Overhead Emergency Codes

2014 Hospital Guidelines

FHA Florida Hospital Association
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2014 RECOMMENDATIONS FOR HOSPITAL EMERGENCY CODES GUIDELINES FOR PROGRAM MODIFICATION

Executive Summary

In 2002, a survey of hospital emergency codes illustrated the lack of uniformity existing among hospitals and allied healthcare organizations in Florida. At that time, the Florida Hospital Association (FHA) recommended a set of standardized emergency overhead codes for hospital use. Routinely, these recommendations are reviewed and revised. The goal of these recommendations is to provide a common color-set of code indicators for different types of internal and external hospital emergencies.

Beginning in 2013 the FHA Office of Emergency Management Services convened a work group of volunteer, hospital-based, subject matter experts to review the prior recommendations, examine current practices in place within the national hospital community, compare national programs and recommendations for inclusions / exclusion criteria and create an updated set of core recommended standards for adaptation and use.

Prior recommendations met the following objectives:

1. Promote a set of emergency overhead codes based on best practice and existing recommendations.
2. Develop appropriate standards/criteria to increase implementation and use of recommendations.
3. Reduce variation of emergency codes among Florida hospitals.
4. Increase awareness and knowledge of hospital staff working in multiple facilities.
5. Increase staff, patient and public safety within hospitals, health systems and their campuses.
6. Promotes transparency of safety protocols.
7. Attempts to align standardized codes with neighboring states.

These recommendations provide comprehensive resources, including a sample policy and competency checklist to support the adoption of these emergency codes.

FHA is pleased to present the ***Hospital Guidelines: Overhead Emergency Codes – 2014 Recommendations*** document for consideration and use. These revised recommendations reflect the most recent review of hospital emergency overhead codes and their use in the physical environment.

The 2014 recommendations considered two essential goals:

1. Promote a revised set of standard, emergency overhead codes, both color-sets and plain language, based on a national review of best practice programs, activities and guidance aligned with previously released recommendations.

2. Convey appropriate criteria to increase implementation and use by hospitals in Florida.

As you review this document, you will notice a major shift in the recommendation to use 'plain language' in many overhead codes. Some of these recommendations may be individualized or in tandem with the existing color-based systems. The recommendations provide information for this new recommendation in order to keep Florida's hospital security and safety actions ahead of current national practice.

Thank you.

Disclaimer

It is important to note that these are only recommendations and voluntary in nature. An individual hospital or health system may choose to alter and/or allow for variables that best suit the environment. Altering an existing program needs to be done in a planned approach over time.

Background

In 2002 a survey of hospitals' emergency codes illustrated the lack of uniformity existing among hospitals and allied healthcare organizations in Florida. At that time, Florida Society for Health Security and Safety Professionals, representing over 100 hospitals and health care systems in Florida, recommended a set of standardized emergency overhead codes for hospital use. These were:

- **RED** – Fire
- **BLUE** – Cardiac / Respiratory Arrest
- **PINK** – Infant / Child Abduction
- **BLACK** - Bomb
- **ORANGE** - Hazmat / Bioterrorism
- **GREY** - Violence/Security Alert
- **WHITE** - Hostage
- **YELLOW** - Lockdown
- **GREEN** - Mass Casualty / Disaster
- **BROWN** - Severe Weather

While the main colors were constant, flexibility for use was included for individual hospital needs. At that time, the goal was to have a common set of base colors allowing for customization.

These recommendations were reviewed and revised in 2006 and 2010 by members of the Florida Society for Healthcare Security, Safety and Emergency Management Professionals. Changes incorporated a national review of other state hospital association recommendations for a standard approach to overhead emergency codes. The previous recommendations were based on a combined set of colors, code numbers and specific language in an all ‘color’ system.

The 2010 recommendations included the following changes to the code set:

- **Red** – Fire

- **Blue** – Medical Emergency
- **Pink** – Infant / Child Abduction
- **Black** – Bomb Threat
- **Orange** – Hazardous Materials
- **White** – Hostage Situation
- **Green** – Disaster Plan Activation
- **Silver** – Active Shooter

The emphasis of these recommendations is to promote an enhanced secure and safe healthcare environment for employees, patients and their family, visitors and the communities hospitals in Florida serve.

Introduction

FHA continuously receives requests from its members to continue to review, revise and provide recommendations of standardized emergency codes used in Florida hospitals.

There is also a national trend to standardize emergency codes as recommended by the Joint Commission in 2012. Further, there is a trend to adopt plain language versus color code announcements. The adoption of plain language is supported by the following organizations:

- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security
- The National Incident Management System (NIMS)
- The Institute of Medicine

The 2014 Recommendations for Hospital Overhead Emergency Codes take into consideration the following assumptions:

1. Not all hospitals and/or health systems adhere to these recommendations in their entirety.
2. Hospitals and health systems may use a mixture of color codes, code numbers and/or plain language in their programs.
3. Healthcare workers may work at more than one healthcare facility and be required to remember and respond to different emergency overhead codes.
4. Providing a standardized set of recommended emergency overhead codes promotes a safe and secure environment in a uniform manner.

5. Continual review is needed and a revision of these recommendations may be needed in the future.

Principles for Adopting Standardized Emergency Codes

The following principles were developed to guide hospitals and health systems in the development and/or revision of overhead emergency codes:

- This is a voluntary initiative; it is not a mandate to adopt all or any of the recommended emergency codes.
- The recommendations are based on scholarly literature and national safety recommendations.
- Use of plain language emergency codes should be considered to ensure transparency and patient and public safety.
- Minimizing overhead pages in hospitals is encouraged to provide a quieter hospital environment, leading to improved safety and patient outcomes.

2014 Recommendations

Florida's Emergency Color Codes

The use of a color code system has been recommended in Florida since 2003. The current recommendations are the result of a national review of overhead emergency code recommendations by other state, regional and metropolitan hospital associations and hospital systems. It is important to note that these are only recommendations and an individual hospital or health system may alter and or allow for variables that best suit their environment.

Color Code		Descriptor
Black		**Bomb Threat** – The majority of hospitals in Florida and across the country are using Code Black as the designation for a bomb threat
Green		**Emergency Operations Plan Activation** - This code applies to any incident (e.g., natural disaster, mass casualty incident) where a hospital's emergency operations plan is activated.
Red		**Fire** - Code Red is a national standard recommended by the Hospital Fire Marshall's Association and its membership.

Color Code		Descriptor
Blue		**Medical Emergency** – The use of an accompanying number is often used to denote a pediatric emergency (e.g., “Code Blue 13”).
Orange		**Hazardous Materials Incident** – Used for the activation of the decontamination team and other incidents involving hazardous materials spills and/or exposure. May be used for facility or medical alerts requiring cleanup and/or decontamination.
Pink		**Infant/Child Abduction** - Consider using Code Pink with an accompanying number to differentiate age of the abducted infant / child (e.g., Code Pink 3 – a three year old). This helps staff adjust to looking for a toddler versus an infant that may be concealed in a bag or suitcase.
Gray		**Need for Security Personnel** – Applies to any incident where hospital security personnel are needed. This may include, but not be limited to: a violent/combative person; a missing person; criminal activity or other situations where enhanced security is required.

Standardized, Plain Language Emergency Code Recommendation

Florida hospitals are committed to ensuring patient and public safety within each facility. The recommendation to adopt standardized, plain language emergency codes has been developed by experts from hospitals across Florida and is based on scholarly literature, research and national guidelines.

Plain language overhead codes are recommended for the following situations, incidents or events, and their subsequent response:

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

Rationale for Plain Language Emergency Codes

In an era of increased transparency, there are several national initiatives to promote plain language among many disciplines, including health care providers and emergency

managers. Plain language is a central tenet of health literacy and has been adopted to demonstrate improved patient safety outcomes (Institute of Medicine, 2004).

Staff who are new or work at multiple hospitals may not recall unique code nomenclature, resulting in an adverse action.

There is no one universal definition for plain language, but current adoption follows these two criteria (Redish, 2000; U.S. Health and Human Services, n.d.).

1. People understand the information received without further extensive explanation.

2. People know what actions are required based on the information received.

The recommendation to use plain language also is evident in the field of emergency preparedness.

The use of "10" codes such as "10-4" or "10-20" are not recommended or used among law enforcement and public safety officials. The National Incident Management System (NIMS) guidance provides the framework for health care preparedness and response, including the use of the incident command system. NIMS has also established the following plain language requirements for communication and information management (U.S. Department of Homeland Security, 2008, pg. 29).

- "The ability of emergency management/response personnel from different disciplines, jurisdictions, organizations and agencies to work together depends greatly on their ability to communicate with each other. Common terminology enables emergency management/response personnel to communicate clearly with one another and effectively coordinate activities, no matter the size, scope, location or complexity of the incident."

- "The use of plain language (clear text) in emergency management and incident response is a matter of public safety, especially the safety of emergency management/response personnel and those affected by the incident. It is critical that all those involved with an incident know and use commonly established operational structures, terminology, policies and procedures. This will facilitate interoperability across agencies/organizations, jurisdictions and disciplines."

Adoption of standardized, plain language also is an emerging trend in other state's hospitals and healthcare systems. Several states have adopted standardized codes during the past few years, and nearly all have included recommendations for plain language codes.

2014 Emergency Codes

The 2014 guidelines are categorized into three main groups of codes: facility alerts, security alerts and medical alerts. These recommendations combine the existing color code system with a set of plain language emergency codes as an additional safety measure.

Facility Alerts

Purpose: Provide for the safety and security of patients, employees and visitors at all times, including the management of essential utilities.

Types of Facility Threats

- Evacuation (Plain language code)
- Plant facility system alert (Plain language code)
- Fire (**Code Red**)
- Hazardous spill (**Code Orange**)

Facility Utilities

- Electrical power
- Water
- Fuel
- Medical gases, ventilation and vacuum systems

Incident / Event	Recommended Plain Language Code	Alternative Code
Evacuation	"Facility Alert + Evacuation + Descriptor (location)"	No color code; Use plain language only
Plant facility system alert	"Facility Alert + Descriptor (location)"	No color code; Use plain language only
Fire	"Code Red + Descriptor (location)"	**Code Red**
Hazardous spill	"Code Orange + Descriptor (location)" -or- "Facility Alert +Hazardous Spill + Descriptor (location)"	**Code Orange**

Security Alerts

Purpose: To protect employees, patients and visitors from any situation or person posing a threat to the safety of any individual(s) within the hospital.

Types

- Active shooter (Plain language code)
- Armed, violent intruder (Plain language code)
- Hostage situation (Plain language code)
- Need for security personnel (**Code Gray**)
- Infant or child abduction - up to age 8 (**Code Pink**)
- Bomb threat (**Code Black**)

Incident / Event	Recommended Plain Language Code	Alternative Code
Active shooter	"Security Alert + Active Shooter + Descriptor (location)"	No color code; Use plain language only
Armed, violent intruder	"Security Alert + Descriptor (threat/location)"	No color code; Use plain language only
Hostage situation	"Security Alert + Descriptor (threat/location)"	No color code; Use plain language only
Need for security personnel	'Code Gray + Descriptor (threat/location) -or- "Security Alert + Descriptor (threat/location) -or- "Security Alert + Security Assistance Needed + Location"	**Code Gray**

Incident / Event	Recommended Plain Language Code	Alternative Code
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

Purpose: To provide medical care and support to patients and incident victims while maintaining care and safety of patients, employees and visitors within a health care facility during an emergency event or incident.

Types

- Emergency Operations Plan Activation (**Code Green**)
- Medical decontamination (**Code Orange**)
- Medical emergency (**Code Blue**)

Incident / Event	Recommended Plain Language Code	Alternative Code
Emergency Operations Plan Activation	"Code Green + Descriptor" -or- "Medical Alert + Mass Casualty + Descriptor"	**Code Green**

Incident / Event	Recommended Plain Language Code	Alternative Code
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**

Note: Because of the widely accepted use of the two color codes for fire and medical emergency, the workgroup determined it appropriate to maintain these two color codes as the primary recommendation, with plain language as the secondary recommendation.

Also, Code Silver was eliminated for active shooter scenarios and changed to a plain language code promoting safety and awareness and removing any concerns and confusion with 'Silver Alerts' which are used by public safety agencies public to alert the public of a missing elderly person.

Because of the implication of the use of a weapon, similar violent scenarios (i.e., armed, violent intruder and hostage situation) were called out and recommended as separate plain language codes rather than lumping them into a generic security alert.

Overhead Paging versus Silent Notification

In 2001, the Institute of Medicine issued a report, "Quality Chasm," identifying six aims of patient quality and safety: safe, timely, effective, efficient, equitable and patient-centered. This landmark report has served as the foundation for many national initiatives to improve patient safety and clinical outcomes.

Excessive noise in a hospital setting has been attributed to negative clinical outcomes. Research suggests that "Hospital noise has been associated with patient risk for sleep disturbance, cardiovascular response, increased length of stay, increased incidence of

re-hospitalization and other problems" (Ryherd, Okcu, Ackerman, Zimring and Persson, 2011, pg. 491).

A study by the University of Virginia Health System identified noise as the most important irritant to surgical patients (Moore, Nguyen, Nolan, Robinson, Ryals, Imbrie & Spotnitz, 1998). This study and others led to the inclusion of noise as core measures for patient satisfaction in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) reported on the U.S. Department of Health and Human Services' website, Hospital Compare. The measure captures the percentage of patients who report "that the area around their room was always quiet at night" (Hospital Compare, n.d.).

Further, research also suggests excessive noise may contribute to the overall stress, job performance and job satisfaction among hospital staff (Ryherd, 2011). Noise must be considered as a contributing factor in patient outcomes and perhaps staff performance and stress, as well.

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 (2012).

Based on this premise, the committee recommends the following considerations when determining methods of emergency code notification.

Overhead paging likely is appropriate when:

1. The situation requires all or many building occupants hear the notice;
2. The situation requires additional or follow-up information to all or many building occupants;
3. The situation requires an immediate response from all staff; and/or,
4. When it is recommended based on the National Fire and Protection Agency (NFPA) Life Safety Code compliance.

Call notification or mass texting to identified groups of staff likely is appropriate when:

1. The overall goal is to reduce excessive noise within the hospital;
2. The situation requires specific staff have immediate notice for response; and/or,
3. The patient population may be considered easily excitable, such as behavioral patients.

Many hospitals use established call notification systems. These systems may be set up to send emergency notifications to all or select hospital staff. They may also establish notification of area hospitals' emergency preparedness personnel to expedite communication and coordination for emergencies requiring regional response.

Implementation Strategy

FHA is cognizant of the fact that hospitals are using emergency overhead codes in their day-to-day operations. Changing a program can be a challenge for many reasons. Workforce education and training, dissemination of new material and program implementation cost are several examples. Altering an existing program needs to be done in a planned approach over time. These recommendations are voluntary and are intended to improve patient and public safety.

The recommendations also include implementation ideas and guidance. Hospitals will need to review these recommendations with their emergency preparedness committees, hospital leadership and governance. It is important each hospital and healthcare system carefully consider each emergency code as a separate issue. It is encouraged, but not required, that a hospital adopt all standardized codes.

It is recommended hospitals follow these steps to implement standardized codes once the hospital has established formal organizational approval and decision to adopt the codes. The steps and time lines are guidance only and should be modified to meet organizational priorities and approaches.

ACTION STEPS

This section complements the Implementation Checklist (Appendix 3) provided on page 27.

Nine Months Prior to Implementation: Awareness

1. Draft a letter from the CEO or governance board and disseminate widely among hospital employees and key external stakeholders.
2. Include an announcement in the employee newsletter.
3. Recognize any employees or committees willing to help implement the new/revised codes.
4. Announce a “go-live” date.

Eight Months Prior to Implementation: Establish Committees

1. Authorize a committee to review and update all policies.
2. Authorize a committee to review and update all hospital materials.
3. Authorize a committee or individuals to update the hospital emergency operations plan.
4. Authorize a committee or individuals to update all code cards, flip charts, posters or other emergency management tools.
5. Authorize a committee or individuals to update all telecommunication scripts, algorithms and materials.

6. Develop a formal education plan for all employees.
7. Identify train-the-trainers to serve as educators and champions, announce the trainers' names to hospital employees and schedule the trainer training.
8. Establish and promote mechanisms for broad-based, frequent organizational communication, which may include the following:
    a. periodic staff emails;
    b. periodic newsletter articles providing updates and progress; and,
    c. posters, flyers or other materials that include the "go-live" date.

Seven Months Prior to Implementation: Training Plan

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

Six Months Prior to Implementation: Finalize Policy and Training

1. Begin pilot testing hospital employee training.
2. Revise training plan and materials based on pilot testing.
3. Schedule organization-wide training sessions.
4. Finalize and produce education materials.
5. Finalize policies.

Five Months Prior to Implementation: Training and Policy Dissemination

1. Begin organization-wide training.
2. Disseminate all materials to each hospital department.
3. Disseminate all revised policies.
4. Begin to disseminate posters, flyers and other awareness materials.
5. Consider a challenge between hospital departments to complete training requirements.

Four Months Prior to Implementation: Updates

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

Three Months Prior to Implementation: Reinforcement

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

Two Months Prior to Implementation: Finalize

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

One Month Prior to Implementation: Prepare for “Go-Live” Date

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

Implementation

One Month Post Implementation: Initial Evaluation

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

Six Months Post Implementation: Evaluation

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

Other Information

This toolkit provides additional information, policy templates and educational materials to assist hospitals. Other information included in this toolkit is referenced below:

- Appendix 1 – Sample Policy Form
- Appendix 2 – Frequently Asked Questions
- Appendix 3 – Implementation Checklist
- Appendix 4 – Sample Hospital Poster
- Appendix 5 – Sample Competency Checklist
- Appendix 6 – Educational Materials
- Appendix 7 – Reference Information Sources for Policy Consideration
- Supporting Toolkit Information and References

Hospitals may wish to develop additional materials for their specific systems.

Conclusion

FHA continually seeks to promote the security and safety of the hospital and healthcare system physical environment in all aspects. Over time, overhead emergency codes have changed significantly. This toolkit seeks to provide the most recent information allowing hospitals and health systems to model their practice on empirical information. FHA thanks the volunteers who helped develop this toolkit for their time, knowledge and contribution.

Acknowledgements

FHA would like to thank the following individuals and organizations for their volunteer spirit and assistance in the preparation of these recommendations:

- Don Welch, M.B.A., Chief Operating Officer, Florida Hospital Zephyrhills
- Linda Ballou, CHFM, Director Facility Operations, West Boca Medical Center
- Susan Leonard-Gil, Administrative Assistant, Plant Operations, West Boca Medical Center
- Philip Doyle, BBA, FF/NREMT, CHS-III, Director of Public Safety and Emergency Management, Tallahassee Memorial Healthcare
- Andy Sikes, M.S.P., CHPA, Director of Protective Services, Baptist Medical Center/Wolfson Children's Hospital
- Jim Ray, Former Corporate Director, Security and Emergency Preparedness, Orlando Health
- Carol Clark, RBA, CHSP Manager, Safety & Security, Morton Plant Mease Healthcare
- Ed Smolik, AA, Facility Management, Baycare Health System
- Dirk Palmer, CHS - III, CHSS, Emergency Preparedness Coordinator, Morton Plant Mease Healthcare
- Bob Dexter, M.Ed., Manager, Quality Improvement, Regulatory Compliance and Safety, Baptist Health South Florida
- Chris Kilroy, CHEP, CHSP, Former Manager, Emergency Preparedness and Security, Baptist Health South Florida
- Paul Ford, Ph.D., Director, Safety/Security and Transportation, Tampa General Hospital
- Kelly Keys-Torres, RN, B.S.N., CHEC II, Corporate Emergency Preparedness, Broward Health
- Steve Thornton, CHEC II, Coordinator, Emergency Preparedness, Broward Health
- Doug Wade, BA, System Director of Security, Lee Memorial Health System
- Rafael Ortiz, Manager of Security, Lee Memorial Health System
- Connie Bowles, RN, B.S.N., M.A., Emergency Management / Disaster Preparedness, Lee Memorial Health System

- Lidia P. Webb, DAFC, FACHE, Quality Manager, 96MDG/SGHQ, U.S. Air Force, Eglin AFB
- Mike Matroni, Emergency Preparedness & Security Manager
  Sacred Heart Health System

FHA would also like to thank the following hospital associations for their willingness to share their information and recommendations for comparison:

- Arizona Hospital and Healthcare Association
- California Hospital Association
- Colorado Hospital Association
- Georgia Hospital Association
- Kansas Hospital Association
- Louisiana Hospital Association
- Missouri Hospital Association
- Metropolitan Chicago Healthcare Council
- Nebraska Hospital Association
- Nevada Hospital Association
- New Hampshire Hospital Association
- New Jersey Hospital Association
- Ohio Hospital Association
- Oklahoma Hospital Association
- Oregon Association of Hospitals and Health Systems
- The Hospital & Healthsystem Association of Pennsylvania
- Hospital Association of Rhode Island
- South Florida Hospital & Healthcare Association
- Tennessee Hospital Association
- Washington State Hospital Association
- West Virginia Hospital Association
- Wisconsin Hospital Association

Supporting Toolkit Information and References

Porth, L., (2013) MHA Standardized, Plain Language Emergency Codes: Implementation Guide. Missouri Hospital Association. Available at *www.mhanet.com*.

Chadhury H., Mahmood, A., Valente, M. (2009). The effect of environmental design on reducing nursing errors and increasing efficiency in acute care settings: a review and analysis of the literature. Environment and Behavior. 41:755-787. DOI: 10.1177/00139 16508330392.

Healthcare Association of Southern California (2011) Health care emergency codes: a guide for code standardization, (3rd ed). Retrieved February 8, 2013, from *www.HASC.org*.

Hsu, T. Ryherd, E., Persson Waye, K, Ackerman, J. (2012) Noise pollution in hospitals: impact on patients. J. Clinical Outcomes Management. 19(10): 301-309.

Institute of Medicine (2001). Crossing the quality chasm: a new health care system for the 21st century. ISBN 0-309-07280-8.

Institute of Medicine (2004). Health literacy: a prescription to end confusion. ISBN. 0-309-09117-9.

Joint Commission Resources (2012). Emergency management in health care: an all hazards approach (2nd ed). ISBN: 978-1-59940-701-2.

MacKenzie, D.J., Galbrun, L. (2007). Noise levels and noise sources in acute care hospital wards. Building Services Engineering Research and Technology. 28:117-131. DOI: 10.1177/0143624406074468.

Moore, M.M., Nguyen, D., Nolan, S.P., Robinson, S.P., Ryals, B., Imbrie, J.Z., Spotnitz, W. (1998) Interventions to reduce decibel levels on patient care units. 64(9) 894-899. Retrieved December 6, 2012, from *http://search.proquest.com.ezp.waldenulibrary.org/healthcomplete/docview/213098125/fulltextPDF/13AD6E7A6AE2E341F55/6?accountid=14872*.

Minnesota Hospital Association (n.d.) Plain language emergency overhead paging: implementation toolkit. Retrieved February 8, 2013, from *http://www.mnhospitals.org/patient-safety/current-safety-quality-initiatives/emergency-overhead-pages*.

Mitigation Dynamics, Inc. (2012). Sample policy templates. Available at *www.mhanet.com*.

National Center for Missing and Exploited Children (n.d). Retrieved February 8, 2013, from *www.missingkids.com*.

National Fire Protection Association (2012) Life Safety Code 101. Retrieved March 15, 2013, from *www.nfpa.org/aboutthecodes/aboutthecodes.asp?docnum=101*.

Redish J.C. (2000). What is information design? Technical Communication; 47(2):163-166.

Ryherd, E., Okcu, S., Ackerman, J., Zimring, C., Persson Waye, K. (2012). Noise pollution in hospitals: impact on staff. J. Clinical Outcomes Management. 19(11): 491-500.

U.S. Department of Health and Human Services. (n.d.) Hospital compare. Retrieved December 6, 2012, from *www.hospitalcompare.hhs.gov/*.

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion (n.d.) Plain language: a promising strategy for clearly communicating health information and improving health literacy. Retrieved December 6, 2012, from *http://www.health.gov/communication/literacy/plainlanguage/PlainLanguage.htm*.

U.S. Department of Homeland Security (2008) National incident management system. Retrieved December 6, 2012, from *www.fema.gov/sites/default/files/orig/fema_pdfs/pdf/emergency/nims/NIMS_core.pdf*.

U.S. Department of Homeland Security, Office of Emergency (2010) Plain language FAQs. Retrieved December 6, 2012, from *www.safecomprogram.gov/SiteCollectionDocuments/PlainLanguageFAQs.pdf*.

Appendix 1 – Sample Policy Format

HOSPITAL POLICY

Subject: Hospital Emergency Operations **Policy Number:** _____

Effective Date: _____

Dates of Revision: _____

Authorized Approval: _____

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 among Florida hospitals is to:

- reduce variation and the potential for error among Florida 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 [insert hospital name] 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; and,

C. use the established code script.

a. Facility Alert -

i. Evacuation: “facility alert + evacuation + location”

ii. Fire: “Code Red + location”

iii. Hazardous Spill: “facility alert + hazardous spill + location”

b. Security Alert -

i. Abduction: “security alert + abduction + location”

ii. Violent Intruder: “security alert + descriptor (threat/location) + instructions”

iii. Bomb Threat: “security alert + bomb threat + instructions”

iv. Combative Person/Patient: “security alert + security assistance requested + location”

c. Medical Alert -

i. Mass Casualty: “medical alert + mass casualty + descriptor (location/instructions)”

ii. 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 cancellation 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. three categories of alerts (facility, security, medical);

B. immediate steps for emergency code activation and notification of appropriate personnel based on the [hospital] emergency operations plan; and,

C. specific responsibilities, based on their job description as written in the emergency operations plan.

Appendix 2 – Frequently Asked Questions

Why is the Florida Hospital Association endorsing and leading an initiative to adopt standardized, plain language emergency codes?

FHA and member hospitals are committed to increasing patient, employee and visitor safety during any incident. FHA has recommended the use of standardized emergency codes since 2003. The need to standardize emergency codes had been recognized by hospital emergency preparedness staff, especially in communities with more than one hospital or adjacent to nearby states. The decision to adopt plain language was proactive and based on literature, research and trends among hospitals and health systems across the United States to promote transparency and safety. These trends align with new federal initiatives to adopt plain language standards.

How did FHA develop these specific codes for standardized use?

FHA asked several volunteer subject matter experts from its member hospitals to assist in the review and revision of the 2010 recommendations. Representation included critical access hospitals, rural hospitals and large health care systems. FHA facilitated the process, and the group, which first convened in February 2013. A review of other state hospital association guidance and recommendations was conducted through the summer of 2013 including a review of those states recommending plain language codes. FHA's recommendations were updated to reflect the inclusion of plain language codes. Consensus was met with the work group and the recommendations were released for use in January 2014.

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 did the Florida recommendations maintain the recommendations for the use of color codes for specific emergencies?

The standardized emergency code workgroup determined several of these codes are used commonly and therefore institutionalized into the hospital environment. Maintaining these color codes would reduce resistance, increase compliance and would not negatively affect patient, employee or visitor safety. It is important to note the workgroup did recommend plain language as the only acceptable alternative for these color codes.

Does use of plain language create additional fear among patients 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.

Does use of plain language reduce patient 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 privacy.

How should a hospital determine which emergency codes to announce to all patients, visitors and employees and which emergency codes 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 codes that at least the majority of patients, employees and visitors 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.

Is adoption of any or all of these plain language emergency codes mandatory?

Although this initiative is strongly encouraged and endorsed by the FHA, there is no regulation requiring adoption of any or all of these standardized, plain language emergency codes.

Appendix 3 – Implementation Checklist

It is recommended hospitals follow these steps to implement standardized codes once the hospital has established formal organizational approval and decision to adopt the codes. The steps and time lines are guidance only and should be modified to meet organizational priorities and approaches.

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
- periodic 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 community-wide 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 4 – Sample Hospital Poster

A sample poster highlighting these recommendations is available in PDF format.

Appendix 5 – Sample Competency Checklist

Employee Name: _____

Employee Number: _____

Title: _____

Unit: _____

Skills Validation				
Method of Evaluation:	DO – Direct Observation	VR – Verbal Response	WE – Written Examination	OT - Other

Emergency Code Standardization Process	**Method of Evaluation**	**Initials**	**Comments**
Patient, staff and visitor safety			
Access to emergency code policy and procedure			
Definitions of each emergency code			
How to call each emergency code			
When it is appropriate to call each code			
Staff responsibilities after calling or hearing a code			

Name of Skills Evaluator: _____

Signature of Skills Evaluator: _____

Date: _____

I understand the Emergency Code procedures for the hospital and my role in safety.
I agree with this competency assessment.
I will contact my supervisor, manager or director, if I require additional training in the future.

Employee Signature: _____

Date: _____

Appendix 6 – Educational Materials

An educational presentation is available online.

A PDF version of this document is also is available online.

Appendix 7 – Reference Information Sources for Policy Consideration

National Fire Protection Association – The National Fire Protection Association's (NFPA) Life Safety Code 101 2012 Edition provides recommendation and details specific to codes, fire prevention, protection and alarm annunciation in Chapters 8 and 9. Information about NFPA Life Safety Code 101 and other standards is available online.

The Joint Commission – The Joint Commission includes the management of safety, security and utilities as two of the six critical functions of an emergency operations plan. Specifically, the Joint Commission includes the following related requirements with accompanying standards, rationales, elements of performance and scoring (2013 Hospital Accreditation Standards, July Update. Joint Commission Resources, 2013):

- Environment of Care;
- Emergency Management;
- Human Resources;
- Leadership;
- Life Safety; and,
- Performance Improvement.

The National Center for Missing and Exploited Children – The National Center for Missing and Exploited Children offers a free online book and self-assessment form for health care organizations. The book and assessment include recommended actions to prevent an infant abduction and what to do when an abduction occurs.

End of Document