EMERGENCY NURSES ASSOCIATION
SAFE PRACTICE, SAFE CARE

Position Statement

915 Lee Street, Des Plaines, IL 60016-6569 ▪ 800.900.9659 ▪ www.ena.org

Mobile Device Use in the Emergency Care Setting

Description

Emergency nursing is a fast-paced and challenging field that requires a wide range of knowledge. The diverse patient population, variety of patient case-mix, and evolving care therapies make electronic resources valuable tools for keeping current and informed of vital changes in the field of emergency nursing. To stay abreast of progress in evidence-based practice, it is essential that emergency nurses have access to current and reliable resources to optimize safe and effective patient care delivery.

As mobile electronic devices (MEDs) continue to evolve into smaller, more efficient, and versatile platforms, they are driving healthcare professionals to embrace the technology and implement the use of these devices into their practice. While other areas of healthcare have been quick to integrate MEDs, nursing has lagged behind, despite the well-established benefits.[1–4] MEDs can be used to enhance direct communication between healthcare team members and provide emergency nurses with quick access to point-of-care patient education, clinical treatment guidelines, and medication information.[3,5] Although the use of MEDs has greatly increased, there is only limited research exploring the need for their use in emergency care settings and what if any are the limitations.[4]

ENA Position

It is the position of the Emergency Nurses Association that:

1. Emergency nurses have immediate access to reliable, evidence-based clinical resources essential to their practice.

2. Emergency nurses adhere to their institutional policies on the appropriate use of MEDs in the clinical setting.

3. Emergency nurses participate in the development of organizational guidelines and policies regarding the use of MEDs.

4. Emergency nurses practice appropriate infection control measures that follow institutional guidelines and policies regarding MEDs.

5. Emergency nurses work collaboratively with leadership and other healthcare providers to maintain the security and integrity of patients' protected health information.

6. Emergency nurses conduct and participate in research efforts to support the use of MEDs in the emergency care setting and understand their impact on patient outcomes.

Background

Access to current evidence-based resources is imperative in ensuring patients receive appropriate treatment. MEDs speed up this process, which is why they have become an integral part of the modern healthcare setting, expediting clinical decision making and preventing medication errors.[9] In a 2017 randomized trial involving patients with chest pain, researchers discovered that emergency physicians who received troponin push alerts discharged their patients 26 minutes quicker than those without troponin notifications.[10] In another study, researchers developed a mobile device app to provide step-by-step instructions on preparation and delivery of drugs to pediatric patients requiring continuous infusion during cardiopulmonary resuscitation. Medication errors were reduced from 70% to 0% when using the app compared with conventional preparation methods.[11] These examples illustrate the tremendous clinical and educational potential of MEDs and how they can contribute to the delivery of quality care.[12]

The use of MEDs in the clinical setting is not limited to healthcare providers: patients have found them beneficial as well.[13] In a pilot study conducted at a university hospital emergency department, tablets were issued to patients equipped with automated pain-tracking software that allowed them to indicate their pain levels and whether they wanted pain management intervention.[13] Results showed that use of this tablet increased patient satisfaction, improved the delivery of pain care, was operationally efficient, and improved pain assessment documentation.[13]

The increased prevalence of MEDs in the form of smart phones and portable tablets has significantly improved access to evidence-based practice.[14]A variety of application software, known as apps, can be easily downloaded for immediate use. These apps provide rapid access to treatment modalities and medication information including dosing, drug compatibility, and side effects, as well as enhancing communication between staff and specialties and providing patient education.[3,5,6,7,14] There are many apps currently available, but it is ultimately the duty of the MED user to carefully vet the apps for relevance, accuracy, and authenticity.[15]

While MEDs bring information to the fingertips, they can also be carriers of bacteria,[8,16] contributing to the problem of infectious disease transfer within the hospital environment.[8,16] In one study, researchers demonstrated procedures for decontamination of these devices that were effective against many commonly found nosocomial pathogens.[14] Development and enforcement of recommended guidelines and protocols for appropriate cleaning of equipment together with an emphasis on hand hygiene may help to reduce risk of spreading infection via these devices.[17]

Efforts to implement a program of MED use to enhance patient care and safety in the emergency care setting need to include protection of health information. Cyberattacks and data breaches are occurring with increasing regularity in healthcare, with mobile devices often being the most vulnerable components of a network.[18] Lack of education on the risks and impact of inadequate cybersecurity and

poor security practices such as password sharing add to the underlying problem.[17–19] However, management software for MEDs combined with the latest antivirus protection, encryption, and end-user identification — biometrics, dual-factor authentication, and strong personal passcodes — are some measures that may help to strengthen the security of these devices.[20] Separate networks within the facility, one for public access and one for professional/employee use, can also help protect against data breaches.[20]

Over the past several years, emergency care settings have become more computerized, and there has been a simultaneous increase in the use of MEDs.[3] There has been very little research on the benefits of employing these devices in the emergency care setting; further work is necessary to better understand and optimize the use of MEDs in this environment. Given the ubiquity of MEDs, it is inevitable that more decision support, information gathering, charting, etc. will occur.[3] Innovations in technology have immense potential to improve the quality and timeliness of care delivery, but they require thorough evaluation.

Resources

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Authors

Authored by
Monica Escalante Kolbuk, MSN, RN, CEN
Capt. Katherine E. Mallett, MSN, RN

Reviewed by
2018 ENA Position Statement Committee
G. J. Breuer, RN, CEN, CCRN, FAEN
Judith Carol Gentry, MHA, BSN, RN, CEN, CPEN, CFRN, CTRN, CNML, NE-BC, RN-BC
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Justin Winger, PhD, MA, BSN, RN, Chairperson

ENA 2018 Board of Directors Liaison
Ellen Encapera, RN, CEN

ENA Staff Liaison
Monica Escalante Kolbuk, MSN, RN, CEN

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