Hospital Emergency Codes
Standardization and Plain Language Recommendations and Guidance

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There has been a trend to standardize overhead emergency codes, with an increased focus on the adoption of plain language announcements. At least 23 state hospital associations have recommended the adoption of standardized emergency codes, with a number of those associations recommending adoption of plain language overhead alerts. This document provides an overview of standardization initiatives, including recommendations for adoption of plain language alerts, and the national safety and emergency management recommendations on which they are based.

Contents

Overview

Historically, hospital emergency codes used to notify staff of an event requiring immediate action were assigned a color. The use of color codes was intended to convey essential information quickly with minimal misunderstanding to staff, while preventing stress and panic among visitors to the hospital.

Since 2000, there has been a trend to standardize emergency codes, with an increased focus on the adoption of plain language announcements. At least 23 hospital associations have recommended the use of standardized emergency codes, and several have advocated using 'plain language' codes based on federal and other recommendations.

At least 8 state hospital associations have recommended adoption of plain language alerts in hospitals and at least 13 states currently recommend standardized color code alerts. Several state hospital associations, including Colorado, Florida, and North Carolina, have recommended adoption of a standardized combination of color codes and plain language alerts. To date, Maryland is the only state to mandate that hospitals implement uniform code terminology, requiring adoption of a standard color code system as a component of emergency disaster plans[1].

While there is some uniformity among these standardized color codes, there is more variability. Several of the standardized plain language systems recommended by hospital associations are based on the Missouri Hospital Association's "*Category + Alert + Location + Directions"* plain language alert model.

The National Incident Management System defines plain language as communication that "avoids or limits the use of codes, abbreviations, and jargon…"[2] While there is no universal definition or framework for plain language alerts, two criteria are generally recognized:

1. People understand the information received without further explanation;
2. People know what actions are required based on the information received.[3]

This document provides an overview of plain language standardization initiatives and guidance, and the safety and emergency management principles and recommendations on which they are based.

Standards and Recommendations

While there are no federal requirements that health care facilities use plain language emergency alerts, the trend to adopt plain language is supported by federal guidance documents and national standards which address the importance and need for clear communications and use of plain language:

- The Institute of Medicine considers plain language a central tenet of health literacy.[4]

- FEMA recommends the use of common terminology, stating "There simply is little or no room for misunderstanding in an emergency situation."[5]

- The Department of Homeland Security established plain language requirements for communication among emergency managers[6] and released guidance to help facilitate the transition.[7]

- The Emergency Nurses Association developed a position statement supporting plain language.

"In addition to eliminating code confusion entirely, plain language alerts are easily adaptable to novel situations and they provide specific instruction about what hearers need to do, without compromising preordained response protocols.[8]

- The National Incident Management System provides the following principles:

    "Using plain language and clear text, not codes, in incident management is a matter of public safety, especially the safety of incident personnel and those affected by the incident. Personnel should use plain language in all communications between organizational elements during an incident, whether oral or written, to help ensure that personnel are disseminating information in a timely and clear manner and that all intended recipients understand. Personnel should avoid using acronyms or jargon unique to an agency, organization, or jurisdiction during incidents that involve multiple jurisdictions or organizations."[9]

- NIMS Implementation for Healthcare Organizations Guidance establishes as Objective 9:

    "Apply common and consistent terminology as promoted in NIMS, including the establishment of plain language communications standards. Healthcare organizations should establish a common language and communication system with local emergency management, law enforcement, emergency medical services, fire department, and public health agencies. The use of plain language should be addressed in plans, written into training and tested during drills and exercises.

    The use of plain language does not prohibit the use of in-house hospital emergency codes to communicate within the facility. When communicating with entities outside the hospital, plain language should be used in place of internal specific emergency codes."[10]

- A paper published by American Society for Health Care Risk Management outlines the risks of coded alerts may endanger, rather than protect patients, visitors and staff them from threats, and that the change to plain language is both practical and possible.

    "The common and frequent use of emergency codes by hospitals to communicate during life-threatening emergencies routinely segregates hospital staff from patients, visitors, and first-responders during emergencies by providing each group with a different level of information regarding the threat. By relying on codes instead of plain language to communicate during an emergency, a hospital may introduce ambiguity into a potentially life-threatening situation. Consequently, this means that coded alerts may endanger staff, patients, and visitors rather than protecting them from threats."[11]

Active Shooter Scenarios

The 2014 HHS report *"Incorporating Active Shooter Incident Planning Into Health Care Facility Emergency Operations Plans"* describes important aspects of communications when there is an active shooter on site. The report notes that while many facilities use color-coded systems that include weapons/active shooter alerts, there is a need for hybrid protocols which also incorporate plain language alerts to ensure the widest notification in the affected areas.

"Generally, plain language communications, not coded, should be used in conjunction with any coded light and sound systems to maximize message delivery. If the use of coded language is necessary, beyond merely training staff, extra care should be given to how best to communicate the presence of an active shooter to others at risk."[12]

The report addresses a concern that that plain language warnings may induce panic, noting research[13] indicating that people do not panic when given clear, informative warnings, and want to have accurate information and clear instructions on how to protect themselves in the emergency. The HHS report suggests that not everyone affected will understand a code system, "therefore, plain language warnings and clear instructions should be given. As appropriate to the community, clear, consistent, accessible, and culturally and linguistically appropriate methods should be used to effectively relay information."[14]

The ASHCRM paper details active shooter events where color code and plain language terminology has been used, and active shooter events which have influenced the use of plain language terminology.[15]

Color Code Standardization

Of the thirteen states which currently recommend or require use of standardized color codes, there is significant variation, though several codes are consistent (*see Appendix B. Color Code Recommendations*).

- Each of the thirteen include:

Code Red	Fire
Code Blue	Cardiac Arrest and/or Medical Emergency
Code Orange	Hazardous Material Spill/Release

- Eight of the color code systems use:

  | **Code Gray** | Combative Person or Security Response |

- Nine color code systems use:

  | **Code Silver** | Active shooter, Person with a Weapon, and/or Hostage Situation |

- Six of the color code (and three combined color code/plain language) systems use:

  | **Code Pink** | Missing or Abducted Infant and/or Child |

- Seven of these recommendations use variations of "Code Triage" for events that may potentially have a significant impact on the normal operation of the facility.

- Several color codes are used for different incidents/response by different states.

Code Yellow	used for Bomb Threat, EOP Activation/Emergency, and Trauma
Code Black	used for Bomb Threat and Weather Event
Code Gray	frequently used for Combative Person/Security, but also Elopement and Weather
Code Purple	used for Child Abduction, Security Response, Surge, and Infectious Event
Code Green	used for Elopement, EOP Activation, Bomb Threat, and Combative Person

Below is a summary of several state initiatives recommending standardization of color codes used by hospitals in overhead paging.

California

In 2000, the Hospital Association of Southern California (HASC) recommended adoption of standardized color codes, and updated the recommendations in 2014. HASC developed implementation guidance including education materials and sample policy and procedures. The California Hospital Association has conducted surveys on code usage which indicate that most hospitals in the state are using the standardized color codes.

Code	Meaning		Code	Meaning
Code Red	Fire		Code Pink	Infant Abduction
Code Blue	Medical Emergency - Adult		Code Purple	Child Abduction
Code White	Medical Emergency - Pediatric		Code Green	Patient Elopement
Code Gray	Combative Person		Code Yellow	Bomb Threat
Code Orange	HazMat Spill/Release		Code Triage	Alert/Emergency/Activate EOP
Code Silver	Weapon, Active Shooter, Hostage Situation			

Maryland Uniform Color Code Requirements

In 2001, Maryland mandated that all acute hospitals in the state adopt uniform color codes by 2003. The regulations[16] require hospitals to adopt and implement the following set of uniform codes for the identified emergency situations as part of its emergency or disaster plans.

Code	Meaning		Code	Meaning
Code Red	Fire		Code Pink	Infant or Child Abduction
Code Blue	Cardiac Arrest (Adult, Child or Infant)		Code Green	Combative Person
Code Gray	Elopement		Code Gold	Bomb Threat
Code Orange	HazMat Spill or Release		Code Purple	Security Only Response
Code Silver	Armed Assailant		Code Yellow	Emergency or Disaster

Louisiana

In 2005, the Louisiana Hospital Association recommended adoption of standardized color codes which were updated in 2013 to include Code Silver for an incident involving an active shooter or combative person with a weapon

Code	Meaning		Code	Meaning
Code Red	Fire		Code Pink	Infant/Child Abduction
Code Blue	Medical Emergency/Cardiac Arrest		Code Yellow	Disaster-Mass Casualty
Code Orange	Hazardous Materials		Code Black	Bomb
Code White	Security Alert-Combative Person		Code Grey	Severe Weather
Code Silver	Active Shooter/ Person w Weapon			

Oregon and Washington

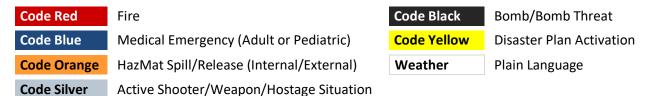In 2008, the Oregon and Washington state hospital associations collaborated in recommending adoption of standard color codes by hospitals in both states. The codes are similar to those recommended in California except for infant/child abduction where Amber Alert is used. Each association developed guidance (WA/OR) providing sample policies and procedures, staff and patient education materials and

implementation guidelines. In determining the types and names of codes to standardize, the task force outlined the following principles:

- The types of codes should be limited;
- Codes should be consistent with national standards to foster clear communication at all levels;
- Codes should reflect clarity and brevity, and definitions should be consistent, clear, and brief;
- In order to prevent confusion, the color codes should be different from the colors adopted for the hospital color-coded wristbands where possible;

Kentucky

In 2011, the Kansas Hospital Association developed guidance and sample policies to help hospitals implement the following standardized color codes with plain language for weather events:

Code Red	Fire	**Code Black**	Bomb/Bomb Threat
Code Blue	Medical Emergency (Adult or Pediatric)	**Code Yellow**	Disaster Plan Activation
Code Orange	HazMat Spill/Release (Internal/External)	**Weather**	Plain Language
Code Silver	Active Shooter/Weapon/Hostage Situation		

Plain Language Standardization

Objectives

State recommendations on the use and standardization of plain language emergency overhead alerts have been based on scholarly literature and national safety recommendations. Stated goals and objectives of these recommendations include:

- Attempt to standardized codes within state/region and with neighboring states/regions;
- Align with national preparedness and safety recommendations;
- Increasing awareness, knowledge and competency based skills of hospital staff working within their own facilities, and/or in multiple facilities;
- Simplify training;
- Increase transparency of communications and safety protocols;
- Improve staff response times;
- Support patient and visitor response during events requiring immediate response (i.e. fire, armed intruder, etc.);
- Reduce errors;
- Minimize overhead pages in hospitals is encouraged to provide a quieter hospital environment, leading to improved safety and patient outcomes;

Implementation

With the exception of Maryland's regulatory requirements, all of the state and regional initiatives outlined below are voluntary in nature and individual hospitals or health systems may choose to alter and/or allow for variables that best suit the environment. Recommended implementation activities include:

- Convene a team to evaluate use of plain language overhead paging and review recommendations with hospital emergency preparedness committees, leadership and governance;

- Consider each code and its scripting as a separate issue. Alerts for certain situations need to be heard by all occupants, and some require only certain staff to be informed. Some pages (e.g., fire, weather, abduction) should have appropriate follow-up action or response instructions.

- Include a technology assessment and review of communication plans as part of project planning.

- Changes will require staff education and training, and performance monitoring and evaluation.

State and Regional Recommendations

Below is a summary of recommendations and guidance for the use and standardization of plain language emergency overhead codes developed by state hospital associations and healthcare coalitions. Several of these recommendations and accompanying implementation material are based on the Missouri Hospital Association's *"Category + Alert + Location + Directions"* plain language alert model and its 2013 implementation guidance. The recommendations are listed chronologically.

Minnesota

The Minnesota Hospital Association's Plain Language Emergency Overhead Paging Toolkit was developed in 2011 to help hospitals move toward the use of plain language in overhead pages and to determine which emergency situations need to reach the patients' and all staff awareness. The recommended plain language scripts include the event type followed, as appropriate, by location and descriptor *("Event + Location + Descriptor")*. The recommended scripts are included in Appendix C.

The toolkit includes:
- Sample Policy, implementation plan and checklist;
- Emergency response actions with overhead page language ;
- Education materials, staff presentation, competency test and checklist;
- Implementation case studies, member hospital survey results and consumer feedback.

The association also recommended that hospitals minimize overhead pages by using other means of communicating to reduce noise; and, when possible, use plain language with emergency overhead paging to promote transparency with patients and families, and increase patient safety. These principles have been incorporated into the recommendations made by other associations and healthcare coalitions.

Missouri

In 2012, the Missouri Hospital Association (MHA) conducted a survey of 134 hospitals concerning the use of emergency codes, finding significant variation in codes including alerts for fire, medical emergency, and security threats. In response to these findings, a work group recommended a set of standardized, plain language codes.

The system divided alerts into one of the following categories: Facility, Weather, Security, or Medical. This system (termed in this document as *"'Category + Alert + Location + Directions'* plain language alert model")* has been incorporated into several other standardized plain language recommendations. MHA's guidance document includes an implementation checklist, sample policy (see Appendix sections) which have also been replicated in other state association implementation guidance.

MHA's recommendations also addresses overhead paging versus silent notification (p. 10), noting studies on excessive noise and clinical outcomes. However, when assessing the use of overhead paging versus call notification processes, it is important to reference the National Fire Protection Association's Life Safety Code 101 to ensure compliance with alarm annunciation. Based on this premise, MHA recommends the following considerations when determining methods of emergency code notification:

- Overhead paging likely is appropriate when:
  - the situation requires all or many building occupants hear the notice;
  - the situation requires additional or follow-up information to all or many building occupants;
  - the situation requires an immediate response from all staff;
  - recommended based on the NFPA Life Safety Code compliance.
- Call notification or mass texting to identified groups of staff likely is appropriate when:
  - the overall goal is to reduce excessive noise within the hospital;
  - the situation requires specific staff have immediate notice for response;
  - the patient population may be considered easily excitable, such as behavioral patients.

Iowa

Iowa Hospital Association's 2014 plain language recommendations are based on Missouri's 'Category + Alert + Location + Directions' plain language alert model and also address the issue of noise reduction.

Texas

In 2018, the Texas Hospital Association endorsed voluntary adoption of standardized, plain-language alerts based on Missouri's 'Category + Alert + Location + Directions' plain language alert model.

New Jersey

In 2004, the New Jersey Hospital Association (NJHA) recommended standardized emergency color codes. In 2018, NJHA developed plain language recommendations and tools to assist facilities transition to plain language alerts. A pilot study, testing nine standard color codes and plain language versions, found significant increase in ability to accurately identify the information conveyed and in response time with the plain language codes. The recommendations are based on Missouri's 'Category + Alert + Location + Directions' plain language alert model. The implementation toolkit includes:

- an implementation guide, including a post-implementation evaluation;
- an informational poster, 2-minute education video and presentation.

Western NY

The WNY HEPC Communications Workgroup and the Security Coordinators Workgroups developed a Plain Language Emergency Codes implementation plan based on the Minnesota and Missouri's 'Category + Alert + Location + Directions' plain language alert model recommendations and implementation guidance.

Combined Color and Plain Language Standardization

Several state hospital associations have recommended adoption of a combined system of standardized color code and plain language alerts after earlier recommendations on standardized color codes. These recommendations are summarized below as well as in Appendix D.

Florida

In 2002, the Florida Hospital Association (FHA) recommended standardized color codes. In 2014, FHA recommended a combined color and plain language code system. FHA's plain language codes are similar to Missouri's *'Category + Alert + Location + Directions'* plain language alert model. FHA makes similar recommendations to those of the Missouri Hospital Association on when overhead paging vs. silent notification is appropriate. The document includes a detailed implementation strategy checklist, education materials and sample hospital policy. The recommended color codes are:

RED	Fire		**PINK**	Infant/Child Abduction
BLUE	Medical Emergency		**BLACK**	Bomb
ORANGE	Hazardous Materials		**GREEN**	EOP Activation
GRAY	Need for Security Personnel			

Plain language overhead codes are recommended for the following situations, incidents:

- Active shooter, armed violent intruder;
- Hostage situation;
- Facility evacuation;
- Plant facility system alert (e.g., generator failure, etc.).

Colorado

The Colorado Hospital Association replicated Missouri's *'Category + Alert + Location + Directions'* plain language alert model, but included standardized color codes for hospitals that were not ready to make the transition to plain language. CHA developed a set of recommended standardized color codes in 2007 and added the plain language recommendation in 2013. The implementation guidance includes a sample planning and implementation timeline, sample hospital policy, staff presentation, competency assessment and checklist, and informational poster.

North Carolina

The North Carolina Hospital Association's 2014 recommendations are based on Missouri's *'Category + Alert + Location + Directions'* plain language alert model while retaining three optional universal code color alerts: Code Red for fire, Code Blue for medical emergencies, and Code Pink for missing infant/child events. The recommendation workgroup determined these three alerts are so common and institutionalized that having these three alerts that can be used as an alternative, would reduce resistance, increase compliance and would not negatively affect patient, employee, physician, visitor or public safety.

[1] (Code of Maryland Regulations n.d.)
[2] (U.S. Department of Homeland Security 2017)
[3] (Redish 2002)
[4] (Institute of Medicine 2004)
[5] (Federal Emergency Management Agency 2006)
[6] (Federal Emergency Management Agency 2009)
[7] (U.S. Department of Homeland Security 2008)
[8] (Emergency Nurses Association 2016)
[9] (U.S. Department of Homeland Security 2017) p. 57
[10] (HHS ASPR 2015)
[11] (Dauksewicz 2018)
[12] (U.S. Department of Health and Human Services 2014)
[13] (Sorensen and Mileti 1990)
[14] (U.S. Department of Health and Human Services 2014)
[15] (Dauksewicz 2018)
[16] (Code of Maryland Regulations n.d.)

Appendix A. State Standardization Summary

	Plain Language	Color	
AZ		X	Arizona Hospital Association recommended color code standardization in 2009.
CA		X	In 2000, the Hospital Association of Southern California developed standardized color codes which were updated in 2014. The California Hospital Association has conducted surveys on code usage and trends indicating most hospitals use standard color codes.
CO	X	X	In 2007, CHA recommended standardized color codes. In 2013, CHA recommended standard plain language codes based on Missouri's recommendations, but included standardized color codes for hospitals that were not ready to make the transition.
CT			Looking at standardizing codes, including plain language across all member facilities.
FL	X	X	In 2003, Florida Hospital Association recommended standard color code system. In 2014, FHA outlined recommendations for color codes and plain language codes.
HA		X	Recommended standardized color codes
IA	X		Iowa Hospital Association developed plain language recommendations in 2014.
KS		X	Kansas Hospital Association recommended standardized color codes with plain language recommendations for weather events.
KY		X	In 2011, the Kentucky Hospital Association recommended standard color codes and that plain language codes be standardized regionally. Codes are similar to Ohio's.
LA		X	In 2005, the Louisiana Hospital Association recommended standardized color codes.
MD		X	In 2001, Maryland state code required hospitals to adopt standard color code alerts as part of their emergency plan.
MN	X		In 2011, the Minnesota Hospital Association developed a toolkit to help hospitals move toward the use of plain language and determine which emergency situations need to reach the patients' and all staff awareness.
MI	X		Missouri recommended standardized, plain language codes in 2014.
NC	X		Issued plain language recommendations and implementation guide in 2016.
NH		X	Recommended standardized color codes in 2008.
NJ	X		Recommended standard color codes in 2004 and standard plain language in 2018.
NY	X*		3/4 of WNY hospitals have adopted plain language based on HEPC recommendations.
NC	X	X	Recommended standardized plain language codes and three color codes in 2016.
OH		X	Recommended standardized color codes
OR		X	Recommended standardized color codes in 2009 in collaboration with Washington.
RI		X	Updated recommendations on standardized color codes in 2016.
SC	X		South Carolina Hospital Association developed materials in 2016 to assist hospitals in transition to recommended plain language emergency codes.
TX	X		The Texas Hospital Association recommended standardized plain language codes with medical alert remaining Code Blue.
WA		X	Recommended standard color codes in 2009 in collaboration with Oregon.
WV		X	Recommended standard color codes
WI		X	Recommended standard color codes

Appendix B. Color Code Recommendation Examples

STATE	RED	BLUE	YELLOW	GRAY	SILVER	PINK	ORANGE	BLACK	PURPLE	GREEN	ADAM/ AMBER	TRIAGE	OTHER
AZ	Fire	Cardiac Arrest	Bomb Threat	Combative Person	Weapon/ Hostage	Infant Abduction	HazMat					✓	
CA	Fire	Adult Med Emergency	Bomb Threat	Combative Person	Weapon/ Hostage	Infant Abduction	HazMat		Child Abduction	Patient Elopement		✓	A
CO*	Fire	Cardiac Arrest		Combative Person	Weapon	Infant/Child Abduction	HazMat	Bomb Threat					B
FL*	Fire	Medical Emergency		Security Response		Infant/Child Abduction	HazMat	Bomb Threat		EOP Activation			
KS	Fire	Cardiac Arrest/ Med Emergency			Armed Intruder	Infant Abduction	HazMat	Bomb Threat					C
KY	Fire	Medical Emergency	Disaster Plan Activation		Weapon/ Hostage		HazMat	Bomb					D
HA	Fire	Cardiac Arrest		Security Assistance		Infant Abduction	HazMat/ Bioter	Severe Weather		Bomb Threat		✓	
LA	Fire	Cardiac Arrest/ Med Emergency	Disaster/Mass Casualty	Severe Weather	Active Shooter Weapon	Infant/Child Abduction	HazMat	Bomb					E
MD+	Fire	Cardiac Arrest	Emergency/ Disaster	Elopement	Armed Assailant	Infant/Child Abduction	HazMat		Security Response	Combative Person			F
NC*	Fire	Medical Emergency				Missing Infant/Child							
NH	Fire	Cardiac Arrest		Combative Person	Active Shooter		HazMat	Bomb Threat	Surge		Missing Person	✓	G
OH	Fire	Adult Med Emergency	Disaster	Severe Weather	Weapon/ Hostage	Child Medical Emergency	HazMat	Bomb/ Threat			Infant/Child Abduction		H
OR	Fire	Cardiac Arrest		Combative Person			HazMat				Infant/Child Abduction	✓	I
RI	Fire	Cardiac Arrest/ Med Emergency	Trauma Patient/Team	Security Response	Hostile Sit/ Weapon		HazMat		Infectious Event	Bomb Threat	Infant/Child Abduction	✓	J
WA	Fire	Cardiac Arrest		Combative Person			HazMat				Infant/Child Abduction	✓	K
WV	Fire	Cardiac Arrest		Security/ Combative Person Weapon/Hostage			HazMat				Infant/Child Abduction		L

* States which have recommended standard system combining color codes and plain language.

+ MD state code requires standardized color codes be adopted as part of hospital emergency plans.

A. CA: WHITE – Pediatric Medical Emergency

B. CO: WEATHER – Plain Language

C. KS:	WEATHER – Plain Language

D. KY:	WEATHER – Plain Language

E. LA:	WHITE - Security Alert – Combative person without a weapon

F. MD: GOLD – Bomb Threat

G. NH: CODE WHITE – EOP Activation;

H. OH: BROWN – Missing Adult Patient;   VIOLET – Combative Patient

I. OR: RAPID RESPONSE TEAM - Rapid Response Team

J. RI: ACTIVE SHOOTER – Plain language used for person discharging a firearm with intent to harm or kill

K. WA: RAPID RESPONSE TEAM - Rapid Response Team

L. WV: CODE TRIAGE – Mass Casualty;   CODE WALKER – Missing Adult Patient; WEATHER – Weather

Appendix C. Plain Language Code Recommendation Examples

Minnesota Hospital Association

Emergency Alert	Plain Language
Fire Determine appropriate action for staff, patients, and visitors.	Fire alarm + location (and as appropriate, action for staff/patient/visitors.)
Medical Emergency Plain language is recommended. However, if a code is to be used, it should be "code blue" Which is national standard for medical emergencies. Code blue teams are well established in and policies and practices are well engrained.	Medical emergency + location (and as appropriate, adult or pediatric.)
Abduction/Elopement Determine appropriate action for abduction versus elopement.	Missing person (any age) + descriptor (and as appropriate, action for staff, patient, visitors)
Severe Weather Determine appropriate action for staff, patients, and visitors.	Severe weather + descriptor (and as appropriate, action for staff/patient/visitors.)
Security Alert Convene team to evaluate what security situations would be announced overhead or if other communication methods would be used (i.e. email, silent page). • **Show of force** – Need to determine at what point situation would reach an overhead page or if it can be managed with other means of communication. • **Intruder** – Need to determine at what point situation would reach an overhead page or if it can be managed with other means of communication. • **Bomb threat –** Need process to determine credible threat and at what point situation would deem an overhead page.	Security alert + descriptor + location.
Disaster (internal or external emergency) (e.g., hazardous agent, mass casualty, evacuation, chemical spill, power outage,)	Internal/external emergency + descriptor + activate incident command system (if applicable.)
Rapid Response Team Evaluate having a separate rapid response team page or use medical emergency code or other means of communication.	Rapid response team + location.
Stroke Team Activation Evaluate having a separate stroke team page or use medical emergency code or other communication.	Stroke team + location.
Trauma Team Activated Evaluate having separate trauma team page or use medical emergency code or other means of communication.	Trauma team + location.

Missouri Hospital Association

Event	Recommended Plain Language	Alternate Code
FACILITY ALERT		
Evacuation	"Facility Alert + Evacuation + Descriptor (location)"	None
Fire	"Code Red + Descriptor (location)"	Plain Language
Hazardous Spill	"Facility Alert + Hazardous Spill + Descriptor (location)"	Code Orange
WEATHER ALERT		
Severe Weather	"Weather Alert + Descriptor (threat/ location) + Instruction	None
SECURITY ALERTS		
Abduction	"Security Alert + Descriptor (threat/ location)"	Code Pink
Missing Person	"Security Alert + Descriptor"	None

Armed Violent Intruder/ Active Shooter/Hostage	"Security Alert + Descriptor (threat/ location)"	Code Silver
Bomb Threat	"Security Alert + Descriptor (threat/ location)"	Code Black
Combative Patient/Person	"Security Alert + Security Assistance Requested + (location)"	None
MEDICAL ALERT		
Mass Casualty	"Medical Alert + Mass Casualty + Descriptor"	None
Medical Decontamination	"Medical Alert + Medical Decontamination + Descriptor"	None
Medical Emergency	"Code Blue + Descriptor (location)"	Plain Language

South Carolina Hospital Association

Alert Category	*Recommended Plain Language*	*Notes/Suggestions*
FACILITY ALERT		
Decontamination	Facility Alert + Decontamination + Location + Directions	Overhead page
Evacuation/Relocation	Facility Alert + Evacuation + Location + Directions	Evacuation facility alert will only be used when referencing the evacuation of an entire building. A relocation facility alert will be used when horizontal or vertical evacuation is necessary.
Fire	Facility Alert + Fire + Location + Directions	Smoke alarm response should be the same.
Hazardous Material Release	Facility Alert + Threat + Location + Avoid the area	Focus directions on "avoiding the area". Only announce if public is in jeopardy or if an outside agency is required to assist in clean-up.
Mass Casualty	Facility Alert + Mass Casualty + Location + Directions	Major traumatic events that do not qualify as a surge (i.e. a slow, gradual increase). An event that is impacting the ED as well as other depts.
Utility/Technology Interruption	Facility Alert + Utility/Technology Interruption + Location + Directions	Plant Facility System Alert would fall under this event. Classified as all the things you need to run a facility; the facility will decide if any additional language is needed.
Weather	Facility Alert + Weather Event + Location + Directions	Tornado watches/warnings, snow, severe thunderstorm, etc.
SECURITY ALERT		
Armed Subject	"Security Alert + Threat + Location + Directions	Differentiate between inside vs. outside the facility; "Escape immediate danger or shelter in place" is best overall terminology to use with giving directions.
Bomb Threat	"Security Alert + Threat+ Location + Directions	Immediate threat; direct with staff instructions
Civil Disturbance	"Security Alert + Civil Disturbance + Location + Avoid the area	Keep this event in this category in case it is ever needed because it does not fall into other categories.
Controlled Access	"Security Alert + Controlled Access + Location + Directions	Cannot use "lockdown" terminology.
Missing Person	"Security Alert + Missing Person + Location + Directions	Use "missing" unless there is absolute certainty about abduction; stay away from using abduction unless necessary - if they are abducted, they are still missing.
Security Assistance	"Security Alert + Security Assistance + Location + Directions	Out of control individual causing a disturbance. Can also include a caveat of "escalated behavior" if necessary.
Suspicious Package	"Security Alert + Suspicious Package + Location + Directions	"Suspicious package, avoid the area."
MEDICAL ALERT		
Medical Alerts	Medical Alert + Medical Emergency + Location + Directions	These will be listed on a matrix, but fall under daily operations response rather than emergency management response.

New Jersey Hospital Association

FACILITY ALERT	
Command Center Open	Facility Alert + Command Center Open + Location + Directions
Decontamination	Facility Alert + Decontamination (Internal/External) + Location + Directions
Evacuation/Relocation	Facility Alert + Evacuation + Location + Directions
Fire	Facility Alert + Fire Alarm + Location + Directions
Hazardous Material Release	Facility Alert + Hazardous Material Release + Location + Directions
Shelter-In-Place	Facility Alert + Shelter-In-Place + Location + Directions
Utility/Technology Interruption	Facility Alert + Utility or Technology Interruption + Location + Directions
Weather	Facility Alert + Weather Event + Location + Directions
SECURITY ALERT	
Active Shooter	Security Alert + Active Shooter + Location + Directions
Bomb Threat	Security Alert + Suspicious Item + Location + Directions
Civil Disturbance	Security Alert + Civil Disturbance + Location + Directions
Controlled Access	Security Alert + Controlled Access + Location + Directions
Security Assistance	Security Alert + Security Assistance + Location + Directions
Missing Person	Security Alert + Missing Person (adult/child/infant) + Location + Directions
MEDICAL ALERT	
Mass Casualty	Facility Alert + Mass Casualty + Location + Directions
Medical Alerts	Medical Alert + (describe medical alert i.e. stroke) + Location + Directions

Western New York

Facility or Building Alerts		
Command Center Activation:	State location:	Required Action: *Normal–Monitoring–Partial–Full*
Evacuation	State location:	Required action:
Fire Alarm Activation	State location:	Required action:
HazMat Incident	State location:	Required action:
Utility Outage	State location:	Required action:
Medical Alerts		
Adult Medical Emergency	State location:	Required action:
Mass Casualty Incident	State location:	Required action:
Pediatric Medical Emergency	State location:	Required action:
Rapid Response Team	State location:	Required action:
Stroke Team	State location:	Required action:
Support Team	State location:	Required action:
Security Alerts		
Bomb Threat	State location:	Required action:
Dangerous Person	State location:	Required action:
Missing Infant / Child	State location:	Required action:
Missing Visitor	State location:	Required action:
Patient Elopement	State location:	Required action:
Weather Alerts		
Weather/Natural Disaster Warning	State location:	Required action:

Appendix D. Combined Color Code and Plain Language Recommendation Examples

Colorado

Event	Recommended Plain-language	Color Code
Facility Alert		
Evacuation	Facility Alert + Evacuation + Location	
Fire Alarm	Facility Alert + Fire Alarm + Location	**Code Red**
Hazardous Spill	Facility Alert + Hazardous Spill + Location	**Code Orange**
Medical Alert		
Surge/Mass Casualty Incident	Medical Alert + Surge/Mass Casualty Incident + Location	
Decontamination	Medical Alert + Decontamination + Location	
Medical Emergency	Medical Alert + Cardiac Arrest + Location	**Code Blue**
Weather Alert		
Severe Weather	Weather Alert + Type of Weather + Instructions	
Security Alert		
Missing Person	Security Alert + Missing Person + Description	**Code Pink**
Active Shooter/Hostage	Security Alert + Active Shooter + Location	**Code Silver**
Bomb Threat	Security Alert + Bomb Threat + Location + Instructions	**Code Black**
Security Assist	Security Assist + Location	

Florida

Incident / Event	Recommended Plain Language	Color Code
Facility Alerts		
Evacuation	Facility Alert + Evacuation + Descriptor (location)	Plain Language
Plant facility system alert	Facility Alert + Descriptor (location)	Plain Language
Fire	Code Red + Descriptor (location)	**Code Red**
Hazardous spill	Code Orange + Descriptor (location) -or- Facility Alert +Hazardous Spill + Descriptor (location)	**Code Orange**
Security Alerts		
Active shooter	Security Alert + Active Shooter + Descriptor (location)	Plain Language
Armed, violent intruder	Security Alert + Descriptor (threat/location)	Plain Language
Hostage situation	Security Alert + Descriptor (threat/location)	Plain Language
Need for security personnel	'Code Gray + Descriptor (threat/location) -or- Security Alert + Descriptor (threat/location) -or- Security Alert + Security Assistance Needed + Location	**Code Gray**
Infant / child abduction	Code Pink + Descriptor (age) + Descriptor (threat/location) or- Security Alert + Descriptor (threat/location) + Descriptor (age)	**Code Pink**
Bomb threat	Code Black + Descriptor (threat/location) -or- Security Alert + Descriptor (threat/location)	**Code Black**

Medical Alerts		
Emergency Operations Plan Activation	Code Green + Descriptor -or- Medical Alert + Mass Casualty + Descriptor	**Code Green**
Medical Decontamination *(Includes chemical and radiological exposure for small and large incidents)*	Code Orange + Medical Decontamination (or Decontamination) + Descriptor (location) -or- Medical Alert + Medical Decontamination (or Decontamination) + Descriptor (location)	**Code Orange**
Medical Emergency	Code Blue + Location -or- Medical Alert + Medical Emergency + Location	**Code Blue**

North Carolina

Event	*Recommend Plain Language*	*Alternate Color Alert*
Facility Alerts		
Evacuation/Relocation	Facility Alert + Evacuation/Relocation + Descriptor + Location	
Fire/Alarm	Facility Alert + Fire/Smoke Alarm + Descriptor + Location	**Code Red**
Hazardous/Materials Spill	Facility Alert + Hazardous Spill + Descriptor + Location	
Mass Casualty	Facility Alert + Mass Casualty + Descriptor (may have levels) + Location	
Medical Decontamination	Facility Alert + Medical Decontamination + Descriptor + Location	
Surge Capacity	Facility Alert + Surge Capacity + Descriptor *(may have levels)* + Location	
Utility/Technology Interruption	Facility Alert + Type of Service Interruption + Descriptor + Location	
Weather	Facility Alert + (Instruction) + Weather + Descriptor + Location	
Security Alerts		
Missing Infant/Child	Security Alert + Missing Person + Descriptor (Infant/Child) + Location	**Code Pink**
Decisionally Impaired Missing Person >18 yrs	Security Alert + Missing Person + Descriptor (Adult) + Location	
Armed Intruder/Shooter/ Hostage Situation	Security Alert + (Instruction) + Descriptor + (Type of Threat) + Location	
Bomb Threat/Suspicious Package	Security Alert + (Type of Threat) + Descriptor + Location	
Civil Disturbance	Security Alert + Civil Disturbance + Descriptor + Location	
Controlled Access	Security Alert + Controlled Access + Descriptor + Location	
Medical Alerts		
Medical Emergency	Medical Alert + (Type of Emergency-Incident) + Descriptor + Location	**Code Blue**

Appendix E. Checklist: Planning and Implementation

The checklist below is from the Missouri Hospital Association's 2013 Emergency Code Implementation Manual recommending standardized plain language codes. The same or similar checklist is included in other hospital association guidance documents.

HOSPITAL CHECKLIST

NINE MONTHS BEFORE IMPLEMENTATION: *AWARENESS*

- ❑ Draft a letter from the CEO or governance board and disseminate widely among hospital employees and key external stakeholders.
- ❑ Include an announcement in the employee newsletter.
- ❑ Recognize any employees or committees that will help implement the plain language codes.
- ❑ Announce a "go-live" date.

EIGHT MONTHS BEFORE IMPLEMENTATION: *ESTABLISH COMMITTEE*

- ❑ Authorize a committee to review and update all policies.
- ❑ Authorize a committee to review and update all hospital materials.
- ❑ Authorize a committee or individuals to update the hospital emergency operations plan.
- ❑ Authorize a committee or individuals to update all code cards, flip charts, posters or other emergency management tools.
- ❑ Authorize a committee or individuals to update all telecommunication scripts, algorithms and materials.
- ❑ Develop a formal education plan for all employees.
- ❑ Identify train-the-trainers to serve as educators and champions, announce the trainers' names to hospital employees and schedule the trainer training.
- ❑ Establish and promote mechanisms for broad-based, frequent organizational communication, which may include the following:
    - ▪ periodic staff emails and newsletter articles providing updates and progress
    - ▪ develop posters, flyers or other materials that include the "go-live" date

SEVEN MONTHS BEFORE IMPLEMENTATION: *DEVELOP TRAINING*

- ❑ Conduct train-the-trainer competency-based training.
- ❑ Finalize education plan.
- ❑ Develop draft education materials; do not mass produce.
- ❑ Provide update to hospital governance board, leadership team and key external stakeholders.

SIX MONTHS BEFORE IMPLEMENTATION: *FINALIZE POLICY AND TESTING*

- ❑ Begin pilot testing hospital employee training.
- ❑ Revise training plan and materials based on pilot testing.
- ❑ Schedule organization wide training sessions.
- ❑ Finalize and produce education materials.
- ❑ Finalize policies.

FIVE MONTHS BEFORE IMPLEMENTATION: *TRAINING DISSEMINATION*

- ❑ Begin organization wide training.
- ❑ Disseminate all materials to each hospital department.
- ❑ Disseminate all revised policies.

- ❏ Begin to disseminate posters, flyers and other awareness materials.
- ❏ Consider a challenge between hospital departments to complete training requirements.

FOUR MONTHS BEFORE IMPLEMENTATION: *UPDATES*

- ❏ Provide an update in the employee newsletter on the progress, include the "go-live" date.
- ❏ Continue with competency-based education.
- ❏ Continue to disseminate posters, flyers and other awareness materials.
- ❏ Update hospital governance and key external stakeholders as appropriate.

THREE MONTHS BEFORE IMPLEMENTATION: *FINALIZE*

- ❏ Continue organization wide training.
- ❏ Continue communication through posters, newsletters, staff meetings and other forums as appropriate.

TWO MONTHS BEFORE IMPLEMENTATION: *REINFORCE*

- ❏ Complete organization wide training.
- ❏ Continue communication through posters, newsletters, staff meetings and other forums as appropriate.
- ❏ Ensure updated policies are available for all hospital employees.
- ❏ Ensure the emergency operations plan has been updated and formally adopted.
- ❏ Ensure all emergency management tools and resources have been updated.
- ❏ Ensure all telecommunication scripts, algorithms and materials have been updated.
- ❏ Ensure public safety partners (fire, police, EMS) are aware of the new policies, codes and "go-live" date.

ONE MONTH BEFORE IMPLEMENTATION: *PREPARE FOR GO-LIVE DATE*

- ❏ Begin a daily or weekly countdown until the "go-live" date.
- ❏ Develop a mechanism to ensure clarification of any questions.
- ❏ Ensure all department managers are ready to implement the new codes.
- ❏ Provide broad communitywide articles to educate the public on this change.
- ❏ Display awareness materials with the "go-live" date throughout the organization.
- ❏ Ensure trainers are available to answer questions.
- ❏ Communicate readiness to hospital governance and leadership team.
- ❏ Recognize employees and committees for their work to ensure a successful implementation.

IMPLEMENTATION

ONE MONTH POST IMPLEMENTATION: *INITIAL EVALUATION*

- ❏ Congratulate and recognize employees and committees for leading a successful implementation.
- ❏ Congratulate and recognize all employees for a successful implementation.
- ❏ Assess adoption of plain language codes in staff meetings, education sessions and leadership team meetings.
- ❏ Conduct department drills to assess adoption during the first five months.

SIX MONTHS POST IMPLEMENTATION: *EVALUATION*

- ❏ Conduct an organization wide drill to assess adoption six months post-implementation

Appendix F. Sample Policy

The sample policy below is from the Missouri Hospital Association's Standardized, Plain Language Emergency Codes: Implementation Guidance and is used in other state association guidance documents.

Sample Hospital Policy

Policy Name: Standardized Emergency Codes

Purpose: This policy is intended to provide all staff specific guidance and instruction on how to initiate an emergency code within the hospital.

Policy Objectives: The purpose of standardized, plain language emergency codes is to: reduce variation and the potential for error among hospital staff who may work or have privileges in more than one facility; and promote transparency of safety protocols for employees, patients and visitors.

Definitions:

Policy: In the event of an emergency situation, a plain language emergency code will be used to notify the appropriate individuals to initiate an immediate and appropriate response based on the hospital emergency operations plan. The emergency code activation may or may not include widespread notification, based on the incident and established emergency procedures.

Procedures

1. Initiating an emergency code call When initiating an emergency code call, the [hospital] employee should:
   A. initiate the notification process for the specific emergency, as outlined in the emergency operations plan
   B. use the plain language code to reduce confusion
   C. use the established code script
      i. Facility Alert
         a. Evacuation: "facility alert + evacuation + location"
         b. Fire: "Code Red + location"
         c. Hazardous Spill: "facility alert + hazardous spill + location"
      ii. Weather Alert
         a. "Weather alert + descriptor (threat/location) + instructions"
      iii. Security Alert
         a. Abduction: "security alert + abduction + location"
         b. Violent Intruder: "security alert + descriptor (threat/location) + instructions"
         c. Bomb Threat: "security alert + bomb threat + instructions"
         d. Combative Person/Patient: "security alert + security assistance requested + location"
      iv. Medical Alert
         a. Mass Casualty: "medical alert + mass casualty + descriptor (location/instructions)"
         b. Medical Emergency: "Code Blue + location"

2. Terminating an emergency code
   A. Once the emergency situation has been effectively managed or resolved, and based on the emergency operations plan, the code should be canceled. An indication of "all clear" should be sent to all that received the initial notification. This command should be repeated three times.
   B. The cancelation notification should be sent via the same notification process as the initial code activation. For example, if an overhead paging system was used to activate the code, the overhead paging system should be used to cancel the code.

3. Providing competency-based staff education Competency-based education about the plain language emergency codes should be provided to all employees during employee orientation and reviewed during annual life-safety updates. Physicians, public safety officers and other contract employees also should be provided education. Education should include the following:
   A. four categories of alerts (facility, weather, security, medical)
   B. immediate steps for emergency code activation and notification of appropriate personnel based on the [hospital] emergency operations plan
   C. specific responsibilities, based on their job description as written in the emergency operations plan.

Appendix G. Sample FAQs

Why is the NJHA endorsing and leading an initiative to adopt standardized plain language emergency alerts? Healthcare facilities are committed to increasing patient/resident, employee and visitor safety during an incident. The need to standardize emergency alerts has been recognized by healthcare emergency management and patient safety staff. The decision to adopt plain language was proactive and based on literature research, federal initiatives and early trends among healthcare facilities to promote transparency and safety.

Why is plain language important? The adoption of plain language promotes transparency, increases safety and aligns with national initiatives. The Institute of Medicine considers plain language a central tenet of health literacy (2004). The National Incident Management System also has established plain-language requirements for communication and information management among emergency managers (2008).

Why does the recommendation eliminate all color codes? The Plain Language Emergency Alert workgroup felt that mixing color codes and plain language alerts would send mixed messages about the importance of using communication that can be understood the first time it is heard.

Does use of plain language create additional fear among patients/residents and visitors? Although this is a commonly expressed concern, research suggests that plain language does not create additional fear among patients and visitors. In fact, it may decrease uncertainty among patients and visitors. To address the growing concern of patient and family confusion, a recent Joint Commission report on health literacy and patient safety recommends making plain language a "universal precaution" in all patient encounters. Studies include the 2005 Anthony R. Mawson article [Understand mass panic and other collective responses to threat disaster.]

Does use of plain language reduce patient/resident privacy or protection? If policy implementation adheres to principles of privacy and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy, Security and Breach Notification Rules, the use of plain language should not adversely affect patient/resident privacy.

How should a hospital determine which emergency alerts to announce to all patients, visitors and employees and which emergency alerts to announce to only specific hospital personnel? It is important that each hospital consult its emergency management and leadership teams to determine appropriate policies and procedures for the organization. As a general rule, the trend is to reduce the amount of overhead paging and announce overhead only those alerts that at least the majority of patients, employees, physicians, visitors and the public should be aware of and prepared to respond.

How should hospitals handle security issues such as an armed violent intruder? It is important that each hospital consult its emergency management and leadership teams to determine appropriate policies and procedures for the organization. As a general rule, hospitals should consider overhead announcements when there is a confirmed or likely armed violent intruder. All persons whose lives are at immediate risk of serious injury and/or death need to be told of that risk and given the opportunity to take protective actions.

Is it OK to reduce noise by not using overhead pages? Some hospitals have moved toward reducing noise for patients by minimizing overhead paging and communicating emergency situations through other means. This is received well by patients, families and staff. Each hospital will need to determine which emergency situations need to reach the patient's awareness. Some emergencies may be communicated through other means to the appropriate staff that need to respond. As a general rule, the trend is to reduce the amount of overhead paging and announce only those codes that at least the majority of patients, employees and visitors should be aware of and prepared to respond.

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