

Title:

Adoption of Mobile Applications by Advanced Practice Providers

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Session Title:

The APN and Technology

Slot:

A 16: Saturday, 28 October 2017: 2:15 PM-3:00 PM

Scheduled Time:

3:15 PM

Keywords:

advanced practice providers, mobile applications and nursing education

References:

Barry, J., & Hardiker, N. R. (2012). Advancing nursing practice through social media: A global perspective. *Online Journal of Issues in Nursing*, 17(3). doi:10.3912/OJIN.Vol17No03Man05

Boudreaux, E. D., Waring, M. E., Hayes, R. B., Sadasivam, R. S., Mullen, S., & Pagoto, S. (2014.) Evaluating and selecting mobile health apps: strategies for healthcare providers and healthcare organizations. *Translational Behavioral Medicine*, 4(4), 363-371. <http://doi.org/10.1007/s13142-014-0293-9>

Doyle-Lindrud, S. (2014). Mobile health technology and the use of health-related mobile applications. *Clinical Journal of Oncology Nursing*, 18(6), 634-636. doi:10.1188/14.CJON.634-636

Franko, O. I., & Tirrell, T. F. (2012). Smartphone app use among medical providers in ACGME training programs. *Journal of Medical Systems*, 36(5), 3135–3139. <http://doi.org/10.1007/s10916-011-9798-7>

Grabowsky, A. (2015). Smartphone use to answer clinical questions: A Descriptive study of APNs. *Medical Reference Services Quarterly*, 34(2), 135–148. <http://doi.org/10.1080/02763869.2015.1019320>

Ventola, C. L. (2014). Mobile Devices and Apps for Health Care Professionals: Uses and Benefits. *Pharmacy and Therapeutics*, 39(5), 356–364.

Abstract Summary:

The breadth and depth of mobile medical applications (apps) for advanced practice providers is expanding rapidly. Learn which apps are used most often by advanced practice providers and how they are discovering and evaluating new apps. Find out which apps they are recommending to students and patients.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Describe three apps used most often by advanced practice providers in the clinical setting and how they can facilitate workflow and patient care.	Presenters will describe survey respondents and show relationships between demographic variables and sample characteristics in graphical format. The most commonly used apps will be listed and described, and attendees will receive a handout reference list with sources for more information. Barriers to app use will be discussed with attendees and solutions will be generated from facilitated discussion. Attendee engagement will be encouraged through a web-based, interactive presentation application (Nearpod) with polling, short-answer responses and sharing of collaborative solutions.
Identify strategies for discovering new apps and exploring their potential validity, reliability, and usability in practice and nursing education.	Presenters will describe survey responses related to how advanced practice providers are currently finding out about new apps and evaluating their value for clinical decision making. Implications for professional development for advanced practice providers regarding new mobile apps will be explored. Presenters will facilitate a discussion around how advanced practice providers are recommending apps to patients and how they are using apps in their clinical teaching and nursing education.

Abstract Text:

Mobile medical applications (apps) put information in the hands of advanced practice providers quickly and efficiently, and precisely when and where they need it—at the point of care. Apps draw from large databases of aggregated statistics and information to provide a risk calculation, best practice, or drug therapy recommendation for a single patient. (Franko & Tirrell, 2012) Advanced practice providers use apps when they need information quickly about medication administration, differential diagnoses, staging, risk management, coding, and even to access electronic health records (Ventola, 2014). Apps facilitate workflow and patient flow as well as improve diagnosis, treatment, and documentation (Doyle-Lindrud, 2014). Easy access to any-time, any-place medical information also promotes equity of healthcare (Barry & Hardiker, 2012).

The number of apps has been growing because of technology improvements and the increasing popularity of obtaining health care information through apps. Advanced practice providers and their students are persistently challenged by the expanding number and sophistication of medical apps, and they may not know how to identify and evaluate the apps that would be most helpful to them in their specific clinical setting (Franko & Tirrell, 2012; Boudreaux et al., 2014).

In addition, previous studies have found differences in how healthcare providers with certain characteristics use healthcare apps. For example, Grabowsky (2015) found that advanced practice nurses who have been in practice for more than 10 years were less likely to use smartphones in clinical

situations. Franko and Tirrell (2012) found that, among physicians, fellows, and residents, as the level of training increased, app use decreased, and that app use varied according to specialty. A better understanding of how advanced practice nurses are searching for apps, learning about them, and using them can inform professional development programs in clinical healthcare and academic settings. Nursing faculty will find value in a deeper knowledge of how to prepare their students to search for and critically evaluate apps for validity, reliability, and usability.

To examine how advanced practice providers are learning about mobile apps and which apps they are using most frequently in the clinical setting, a cross-sectional, exploratory study was launched in a large Midwestern metropolitan area. Survey data were gathered from 132 advanced practice providers about how they are using mobile apps. Question responses were analyzed with demographic and practice information to determine whether attitudes, perceptions, and practices differed with personal and professional characteristics. The purpose for this study was to develop a clearer understanding of which mobile apps advanced practice providers use most often and why. Specifically, the authors sought to identify the mobile apps used most frequently by advanced practice providers in the clinical setting, determine whether demographic variables and practice settings predicted their choice of apps to use in patient care, and explore how advanced practice providers are learning about apps and how they would prefer to learn about and evaluate them in the future.

In this session, two advanced practice nurses and an instructional designer will present their findings from survey data about which mobile apps are used most often by advanced practice providers and their reasons for choosing these apps. They will describe how providers search for apps and critically evaluate them for usability, and they will explore differences in how they are discovering and using mobile apps in their practice. Barriers to mobile app use in the clinical setting will be explored. Apps specifically recommended for students in advanced nursing programs will be described and discussed. The presenting advanced practice nurses will provide a short demonstration of some of the apps that are most popular among healthcare providers. Presentation content will be pushed to attendees at this session via their internet-connected mobile device. Attendees will be able to provide feedback in polls and collaborative observations and reactions through an interactive application.

Attendees will leave this session with an increased understanding of how advanced practice providers are currently searching for apps, learning about their usefulness, and how they would prefer to learn about mobile healthcare apps in the future. This knowledge can inform training programs and technology updates for providers in healthcare institutions and academic settings. Educators who are managing professional development or advanced nursing education can use this knowledge to prepare their students for modern clinical decision making and efficient workflow management. An electronic reference with a current list of apps most popular among advanced practice nurses will be provided.