
MedCalc	MedCalc gives you easy access to complicated medical formulas, scores, scales and classifications.	\$0.99
MedPage	MedPage Today Mobile puts breaking medical news, comprehensive drug information and CME/CE credits at your fingertips, with daily coverage of over 30 specialties and annual coverage of over 60 meetings and symposia.	Free
MedicalRadio	MedicalRadio allows you to keep up to date with changing clinical guidelines.	Free
MedScape	Medscape from WebMD (medscape.com) is the leading medical resource most used by physicians, medical students, nurses.	Free
MSK Radiology Teaching File	MSK Radiology is the lite version of Radiopaedia.org's Radiology Teaching Files: Volume 3, an app designed to teach radiology. Although this is a lite version, I was surprised to find out how much information it packs in 10 full cases.	Free
NeuroMind	It's a great tool for medical students, neurology residents,	Free

	and even neurosurgeons. It contains a wide range of information, from basic neuro-anatomy to the WHO Safe Surgery checklist items	
Pneumonia Guide	Pneumonia distills and organizes the guidance found in the 2005 and 2007 American Thoracic Society & Infectious Disease Society of America guidelines on management of Community Acquired Pneumonia, Healthcare Associated Pneumonia, and Hospital Acquired Pneumonia.	Free
Rx-Bayes	Significantly enlarged database of tests – sensitivity & specificity data for over 100 tests.	\$0.99
Visual Dx	This new medical app combines physician-reviewed clinical information with THOUSANDS of medical images from renowned physician and institutional collections. The only medical application to represent the variation of disease presentation through age, stage, and skin type, VisualDx Mobile addresses the key complexities faced by many clinicians today when diagnosing dermatologic and other visual conditions.	Free Trial \$100.00 or >
Wikipanion	Direct access to Wikipedia...it is a top rated app and worthy of a mention.	Free

Table 3. Medical Translators and Dictionaries

Application	Product Description from Source	Approximate Cost
Google Translate	Translate words and phrases between more than 60 languages using Google Translate for iOS	Free
MediBabble	MediBabble is a free, professional-grade medical translation tool.	Free

Table 4. Apps for Geriatrics

Application	Product Description from Source	Approximate Cost
AGS Pocket Guide to Common Immunizations in the Older Adult	Includes essential information about four must-have vaccines for seniors -- the flu, pneumococcal, herpes zoster, and tetanus/diphtheria immunizations. It also includes information about five additional vaccinations that older travelers going abroad may need. For each of the four must-have vaccinations, the application includes suggested "Talking Points with Patients."	Free
<i>Geriatrics At Your Fingertips</i>	<i>Geriatrics At Your Fingertips</i> ™ is an essential tool for all healthcare providers and trainees who care for older adults. It contains specialized, up-to-date evaluation and management strategies for common geriatric conditions and disorders.	\$19.99
Geriatrics Cultural Navigator	The Geriatrics Cultural Navigator was developed from the Doorway Thoughts series of books published by the American Geriatrics Society.	Free
<i>GerPsych Consult</i>	Developed to assist healthcare providers in managing psychotic symptoms and disorders in older adults. It is based on two publications of the American Geriatrics Society (AGS) (www.americangeriatrics.org), the 2010 edition of The Geriatrics Review Syllabus and 2011 edition of Geriatrics At Your Fingertips.	

About the Author *Ellen Jones, DNP, FNP-C, FAANP, is an Associate Professor at the University of North Carolina Greensboro. Contact Dr. Jones at ellen_jones@uncg.edu*

References

- Enderle, L. (2011, December 27). 8 Must Try Apps for Pharmacists. *Pharmacy Times*. Retrieved from <http://www.pharmacytimes.com/web-exclusives/8-Must-Try-Apps-for-Pharmacists>
- iMedical Apps Team. (2010, February 15). *Top 10 Free iPhone Medical Apps for Health care Professionals*. Retrieved from <http://www.imedicalapps.com/2010/02/top-10-free-iphone-medical-apps-for-health-care-professionals/10/>
- Online Nurse Practitioner Schools. (2012). *20 Incredible iPad Apps That Will Revolutionize Nursing*. Retrieved from <http://onlinenursepractitionerschools.com/20-incredible-ipad-apps-that-will-revolutionize-nursing/>
- Skiba, D. J. (2010). Back to School: What's in Your Students' Backpacks? *Nursing Education Perspectives*, 31(5), 318-320.
- Steinberg, J. (2011, October 25). Medical Resources for your iPhone/iPod/Touch. *Society of Teachers of Family Medicine*. Retrieved from <http://www.fmdrl.org/2423>.

