ISMP Survey Raises Concerns about Safety of Text Messaging Medical Orders

Horsham, Pa.—The use of text messaging of medical orders in healthcare has become more common, but the majority of participants in a recent Institute for Safe Medication Practices (ISMP) survey expressed a high level of concern regarding the potential safety risks. Top issues identified included possible lack of order clarity, completeness and correctness, along with the failure to retain or document the text message and the inability to authenticate the sender and receiver.

An article in the November 16, 2017 issue of the ISMP Medication Safety Alert!® newsletter summarizes the results of the Institute’s survey on texting medical orders. The 778 respondents included nurses (40%), pharmacists (38%), physicians and other prescribers (7%), medication safety officers and quality/risk managers (7%), and others, such as educators and pharmacy technicians (8%). The majority (86%) practice in a hospital setting. Following are some highlights of the survey findings.

- **Acceptance of Texting**—Thirty-three percent of all respondents, and more than half of all medication/patient safety officers and quality/risk managers, do not believe medical orders should be texted under any circumstance in healthcare. Another 40% thought the practice was acceptable only if an encrypted phone/device application was used. Although only 12% said that texting was allowed in their facility per organizational policy, 45% of pharmacists and 35% of nurses reported receiving texted orders regularly.

- **Texting Order Restrictions**—For those who did think texted orders should be allowed, approximately half believe orders for chemotherapy and medications that require complex order sets should be prohibited as a texted order. More than a quarter thought texted orders for all high-alert medications and controlled substances should not be allowed. However, in practice, very few types of texted orders were prohibited in respondents’ facilities. Only 9% said that texted chemotherapy orders were not allowed, and only 3% reported that complex order sets could not be texted.

- **Unintended Autocorrection**—Seventy percent of respondents were concerned or highly concerned about the risk of unintended autocorrection of medical terms, approved abbreviations, drug names, or patient names that are unlikely to be in the user’s phone/device dictionary. Incorrect entries could lead to delay in care or clinically significant errors.
• **Use of Confusing Abbreviations**—Sixty-six percent of respondents were concerned or highly concerned about the use of common text abbreviations—2day for today, 2 for to, b/4 for before, 3D for 3 times daily, and MT for empty. Almost half (46%) of physician respondents said that texted orders contain those potentially confusing abbreviations, and 30% said they are used frequently.

• **Potential for Patient Misidentification**—Sixty percent of all respondents were concerned or highly concerned about the risk of misidentifying a patient with a texted order, since most transmission devices/phones do not facilitate the communication of two unique identifiers. Some respondents alarmingly noted they only include abbreviated patient identifiers in text messages to offset security risks, which could lead to errors and the wrong patient receiving a medication.

• **Misspellings**—Fifty-eight percent of all respondents were concerned or highly concerned about the risk of spelling errors with patient names, drug names, and doses, since most texted orders must be entered as “free text” without the aid of drop-down menus, or via voice recognition features that may mishear and misspell words.

• **Incomplete Orders**—Fifty-six percent of all respondents were concerned or highly concerned about the risk of communicating incomplete orders when texting. The lack of prompts often found in electronic prescribing systems may lead to missing key components such as the route of administration or for pediatric medications, the mg/kg dose.

ISMP believes that the texting of medication-specific orders should not be allowed until the safety issues have been identified and resolved through advanced technology along with the development of vetted, industry-wide clinical guidelines that can be employed to help ensure standardized, safe, and secure texting processes.

Healthcare leadership should establish and communicate their policies on the texting of orders and take a strong stance on avoiding texted medication-specific orders at this time, until they can be safely introduced through careful pilot testing and implementation plans.


**About ISMP:** The Institute for Safe Medication Practices (ISMP) is an independent, nonprofit charitable organization that works closely with healthcare practitioners and institutions, regulatory agencies, consumers, and professional organizations to provide education about medication errors and their prevention. ISMP represents more than 40 years of experience in helping healthcare practitioners keep patients safe, and continues to lead efforts to improve the medication use process. For more information on ISMP, or its medication safety alert newsletters and other tools for healthcare professionals and consumers, visit [www.ismp.org](http://www.ismp.org).