White Paper

Plain Language Emergency Alert Codes:

The Importance of Direct Impact Statements in Hospital Emergency Alerts

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Health systems throughout the country are equally united and committed in their efforts to offer high quality healthcare throughout their communities. In the event of an emergency situation, hospitals make every effort to communicate urgent information to associates and ensure patient safety. While most healthcare facilities utilize some form of emergency alert system to notify providers of an event that requires immediate action, many have not standardized these codes with other healthcare facilities in their area through the use of plain language or standardized emergency codes. Multiple hospital associations, the Joint Commission, healthcare emergency management associations, and the Institute of Medicine have each issued recommendations on the use of plain language emergency alert codes, indicating that plain language is a central tenet of health literacy (U.S. Department of Health and Human Services, 2015). However, the development and adaptation of these plain language emergency alert codes has not taken place within many hospital systems.

Area of Focus

Current emergency alert systems. Emergency codes are used throughout the country and in healthcare facilities across the globe with the universal intent of relaying emergent information to the proper staff in an effective and efficient manner. Emergency alert code systems are, however, only effective so far as healthcare workers are familiar with the code system. In the current healthcare employment climate many hospitals use short term per diem nurses and long term ñtravelingò nurses employed by staffing agencies to mitigate the lack of experienced clinical staff, with more than 30% of total nursing hours across the nation being represented by supplemental clinical staffing (Sukyong & Spetz, 2013). Non-clinical staff and

professional staff members such as environmental services, security and engineering associates may also work in multiple facilities. A 2006 healthcare employment survey indicated that 75% of all surveyed hospitals utilize temporary staff (May, Bazzoli, & Gerland, 2006). Because healthcare systems currently use a plethora of non-standardized codes, healthcare associates could easily be confused in the event of an emergency due to lack of familiarity or understanding. The lack of standardization increases the potential for misunderstanding and delayed or inappropriate responses during serious and urgent situations. These delays or inappropriate responses could result in significant patient safety events.

Plain language codes. The use of plain language emergency codes has, at its foundation, the belief that emergency information can be communicated in a manner that is easily understood by all listeners, which may include patients and visitors in addition to staff. Uniformity in emergency alerts enables healthcare providers to respond appropriately to an emergency, enhancing safety to patients, visitors and providers. A literature and data review showed that hospital associations from 25 states have recommended the introduction of a standardized set of emergency codes. (Wallace & Finley, 2015) Some of the 25 hospital associations have gone beyond standardization and advocated for the use of plain language alerts that remove the potentially confusing system of codes all together. The concept of plain language emergency codes is based upon plain language recommendations made by the United States Department of Homeland Security and founded in the principal concepts of the Incident Command System.

Use of Plain Language Emergency Codes. Multiple healthcare facilities around the country have introduced this method of emergency alerting in an effort to increase the safety and responsiveness of patients, visitors, and staff members. Hospital associations in Colorado, Florida, Iowa, Minnesota, Missouri, and Wisconsin have recommended the use of plain language

emergency codes rather than emergency code systems based on colors, letters, names, or numbers. (Wallace & Finley, 2015) However, to date, none of these recommendations have been legislated as mandatory.

The use of plain language emergency codes is also recommended by federal agencies such as The US Department of Homeland Security Federal Emergency Management Agency (FEMA) and the US Department of Health and Human Services (DHHS) who each advocate for the use of plain language in all emergency communications. FEMA states that it is important that responders and incident managers use common terminology as the use of plain language in emergency response is a matter of public safety, especially the safety of those affected by the incident. (United States Department of Homeland Security, 2006)

The US Department of Homeland Security requires plain language for multiagency, multijurisdictional, and multidisciplinary events such as major disasters or exercises. Events involving a multidiscipline response have become commonplace in the post 9/11 climate and have placed increasing emphasis on the healthcare system. This emphasis has forced healthcare facilities across the nation to conform to the incident command principals emphasized by DHHS and FEMA, but the emphasis on clear language and interoperable communications within the hospital incident command system has yet to carryover to overhead emergency alert communications within a facility. This lack of carryover is frightening to many first responders who recognize that most significant events require multiple agencies to operate within a healthcare facility during the response phase and are uncomfortable with the multitude of emergency alerts that exist within a single jurisdictionôs healthcare community.

There are currently no governmental or regulatory requirements, that the authors are aware of, that mandates the use of plain language in daily operations of individual organizations

such as healthcare facilities. However, with new CMS emergency preparedness regulations regarding a healthcare facilityôs communication plans complying with all federal and state laws and the facilityôs ability to effectively communicate ñwithin the facility, across health care providers, and with State and local public health departments and emergency systemsò (Centers for Medicare & Medicade Services, 2016) it could be argued that a standardization of emergency codes within healthcare facilities is now a mandated step in the emergency communication process.

Understanding plain language emergency alert codes: current misunderstandings. A common deterrent to the implementation of plain language emergency codes in healthcare facilities is the belief that patients and visitors of the facility will be frightened and suffer from heightened levels of anxiety. However, this belief is not supported by modern psychology studies. Research into anxiety in emergency communications suggests that messages that leave groups of the population without information during a crisis builds fear and anxiety regardless of the situation. Instead, effective risk communication can mitigate negative individual behaviors in the population while simultaneously decreasing anxiety. (Oak Ridge Institute for Science and Education, 2016) The North Carolina Hospital Association also cites in their plain language emergency alert code recommendation that plain language emergency alert notifications do not create additional fear among patients and visitors, but rather, decreases uncertainty among those persons affected by the event. (North Carolina Hospital Assoication, 2015)

Understanding plain language emergency alert codes: impact on patients and staff. Proponents of plain language emergency codes argue that the use of plain language will not only increase rapid understanding by clinical and non-clinical staff members during emergency situations, but also allow for a rudimentary understanding of emergent situations by patients and

visitors allowing those patients and visitors the ability to seek shelter without the direction of staff members. The idea of affording all persons who hear an emergency code overhead page with an understanding of what hazards are present is a central tenant to the National Weather Service (NWS) who believes that, like healthcare emergencies, seconds count in severe weather situations. NWS Warning Point Coordinator David Nadler states that ñeffective messaging is a topic that is debated and discussed quite frequentlyò (Nadler, 2016) within the weather service with the common belief among meteorologists that the more direct the information is the more appropriate the response.

Surveys conducted following the Super Tornado Outbreak of April 2011 showed that only 20% of the population warned responded appropriately to the warnings. However, the NWS discovered that by including impact statements into warnings coupled with direct plain language such as ñtrained spotters have confirmed a tornado over <location> moving east at 15mphò (Nadler, 2016) over 80% of the warned population responded appropriately by seeking shelter immediately.

Purpose of the plain language emergency alert codes research. The purpose of the study conducted by the authors that is referenced in this article was to determine how responsive individual hospitals and healthcare organizations would be to the adoption of plain language emergency alert codes. This study not only determined the current emergency alert systems utilized at participating hospitals was inadequate and antiquated, but also determined the willingness of said facilities to adopt plain language emergency alert codes in the future. The research design of this study was non-experimental as it studied the willingness of health practitioners across the nation to transition from a set of non-standard localized emergency codes of varying types to a set of standardized plain language codes. The results of this study provided

both the researchers and the healthcare community with valuable insight about the current understanding of and willingness to use plain language emergency alert codes.

Research Questions

Research question 1. What percent of healthcare facilities are currently using plain language emergency alert codes?

Research question 2. To what extent are healthcare facilities willing to adopt plain language emergency alert codes?

Definition of Variables

Plain Language Emergency Alert Codes. A system of announcing emergency alerts via the prescribed method, typically via overhead paging, by proclaiming the alert category, the specific code description, and the location of the emergency. For example, the announcer would state: ñmedical emergency, cardiac arrest, room D12.ò

Emergency Alert Codes. There is no standard definition of an emergency alert code. However, for the purpose of this research, emergency alert codes are defined as codes announced overhead in healthcare facilities to alert staff members of an emergency situation. Emergency alert codes should follow two criteria. (Florida Hospital Association, 2014)

1) Individuals understand the information received without further extensive explanation.
2) Individuals know what actions are required based on the information received.

Results

Data from the national survey revealed that most respondents found the current facility specific emergency code systems in use in many states to be antiquated and not in line with current healthcare emergency preparedness trends. The survey also revealed a fear that the plethora of emergency code variations in existence across the nation and even within healthcare

coalition groups could lead to code confusion amongst healthcare providers that work in multiple facilities, creating the potential for a delay in care or the possibility of a more substantial patient safety event.

Implementation

The implementation of plain language emergency alert code systems will serve as a benefit to healthcare associates and external emergency responders, as well as patients and visitors, by reducing the amount of confusion and anxiety that is associated with code word or color emergency alerting systems. The survey results suggest that half of the participating health systems, while in agreement that plain language codes improve hospital effectiveness and communication in an emergency situation, fear that the use of plain language codes will cause heightened anxiety for visitors and patients. However, current research by psychologists suggests that plain language codes actually reduce such anxiety. If plain language codes are to be implemented, this research will be necessary to obtain administrative and lead stakeholder ñbuy inò and approval prior to training in order to combat this negative viewpoint.

Conclusions

While the concept of plain language emergency codes is not a novel idea, this research is unique to healthcare emergency preparedness. This study has proven through scientifically validated research methods that the vast majority of healthcare emergency managers, clinicians and professional associates are in support of the adoption and implementation of plain language emergency codes. Specifically, the participants of the study agreed that plain language codes not only ease communication during an emergency, but are easily understood by all parties involved. With more than 25 state hospital associations having recommended the use of plain language or standardized emergency alert codes and multiple federal agencies recommending or requiring the

use of plain language in all emergency communication it is evident that the implementation of plain language emergency alert codes is largely accepted by state and federal agencies as well.

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