Texting: Safe Practice or Security Risk?

Mobile phone use, particularly texting, has become ubiquitous in our lives. A quick, convenient and concise form of communication, it is natural for the habit of texting to extend from personal use into our professional world. Many health care providers are now using text messaging in their clinical practice, however, there are many drawbacks to integrating texting into patient management.

In the spring of 2016, The Joint Commission (TJC) permitted the practice of texting orders if the required components of an order were included and the message was sent by a secure platform including:

- sign-in process;
- encrypted messaging;
- delivery and read receipts;
- date and time stamps;
- contact lists for senders and receivers; and
- policies on authentication, documentation and message retention.

However, by the end of 2016, TJC and the Centers for Medicare & Medicaid Services prohibited the use of text messaging of orders due to risks such as:

- **Security**: texting medical orders may violate the Health Insurance Portability and Accountability Act (HIPAA) if the system does not restrict access, protect its integrity and prevent unauthorized access to protected health information (PHI). Most text messaging systems do not include measures such as encrypting, sender/receiver authentication and are stored in unsecure servers. If a phone is lost or stolen, a password is decoded or the text is accidentally forwarded to a personal contact, PHI may be exposed.
- **Sender and Receiver Authentication**: text messages do not allow the recipient to verify the identity of the person sending the text which could lead to fraudulent orders. In addition, if the sender mistypes the receiver's phone number, there is no way to verify the intended recipient or confirm that the message was received. If cellular service is not available, the message may not transmit.
- **Documentation**: there is no mechanism to store the original message to validate what should be transcribed into the medical record.
- **Order clarity and completeness**:
    - Abbreviations and acronyms are often used in text messages which can lead to miscommunication of orders;
    - Free texting and lack of drop-down menus can result in misspelling the drug or patient name leading to the wrong drug dispensed or wrong patient name entered;
    - autocorrection on cell phones may result in incorrect entries;
    - voice recognition technology may cause transcription errors in the text message.
- **No clinical decision support:**
    - Orders that are sent via text message bypass the clinical decision support and alerts provided by computerized prescriber order entry (CPOE) systems which often take into consideration the patient's current medications, medical conditions, age, weight and

References

1. Institute for Safe Medication Practices. (2017). *Nurse Advise-ERR.* Retrieved from Institute for Safe Medication Practices: http://www.ismp.org/newsletters/nursing/issues/NurseAdviseERR201707.pdf

allergies. Many CPOE systems also provide prompts to prevent incomplete orders from being entered.

- **Transcription errors:** texted orders must be transcribed manually by nurses or pharmacists into the patient's electronic medical record which increases the risk of errors. In addition, a delay in order transcription could result in a delay in patient care.
- **Distractions from incoming texts or phone calls:** cell phones constantly receive simultaneous messages at once from multiple sources such as calls, texts, social media notifications, emails and other alerts which can be very distracting when attempting to compose a medical order via text.

Advocates of texting orders claim it has many benefits. They argue that text messages are immediate, reliable, concise, and more likely to be read. It allows for communication with multiple parties at one time and reduces the waiting time for colleagues to share patient information. They also argue that the security risks are the same as other communication methods which all involve human error. The debate will continue, therefore, health care administrators should look closely at this practice, implement protocols and educate their staff on the risks associated with texting medical orders.

References

1. Institute for Safe Medication Practices. (2017). *Nurse Advise-ERR.* Retrieved from Institute for Safe Medication Practices: http://www.ismp.org/newsletters/nursing/issues/NurseAdviseERR201707.pdf