



Colorado Wristband Standardization Project



Implementation Tool Kit



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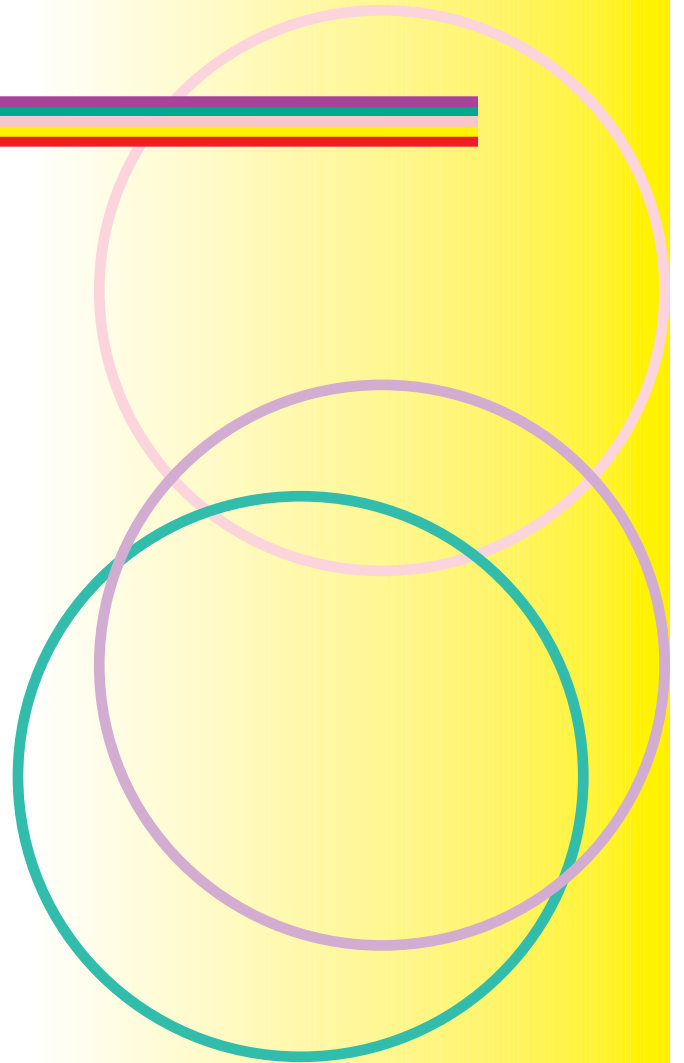
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Colorado Wristband Standardization Project



Executive Summary



EXECUTIVE SUMMARY

In December 2005, a patient safety advisory was issued from the Pennsylvania Patient Safety Reporting System. This advisory, which received national attention, described an incident that occurred in a Pennsylvania hospital where clinicians nearly failed to rescue a patient who had a cardiopulmonary arrest.

The source of confusion was a nurse that had incorrectly placed a yellow wristband on the patient. In the hospital where the patient was admitted, a yellow wristband meant “Do Not Resuscitate”. However, at a nearby hospital where the nurse also was employed, a yellow wristband meant “Restricted Extremity”, which was what the nurse had intended to alert hospital staff about. Fortunately, another nurse recognized the mistake and the patient was resuscitated.

This incident proved that lack of consistency and uniformity in the healthcare setting can be a patient safety issue. As a result, many states have begun to work towards standardization of color-coded alert wristbands in acute care hospitals. To address this patient safety issue in Colorado, the Colorado Hospital Association (CHA) and Colorado Foundation for Medical Care (CFMC) joined forces with the Western Region Alliance for Patient Safety (WRAPS), a multi-state regional collaborative, to standardize patient alert wristbands in hospitals. In late 2006, CFMC surveyed Colorado hospitals to gather information regarding alert wristband use in these facilities. The survey was sent to all acute care and critical access hospitals in the state and 85% of hospitals responded. The survey results showed:

- **Allergies:** Five different wristband colors were being used to designate an allergy.
- **DNR:** Five different wristband colors were being used to designate a DNR.
- **Fall Risk:** Six different wristband colors were being used to designate a fall risk.
- **Latex Allergy:** Six different wristband colors were being used to designate a latex allergy.
 - **Necessity of Latex Band:** The majority of hospitals were either indifferent (38%) or do not see a need for a separate latex wristband (34%). However, 20% of the hospitals did feel that a separate latex wristband is necessary.
- **Cardiac Arrest Code Terminology:** 73% of hospitals use code blue to alert hospital staff of a cardiac arrest.

CHA’s Quality Professionals’ Group, which meets on a regular basis to discuss quality improvement and patient safety topics, reviewed the results of the survey, examined other wristband standardization models that have been implemented in other states and made a recommendation for color-coded alert wristband standardization for the entire state of Colorado. The Quality Professionals’ Group decided to follow the Arizona model, and recommended the following colors for alert wristbands:

Allergy	RED
DNR	PURPLE
Fall Risk	YELLOW
Latex Allergy	GREEN
Restricted Extremity	PINK

The choice of color to designate certain conditions is not limited to wristbands. It is the recommendation of the Quality Professionals' Group that any form of designation that is used for the five conditions be consistent with the colors of the wristbands. For example, if stickers or placards are used in lieu of a wristband to alert clinicians of a certain medical condition; then the stickers and placards should be consistent with the color that should be used for the alert wristband.

The quality professionals that collaborated on this project recognize the possible cost that may be associated with this voluntary statewide standardization. In an effort to reduce financial burden, CHA recommends phasing in the new colors over a 12 month period following the receipt of the implementation tool kit to provide enough time for education of staff and use of out-of-date colored bands in hospital inventory.



Colorado Wristband Standardization Project



**Recommendations
for Adoption**



RECOMMENDATIONS FOR ADOPTION

After taking into account the results of a 2006 survey of Colorado hospitals and examining the standardization models of other states that have implemented similar wristband programs in acute care hospitals, CHA's Quality Professionals' Group decided to adopt a model that will likely be adopted by several states in the western region of the United States. Implementation of a regional model in the state of Colorado will broaden patient safety efforts in the western region as healthcare providers and patients often cross state borders. The following chart outlines the recommendations for color-coded alert wristbands:

Allergy	RED
DNR	PURPLE
Fall Risk	YELLOW
Latex Allergy	GREEN
Restricted Extremity	PINK

The choice of color to designate certain conditions is not limited to wristbands. It is the recommendation of the Quality Professionals' Group that any form of designation that is used for the five conditions be consistent with the colors of the wristbands. For example, if stickers or placards are used in lieu of a wristband to alert clinicians of a certain medical condition; then the stickers and placards should be consistent with the color that should be used for the wristband.

RISK REDUCTION STRATEGIES

1. Use wristbands that are pre-printed with text that clearly identifies the alert.
 - This can reinforce the color coding system for new clinicians, help caregivers interpret the meaning of the band in dim light, and also help those who may be color blind.
 - This eliminates the chance of confusing colors with alert messages.
2. Remove any “social cause” (such as Live Strong, cancer, etc.) colored wristbands.
 - Ensure that hospital policy is amended to reflect this recommendation.
 - If a patient refuses to remove “social cause” or other potentially conflicting wristbands, cover the band with a bandage or medical tape.
 - If a patient refuses to remove “social cause” or other potentially conflicting wristbands, explain potential risks to the patient and have the patient sign the refusal form.
3. Remove wristbands that have been applied from another facility.
 - This should be done at the time of admission to your healthcare facility. Wristband standardization and implementation is voluntary in Colorado. Therefore, some hospitals may not have adopted the recommendations for wristband standardization.
 - Ensure that hospital policy is amended to reflect this recommendation.
4. Initiate banding upon admission, when medical condition(s) change, or when additional information is updated/received during the course of the hospital stay.
5. Educate patients and family members regarding purpose and meaning of the wristbands.
 - Including the family in this process is a safeguard for you and the patient.
 - Remind patients and family members that color coding provides another opportunity to prevent errors.

- Use the Patient/Family Education brochure located in the tool kit.
6. Coordinate chart/white board/care plan/stickers/placards with same color coding.
 7. Educate staff to verify patient color-coded alert wristbands upon assessment, hand-off of care during shift change and facility transfers.

Additional Points

8. Remember, the wristband is a tool to communicate an alert status.
 - Educate staff to always utilize the patient's medical record for verification of allergies, fall risk and advance directives.
9. If your facility uses pediatric wristbands that correspond to the Broselow color coding system for pediatric resuscitation, take steps to reduce any confusion between these Broselow colors and the colors of the alert wristbands.

FREQUENTLY ASKED QUESTIONS (FAQ)

GENERAL

Q. Why should hospitals use wristbands?

A. While there has been extensive discussion regarding the necessity and use of color-coded alert wristbands, a recent literature review has not conclusively identified a better intervention. An increasing number of healthcare providers are not hospital-based staff; therefore the need to have certain medical conditions conveyed in a transparent and universal fashion is crucial for patient safety. It is imperative that current processes in hospitals take this into account, especially for healthcare providers who may not be familiar with how to access information in a hospital (e.g. computerized medical records), may not be familiar with where to find information in the medical record, or even where to locate the medical record in a timely fashion. When seconds count, as in a code situation, an alert wristband on the patient would quickly notify healthcare providers of a certain medical designation. Similar to a second identifier, a color-coded alert wristband can quickly communicate information in a crisis situation, an evacuation situation or transfer situation.

Q. Are the use of alert wristbands a privacy violation?

A. The Joint Commission does not view the use of color-coded alert wristbands to be a violation of privacy in the healthcare setting.

Q. Do hospitals have to use all five of the wristbands in order to be compliant with the recommendations?

A. No. Hospitals and healthcare systems can choose to use some or all of the alert wristbands based on the unique needs of their facility. Hospitals should not feel compelled to start using an alert wristband for a certain medical condition based on the recommendations of this tool kit unless it has been determined internally that use of an additional band would be beneficial and necessary.

The main purpose of this tool kit is to encourage hospitals and healthcare systems to follow a standard model if alert wristbands are used. Compliance with the recommendations of the tool kit involves using the recommended colors for alert wristbands that correspond to certain medical conditions, as well as maintaining the integrity of the color tone, wording chosen for the alert label, font color and font size.

Q. Who decided on the colors?

- A.** To address this patient safety issue in Colorado, CHA's Quality Professionals' Group met to review the results of a 2006 survey of Colorado hospitals and examine the standardization models of other states that have implemented similar wristband programs in acute care hospitals. After careful consideration and in a collaborative effort, this group decided to adopt the Arizona model, which would likely be adopted by several other states in the western region. This recommendation was presented to CHA's Board of Trustees for consideration. Upon review of the background research and examination of the results from the 2006 survey, CHA's Board of Trustees endorsed this project and made the recommendation that all hospitals and healthcare facilities in the state of Colorado following the wristband standardization recommendations of the Quality Professionals' Group.

ALLERGY

It is recommended that hospitals adopt the color RED for the allergy alert designation with the word “ALLERGY” printed on the wristband.

Q. Why did you select red?

A. Red was largely selected due to the results of the 2006 survey of Colorado hospitals which showed that the majority of hospitals already use the color red for the allergy alert wristband. It was decided to continue with this established color given that it had such overwhelming use.

Q. Are there any other reasons for using red?

A. Yes. Our research of other industries showed that red has an association that implies extreme concern. The American National Standards Institute (ANSI) has designated certain colors with very specific warnings, and uses red to communicate “stop” or “danger”. We believe that this message would also translate when communicating an allergy status. When a caregiver sees a red allergy alert wristband, they would likely be prompted to “stop” and double check if the patient is allergic to medications, food, etc.

Q. Should we write the allergies on the wristband too?

A. It is our recommendation that allergies be written in the medical record according to your hospital’s policy and procedure. We suggest allergies not be written on the wristband for several reasons:

- Legibility may hinder the correct interpretation of the allergy listed.
- By writing allergies on the wristband, healthcare providers may assume the list is comprehensive. However, space is limited on a wristband and some patients may have several allergies. The risk of writing on the wristband is that some allergies would be inadvertently omitted due to lack of space, which can lead to confusion or an assumption that the list is comprehensive.
- Throughout a hospitalization, allergies may be discovered by other caregivers, such as dietitians, radiologists, pharmacists, etc. This information is typically added to the medical record and not always a wristband. By having one source of information to refer to, such as the medical record, staff of all disciplines will know where to add newly discovered allergies.

DO NOT RESUSITATE (DNR)

It is recommended that hospitals adopt the color PURPLE for the Do Not Resuscitate alert designation with the word “DNR” printed on the wristband.

Q. Why was a blue wristband not chosen?

A. The 2006 survey of Colorado hospitals showed that 73% of hospitals use “code blue” to overheard page a cardiac arrest. CHA’s Quality Professionals’ Group thought that use of a blue wristband may cause confusion considering the overwhelming use of “code blue”. For instance, “code blue” would alert clinicians to resuscitate a patient, whereas a blue wristband would alert clinicians of an advance directive to not resuscitate in the event of a cardiac arrest. Given this potential confusion, blue was eliminated as a color choice for the DNR alert wristband.

Q. Why was an orange wristband not chosen?

A. Orange was considered, however orange is very close in the color spectrum to both red and yellow (which are both colors that will be used to designate allergies and fall risk). A DNR designation needs to be easily identified in a time of crisis; therefore it was decided that orange was too similar to yellow and red, and might not provide enough distinction.

Q. Why was a green wristband not chosen?

A. Green was also considered to designate a DNR, however other industries use the color green to communicate a “go ahead” connotation, such as for traffic lights. Again, CHA’s Quality Professionals’ Group wanted to avoid the possibility of sending mixed messages in a critical moment.

Q. If we adopt the purple DNR wristband, do we still need to look in the chart?

A. Yes. Some hospitals do not use wristbands to alert clinicians of an advance directive because they want the clinicians to always review the medical record for the most current patient information. However, a medical record should always be reviewed even if alert wristbands are used in the facility. Code status can change throughout a hospitalization, and it is important to know the current status so that the patient’s and/or family’s wishes can be honored.

Q. What if a patient or family member is offended by the DNR wristband?

A. We recognize that a DNR designation can be troubling for patients and/or family members especially in the event of a serious illness. However, in order to respect the

wishes of a patient and/or family, clinicians need to be aware of this designation, especially in the event when a course of care needs to be determined very quickly.

In order to avoid confusion or lack of certainty, following the full recommendations for the DNR alert wristband is the preferred method for using the band. However, an alternative method for using the DNR alert wristband would be to use a purple wristband, but without the label “DNR” printed on the band. Do not substitute the label “DNR” for any other symbol, such as a dove, cross, etc. Alternative symbols for a DNR designation are not recommended for wristband standardization by CHA’s Quality Professionals’ Group. In the event that a patient does not want to wear a DNR alert wristband, ensure that the patient and/or family is made aware of the risks for refusing to wear the band, and ensure that the patient refusal form has been signed.

FALL RISK

It is recommended that hospitals adopt the color YELLOW for the fall risk alert designation with the words “Fall Risk” printed on the wristband.

Q. Why did you select yellow?

A. Our research of other industries tells us that yellow has an association that implies “caution”. The American National Standards Institute (ANSI) uses yellow to communicate “tripping” or “falling” hazards. The color yellow would alert hospital staff to use caution with a person who has a history of previous falls, dizziness, balance problems, weakness or confusion about their current surroundings.

Q. Why even use an alert band for fall risk?

A. According to the Centers for Disease Control and Prevention (CDC), falls are an area of concern in the aging population. CDC data indicates:

- More than a third of adults aged 65 years or older fall each year.
- Older adults are hospitalized for *fall-related injuries five times more often* than they are for injuries from other causes.

When a patient is wearing this alert wristband, it notifies all hospital staff that the patient needs to be assisted when walking or getting up from a sedentary position.

LATEX ALLERGY

It is recommended that hospitals adopt the color GREEN for the latex allergy alert designation with the words “LATEX ALLERGY” printed on the wristband.

Q. Why did you select green?

- A.** Green was selected due to the color having a close association with the environment. Although many hospitals may not necessarily use a separate band for a latex allergy, many facilities may use another form of designation to alert hospital staff, including a sticker on the chart or placard outside of the patient’s hospital room. The recommendation for standardization of color extends beyond wristbands to include any form of designation that is associated with the medical condition. The purpose of the recommendation for latex allergy is to provide a standard color (green) for healthcare providers, which can be easily identified and readily associated with allergies to latex.

RESTRICTED EXTREMITY

It is recommended that hospitals adopt the color PINK for the restricted extremity alert designation with the words “RESTRICTED EXTREMITY” printed on the wristband.

Q. Which extremity should the restricted extremity band go on?

A. The restricted extremity band should be placed on the affected extremity. This alert wristband can also be placed on an extremity that should not be used for blood pressure measurement, IV insertion or other medical procedures secondary to certain medical conditions such as previous history of breast cancer or lymphedema.



Colorado Wristband Standardization Project



Guide To Implementation



IMPLEMENTATION PLAN

Implementation Plan for Facility Preparation, Staff Education and Patient Education

Organizational Approval

Review: Adopting this initiative may require approval by certain committees such as:

- Patient Safety Committee
- Quality Improvement Council
- Medical Staff Committee
- Board of Directors
- Director of Education

Action Plan: Organizations have different committees that need to approve system-wide changes, or changes that directly impact patient care. Each organization needs to assess which committees need to approve the adoption of the initiative. Remember to consider the stakeholders and be sure they understand and approve the initiative before it is implemented.

Supply Assessment and Purchase

Review: Assessment of current supply and wristband procurement

Action Plan: Most organizations have a vendor they are already using for wristbands. It is important to communicate to vendors that you are adopting the Colorado model for color-coded alert wristbands, which is consistent with other states in the western region such as Arizona. Many vendors may be aware of this initiative and what specific colors need to be used for this initiative. However, if a certain vendor is unaware of the initiative, provide them with the specific color and alert label that will be used at your facility for each alert wristband. Coordinate with your Materials Management department to evaluate the current stock of out-of-date colored wristbands, and approximate time when new bands can be introduced.

Hospital Specific Documentation

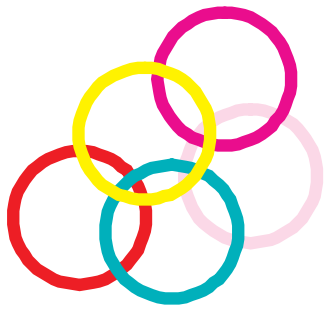
Review: Policy adoption, assessment revision, forms revised to meet standards, consents

Action Plan: The color-coded alert wristband policy should be reviewed and approved if changes are made. Hospitals should review their respective forms for possible modifications (patient education assessments, etc.). You may want to include language that the patient received in the wristband education brochure (see Staff/Patient Education materials). If a patient refuses to wear a band, there should be written documentation of refusal. Make certain to coordinate with risk management staff and individual hospital administrators.

Staff and Patient Orientation, Education and Training

Review: Schedule staff training, documentation requirement, posters and FAQs

Action Plan: Education format and training materials need to be reviewed. Staff education materials and a competency form have been provided in this tool kit. The competency form may be customized to suite each hospital and their unique needs. Education of hospital staff will need to be scheduled and documented per hospital policy. Ensure that new employee orientation procedures are inclusive of wristband standardization education.



Colorado Wristband Standardization Project



**Staff and Patient
Education Materials**



STAFF EDUCATION TRAINING TIPS

Introduction

The following section regarding staff education has been developed to facilitate implementation of the wristband standardization project. It is not required to use all of the provided tools; instead choose sections that may be the most beneficial for your hospital.

The decision on how to implement these recommendations is unique to the needs of the hospital. The education process can be either formal or informal. Suggested avenues for education include staff meetings, formal education sessions or annual competencies. Ensure that new staff orientation includes education about color-coded alert wristbands.

Preparation for Getting Started: Identify Other Key Participants

- While nurses will likely be the designated staff person placing the bands on patients, remember that ward clerks are involved in the system process as well. It is important to educate ward clerks, as they will better assist the nurses when they are included in the process.
- Remember to educate environmental services staff, as they are often present in patient rooms. If the environmental services staff is aware of the meaning of the alert wristband (i.e. yellow = fall risk), they can alert hospital staff and potentially prevent an accident.
- Remember to educate dietary technicians. A red wristband is meant to convey any type of allergy, not limited to medications. A red band could alert dieticians to consider food allergies and update information in the medical record.
- Do not make assumptions that the entire hospital staff has knowledge about the alert wristbands. Individuals, such as medical students and residents, also need to be educated about the meaning of the alert wristbands as well.

Getting Started: Education

1. **Start with a story** - Individuals need to know “why” they should do something; simply telling them they need to start doing something “because it is hospital policy” is not sufficient information to get high levels of compliance. A story can provide context and help hospital staff understand why it is important to comply.

For example, use this near-miss occurrence to educate staff:

In December 2005, a patient safety advisory was issued from the Pennsylvania Patient Safety Reporting System. This advisory, which received national attention, described an incident that occurred in a Pennsylvania hospital in which clinicians nearly failed to rescue a patient who had a cardiopulmonary arrest. The source of confusion was a nurse that had incorrectly placed a yellow wristband on the patient. In the hospital where the patient was admitted, a yellow wristband meant “Do Not Resuscitate”. However, at a nearby hospital where the nurse also was employed, a yellow wristband meant “Restricted Extremity”, which was what the nurse wanted to alert hospital staff about. Fortunately, another nurse recognized the mistake and the patient was resuscitated.

This near-miss occurrence highlights a potential source of confusion and an opportunity to improve patient safety by re-evaluating the use of color-coded alert wristbands.

2. **Provide data of statewide wristband use** - Educating the staff about how our state uses alert wristbands makes the information more relevant, and reinforces the message how important standardization is to improve patient safety. Results from the 2006 survey of Colorado hospitals can be accessed at:

www.hospitalquality.org/images/stories/qualityprofessionals/wristbands_surveyresults.xls

Key points from the survey include:

- Five different wristband colors were in use to designate an allergy.
 - Five different wristband colors were in use to designate a DNR.
 - Six different wristband colors were in use to designate a fall risk.
 - Six different wristband colors were in use to designate a latex allergy.
3. **Stress the “big picture” of compliance to standardization** - Providing context for why it is important to participate in a statewide effort may provide incentive for compliance. Explain to the staff that this initiative is part of a larger western region effort to standardize color-coded alert wristbands. Possibly share the following information:
 - This initiative has the potential to be larger than a statewide effort. A regional adoption of this initiative is currently moving forward that will include most of the western states in the nation. The Western Region Alliance for Patient Safety (WRAPS), which is currently comprised of

representatives from Arizona, California, Colorado, Nevada, New Mexico and Utah, are all united in this effort and are working within their individual states to implement this initiative. Although most states are moving forward with voluntary adoption by hospitals, there is a high likelihood that most hospitals in the western region will be using the same wristband colors to designate certain medical conditions.

4. **Introduce the colors** - The tool kit will provide sample wristbands that show the color and label that should be used for each alert wristband. Although Colorado hospitals may use different vendors, it is important to use the same color shade for alert wristbands as designated by the tool kit. For example, the light pink color that should be used for the restricted extremity wristband should be the only shade of pink used; do not use substitutions such as pink fuchsia. Review with staff the five wristbands, color designation and corresponding meaning.
5. **Utilize the FAQs** - Demonstrate that research was conducted that assessed best color choice and human association with certain colors, and that this information was used in the color selection process of this initiative. The FAQ document reviews why certain colors were selected and why other colors were not chosen.
6. **Stress the seven risk reduction strategies and additional points** - The seven risk reduction strategies can facilitate the adoption of this initiative.
7. **Explain the process for educating patients** - You can mention to staff members that there is a Patient/Family Education brochure that can be utilized if you believe that your facility would find this useful.

Below is an example of a script for any person talking to a patient or family member:

Q. What is a color-coded alert wristband?

A. Color-coded alert wristbands are used in hospitals to quickly communicate a certain healthcare status or medical condition. Wristbands are used by hospital staff to help provide the best possible care.

Q. What do the colors mean?

A. RED means ALLERGY, YELLOW means FALL RISK, PURPLE means DNR or Do Not Resuscitate, GREEN means LATEX ALLERGY, and PINK means RESTRICTED EXTREMITY.

Allergy

If a patient has an allergy to anything, including food, medicine, dust, grass, or animals, please tell us. Knowledge of any type of allergy could be very important to the care that a patient receives.

DNR

Some patients have expressed an end-of-life wish and our hospital would like to honor this request by alerting hospital staff.

Fall Risk

Our hospital wants to prevent falls at all times. Nurses review patients all the time to determine if they need extra attention in order to prevent a fall. Sometimes, a person may become weakened during their illness or because they just had surgery. When a patient is wearing this wristband, it alerts the rest of the hospital staff that the patient needs to be assisted when walking or getting up from a sedentary position.

Latex Allergy

If a patient has an allergy to latex, it is very important to alert hospital staff. Many products used in hospitals are made from latex, and contact with these items can cause an allergic reaction. Other non-latex products can be substituted for use when a patient has a latex allergy.

Restricted Extremity

Some patients have past or current medical conditions that would prohibit the use of a certain extremity for various reasons. This band will alert hospital staff to avoid this extremity for blood draws, I.V. insertion or other medical procedures.

8. **Review with staff the key points below** - The items listed below are part of the competency for this initiative; therefore it is important that hospital staff has a good understanding of these key points. If your hospital policy will only be modified to include certain key points, ensure the competency form given to staff reflects these changes.
- What do the colors mean?
 - Who can apply the wristband to the patient?
 - When in the course of care are the wristbands applied?
 - What is hospital policy on removal of “social cause” wristbands?
 - What is the process for patient education and how is this information conveyed to patients and families?
 - What is the policy on re-application of wristbands?
 - What is the policy for communication of wristband use during facility

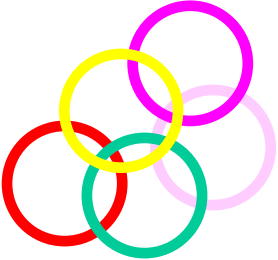
transfers or hand-off of care during change of shift?

- What is the policy for patient refusal to comply with wristband use?
- What is the policy for removal of wristbands prior to discharge of patients to home or transfer facilities?

STAFF EDUCATION POWERPOINT SLIDES

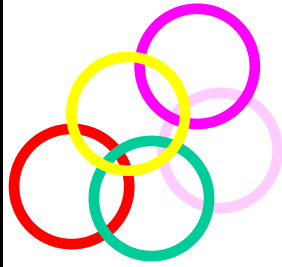
The staff education PowerPoint presentation can also be accessed through the following link:

www.hospitalquality.org/images/stories/qualityprofessionals/wristbands_stafftraining.ppt



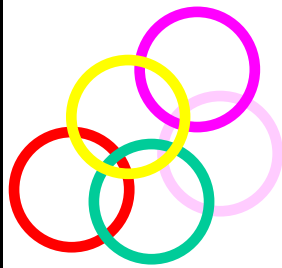
**Colorado Wristband
Standardization Project**

Joint Project Sponsors:
Colorado Hospital Association (CHA)
Colorado Foundation for Medical Care (CFMC)



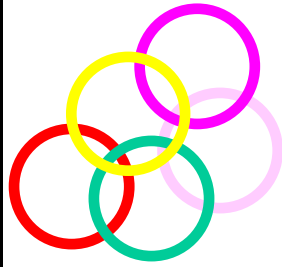
Project Background

- Wristbands meant to designate a certain medical condition should be consistent throughout healthcare facilities.
 - Standardization would result in certain colors becoming associated with certain medical conditions over time.
 - Multiple wristband colors in use for the same medical condition is a **patient safety concern**.



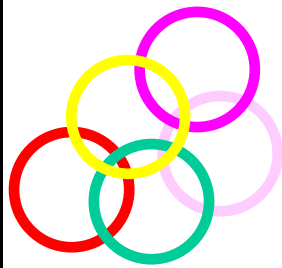
Project Background Continued...

- Colorado hospitals were surveyed in 2006. Survey results from 57 hospitals showed:
 - Five different wristband colors in use for both DNR and Allergy designation.
 - Six different wristband colors in use for both Latex Allergy and Fall Risk designation.



National Work on Similar Standardization Initiatives

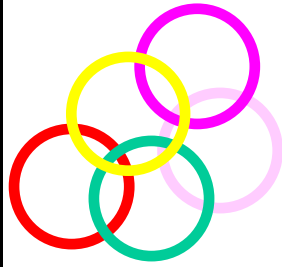
- Arizona and Pennsylvania were first states to implement wristband standardization.
- Many other states, including several states in the western region, are currently working on similar initiatives.



Arizona and Pennsylvania Recommendations

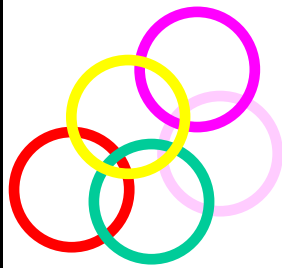
	Arizona	Pennsylvania
DNR	Purple	Blue
Allergies	Red	Red
Fall Risk	Yellow	Yellow
Latex	Green*	Green
Restricted Extremity	Pink*	Pink

*Arizona is not currently recommending that all hospitals use Latex or Restricted Extremity bands, however they recommend the suggested colors if state hospitals prefer to use a separate band for these medical conditions.



Arizona and Pennsylvania Implementation Facts

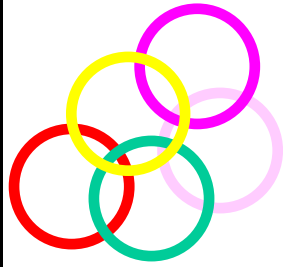
	Arizona	Pennsylvania
Number of hospitals in the state adopting the standardization model	100% hospital commitment from CEOs	11 hospitals
Mandated through state legislature	No	No
Other states moving forward with same color adoption	<ol style="list-style-type: none"> 1. New Mexico 2. Utah 3. Nevada 4. California 5. Wyoming 6. Oregon 7. Washington 8. Montana 9. West Virginia 10. Ohio 	None at this time



Recommendation for Wristband Standardization in Colorado

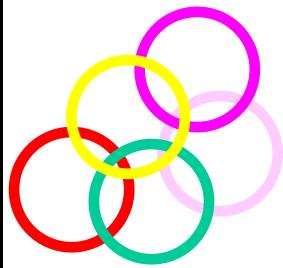
- Arizona model will be used for wristband standardization in Colorado.
- 10 other states, mostly in western region, are also considering the Arizona model.

Allergy	RED
DNR	PURPLE
Fall Risk	YELLOW
Latex Allergy	GREEN
Restricted Extremity	PINK

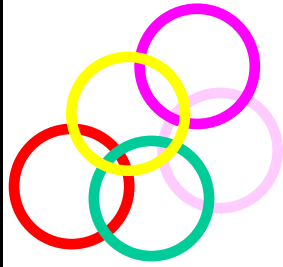


The Benefits of Regional Standardization

- Colorado receives traveler nurses most often from New Mexico and Oklahoma.
- Colorado nurses that contract for traveler positions are most likely to choose Arizona and California as employment destinations.
- We share borders and patients with states that are currently implementing or considering the recommended model.

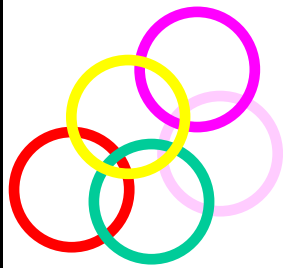


ANSWERS TO FREQUENTLY ASKED QUESTIONS



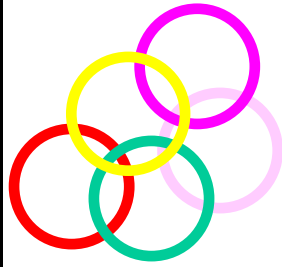
Do all five bands have to be used to be compliant?

- No. Only use the alert wristbands that your facility feels are necessary.
- However, if your facility uses colored stickers, placards or other forms of communication to alert healthcare providers of any of the five medical conditions; ensure that the colors correspond with the colored wristbands.



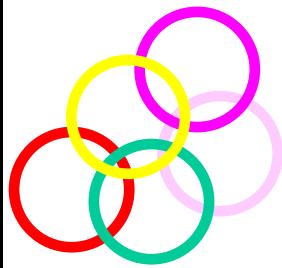
Have any barriers been identified that would hinder successful implementation?

- Both Arizona and Pennsylvania have noted little staff resistance.
- Cost was not noted as a major barrier in either state.
- Education was not noted as a barrier.
 - Both states provided hospitals with tool kits that contained educational materials.



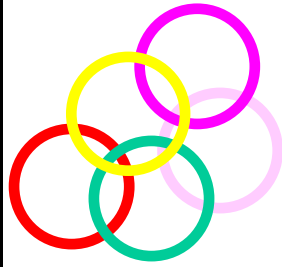
Who made the decision on which colors to use?

- CHA's Quality Professionals' Group initially decided to look at this project as a possible initiative for statewide collaboration.
- After surveying Colorado hospitals, this group of quality professionals made a recommendation for statewide standardization.
- The recommendation was presented to CHA's Board of Trustees. The Board endorsed this patient safety project with a recommendation for voluntary, statewide implementation in all Colorado hospitals and healthcare systems.



DNR Why was blue not chosen?

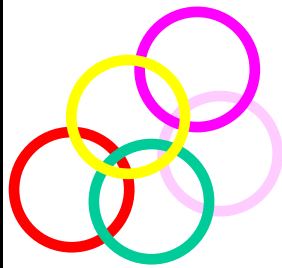
- 73% of Colorado hospitals currently use code blue to alert medical staff of a cardiac arrest.
- Patient safety is about eliminating any potential for confusion.
 - Code blue = Resuscitate Patient
 - Blue wristband = DO NOT Resuscitate Patient



DNR

Why was purple chosen?

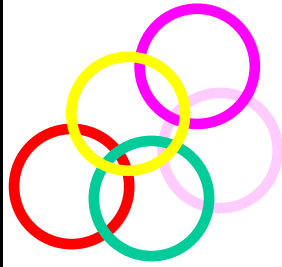
- Purple is the most distinctive color option available considering the elimination of blue as a choice.
- Orange is too close in the color spectrum to red and yellow, which are currently being used to designate allergies and fall risk.
- Green is currently being used to designate a latex allergy.



DNR

If using the purple band, do clinicians still need to look in the chart?

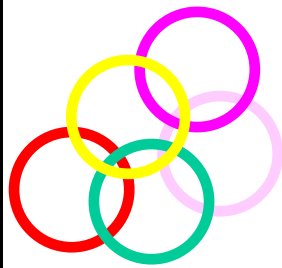
- Yes. The chart should always be reviewed even if alert wristbands are used.
- It is important to know the current status of an advanced directive so that a patient's and/or family's wish can be honored.



Allergies

Why was red chosen?

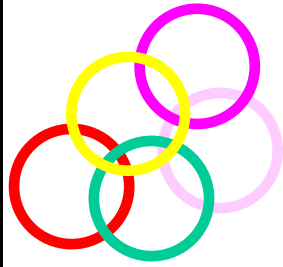
- Our research showed that the color red implies “caution” or a need to “stop”.
 - A red wristband will alert a caregiver to stop and check for patient allergies.
- Results from the hospitals surveyed showed that the majority of Colorado hospitals already use the color red for allergy alert wristbands.



Allergies

Do clinicians need to write the allergies on the wristband?

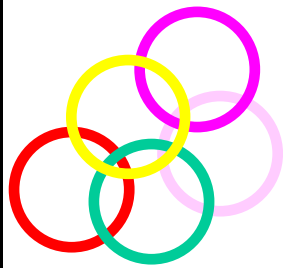
- It is recommended that allergies be written in the medical record according to your hospital’s policy and procedure.
- It is suggested that allergies not be written on the wristband for several reasons including:
 - Legibility
 - Assumption that list is comprehensive and up-to-date



Fall Risk

Why was yellow chosen?

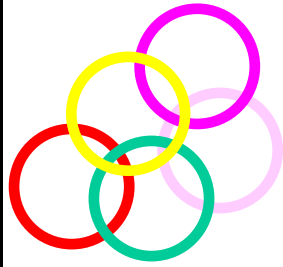
- Yellow has an association that implies "caution".
- Caregivers would want to have knowledge to use caution with a patient who has a history of previous falls, dizziness, balance problems, weakness or confusion about their current surroundings.



Restricted Extremity

Which extremity should the wristband be placed on?

- The restricted extremity wristband should be placed on the extremity that should not be used.
- Placement of the wristband on the restricted extremity will alert hospital staff to use the opposite extremity for IVs, BPs, etc.



Resources for Additional Questions

- Donna Kusuda
Chair of CHA's Quality Professionals' Group
HCA/HealthONE
donna.kusuda@hcahealthcare.com
- Crystal Berumen
Colorado Hospital Association (CHA)
crystal.berumen@cha.com
- Cari Fouts
Colorado Foundation for Medical Care (CFMC)
cfouts@cfmc.org

Color-Coded Wristband Standardization Staff Competency Checklist Form (Sample)

Employee Demonstrates Knowledge of Hospital Policy for Wristband Use Regarding:	Supervisor's Initials	Date	Comments / Areas for Improvement
Color designation meaning			
Who can apply wristbands			
When wristbands should be applied during the course of care			
Removal of "social cause" wristbands			
Patient/Family education			
Re-application of wristbands			
Transfer of patients or hand-off of care during change of shift			
Refusal by patient to wear alert wristband			
Removal of wristbands prior to discharge of patient			

Employee Name: _____ Position: _____

Employee Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Risk Reduction Strategies Quick Reference Card

This quick reference card is an optional tool for hospital staff that would like to have a resource available to quickly reference the risk reduction strategies.

Color-coded Alert Wristbands Risk Reduction Strategies	
<ol style="list-style-type: none">1. Use wristbands with alert messages pre-printed on the band.2. Remove all “social cause” colored wristbands (i.e. “Live Strong”)3. Remove wristbands that have been applied at another facility.	<ol style="list-style-type: none">4. Initiate banding upon admission, changes in condition or when updated information becomes available.5. Educate patients and family members about use and purpose of alert wristbands.6. Coordinate chart/white board/care plan/stickers/placards with same color coding as alert wristbands.7. Educate staff to verify patient alert wristbands upon assessment, hand-off of care during shift change, transfers, etc.

Outside
(Sample)

Statewide Patient Safety Initiatives

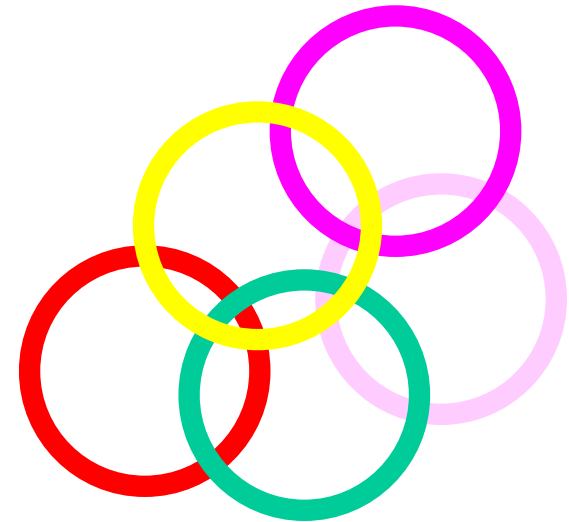
Colorado hospitals are working collaboratively on projects directly related to improving patient safety. The standardization of color-coded alert wristbands in all Colorado hospitals is one project that can directly impact and improve the safety of patients in healthcare facilities.

What is a Color-coded Alert Wristband?

Alert wristbands are used in hospitals to quickly communicate medical conditions that a patient may have. Certain colors and words are used to designate certain medical conditions. Color-coded alert wristbands are used to help hospital staff quickly and easily identify certain medical conditions, which can ultimately help staff provide the best possible care to patients, even in the event that a staff member does not know the patient directly.

Hospital Logo and General
Information here

Color-coded Alert Wristbands



A quick guide to understanding the
purpose and meaning of color-coded
alert wristbands

What Do the Different Colors Mean?

Allergy	RED
---------	-----

If a patient has an allergy to anything, especially medications, is it very important to let hospital staff know as soon as possible.

DNR	PURPLE
-----	--------

Some patients have expressed an end-of-life wish that they would like honored in the event of a cardiac arrest.

Fall Risk	YELLOW
-----------	--------

We would like to prevent falls at all times. Some patients need help to move or walk, especially those patients who have become weakened by their illness. When a patient is wearing a yellow wristband, it is alerting hospital staff that a patient needs assistance when walking because they are at risk for a fall.

Latex Allergy	GREEN
---------------	-------

If a patient has an allergy to latex, it is very important to alert hospital staff. Many products used in hospitals are made from latex, and contact with these items can cause an allergic reaction. Other non-latex products can be substituted for use when a patient has a latex allergy.

Restricted Extremity	PINK
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Some patients have past or current conditions that would prohibit the use of a certain extremity for various reasons. This band will alert hospital staff to not use this extremity for blood draws, I.V. insertion or other medical procedures.

Involving Patient and Family Members

It is important that both patients and their family members know the meaning of these colors because you are the best source of information.

Keep Us Informed

Please make hospital staff aware of information that is important to the health of the patient. If a patient has allergies to medications or has a tendency to lose their balance, share this information with hospital staff as soon as possible.

If you or a family member that is a patient has an advance directive, tell hospital staff immediately and provide documentation of this directive. An advance directive alerts hospital staff of the kind of care a patient would like to receive in the event of a cardiac arrest. Our hospital would like to respect these wishes, especially in the event of an emergency.

Patient Refusal Form (Sample)

Place patient sticker here

The above named patient has refused to follow the recommendations of the hospital staff as it relates to [facility name]'s color-coded alert wristband policy

I, _____, have refused the following recommendations:

- To wear a color-coded alert wristband that would alert medical staff about a medical condition that I have.
- To remove a personal "social cause" wristband (e.g. "Live Strong") while I am a patient at this facility.

The benefits of the use of the color-coded alert wristbands have been explained to me by a member of the hospital staff. However, I do not give my permission to wear the color-coded alert wristbands that would alert hospital staff to my medical condition(s) and/or refuse to remove a colored "social cause" wristband that may cause confusion with medical alert wristbands.

The color-coded alert wristband policy of this hospital has been explained to me.

Patient Signature: _____ Date: _____

Hospital Staff Signature: _____ Date: _____



Colorado Wristband Standardization Project



**Hospital Policy
and Procedures**



HOSPITAL POLICY AND PROCEDURES (Sample)

A possible policy and procedures template regarding color-coded alert wristbands is suggested below. This template can be used as a guide to incorporate language into hospital policy and procedure manuals that specifically pertain to this wristband standardization project.

Policy: Hospital Color-coded Alert Wristbands

Purpose

To have a standardized process that identifies and communicates patient specific risk factors or special needs by standardizing the use of color-coded alert wristbands based upon the patient's assessment, wishes and medical status.

Objective: Color-coded Alert Wristbands

Objectives are:

1. Reduce the risk of confusion associated with the use of color-coded alert wristbands.
2. Communicate patient safety risks to all healthcare providers.
3. Include the patient, family members and significant others in the communication process and promote safe health care.
4. Adopt the following risk reduction strategies:
 - a. A preprinted written descriptive text is used on the bands clarifying the intent (i.e., "Allergy", "Fall Risk", "DNR", "Latex Allergy" or "Restricted Extremity")
 - b. Hospital staff should not write on the alert wristband.
 - c. Colored alert wristbands may only be applied or removed by a nurse or designated staff person conducting an assessment.
 - d. If labels, stickers or other visual cues are used in the medical record to communicate risk factors or wristband application, those cues should use the same corresponding color and label text (if applicable) of the colored alert wristband.

- e. “Social cause” wristbands, such as the “Live Strong” and other causes, should not be worn in the hospital setting. Staff should have family members take the “social cause” wristbands home or store them with the patient’s other personal items. This is to avoid confusion with the color-coded alert wristbands and to enhance patient safety practices.
- f. Assist the patient and their family members to be a partner in the care provided and safety measures being used. Patient and family education should be conducted regarding:
 - The meanings of the hospital wristbands and the alert associated with each wristband.
 - The risks associated with wearing social cause wristbands and why these bands should be removed.

Definitions

The following represents the meaning of each color-coded alert wristband:

Allergy	RED
DNR	PURPLE
Fall Risk	YELLOW
Latex Allergy	GREEN
Restricted Extremity	PINK

Identification (ID) Bands in Admission, Pre-Registration Procedure and/or Emergency Department

The colorless or clear admission ID wristbands are applied in accordance with procedures outlined in organizational policy on patient ID and registration. These ID bands may be applied by non-clinical staff in accordance with organizational policy.

Color-coded Alert Wristbands

During the initial patient assessment, data is collected to evaluate the needs of the patient and a plan of care unique to the individual. Throughout the course of care, reassessment is ongoing which may uncover additional pertinent medical information, trigger key decision points, or reveal additional risk factors about the patient. It is during the initial and reassessment procedures that risk factors associated with falls, allergies, DNR, latex allergy or restricted extremity status are identified or modified. Because this is an interdisciplinary process, it is important to identify who has responsibility for applying and removing color-

coded alert wristbands, how this information is documented and how it is communicated. The following procedures have been established to remove uncertainty in these processes:

1. Any patient demonstrating risk factors on initial assessment will have a colored alert wristband placed on the same extremity as the admission ID band by the nurse or designated staff member, except in the event of needing to use a restricted extremity alert wristband, which should be placed on the extremity that should not be used.
2. The application of the band is documented in the chart by hospital staff, per hospital policy.
3. If labels, stickers or other visual cues are used to document in the medical record, these alternative cues should correspond to the alert wristband color and text label (if applicable).
4. Upon application of the colored alert wristband, the nurse or designated staff member will instruct the patient and their family member(s) (if present) that the wristband is not to be removed.
5. In the event that any color-coded alert wristband(s) has to be removed for a treatment or procedure, a nurse or designated staff member will remove the wristbands. Upon completion of the treatment or procedure, risks will be reconfirmed, and the appropriate alert wristbands will be placed on the patient by a designated staff member.

Social Cause Wristbands

Following the patient ID process, a designated staff member examines the patient for “social cause” wristbands. If “social cause” wristbands are present, the designated staff member will explain the risks associated with the wristbands and ask the patient to remove them. If the patient agrees, the wristband will be removed and given to a family member to take home, or stored with the other personal belongings of the patient. If the patient refuses, the designated staff member will request the patient sign a refusal form acknowledging the risks associated with the “social cause” wristbands. In the event that the patient is unable to provide permission, and family member(s) or a significant other is also not present, the designated staff member may remove the band(s) in order to reduce the potential of confusion or harm to the patient.

Patient / Family Involvement and Education

It is important that the patient and family members are informed about the care provided in the hospital setting. It is also important that the patient and their family member(s) are acknowledged as a valuable member of the healthcare team. Including patients and/or family member(s) in the process of using color-coded alert wristbands will assure a common

understanding of what the alert wristbands mean, how care is provided when the alert wristbands are worn, and the patient's/family's role in correcting any information that contributes to this process. Therefore, during assessment procedures, the designated staff member should take the opportunity to educate the patient and their family members about:

1. The meanings of the alert wristbands and the medical condition associated with each wristband.
2. The risks associated with wearing "social cause" wristbands and why these bands should be removed.
3. To notify the hospital staff whenever a wristband has been removed and not reapplied, or
4. When a new band is applied and the patient and/or family has not been given an explanation as to the reason.

Patients and families should also be given a Patient/Family Education brochure that explains this information as well.

Hand-Off of Care During Change of Shift

The nurse will reconfirm color-coded alert wristbands before invasive procedures, at transfer and during hand-off of care during change of shift with patients and/or family members, as well as other caregivers. Errors should be corrected immediately. Color-coded alert wristbands should not be removed at discharge. For home discharges, the patient is advised to remove the wristband at home. For discharges to another facility, the wristbands should not be removed during transfer. Receiving facilities should follow their policy and procedure for the banding process.

DNR (Do Not Resuscitate)

DNR (Do Not Resuscitate) status and all other risk assessments are determined by individual hospital policy, procedure and/or physician order written and acknowledged within that care setting only. The color-coded alert wristband serves as an alert and does not take the place of an order. Do Not Resuscitate orders must be written and verification of advanced directives must occur.

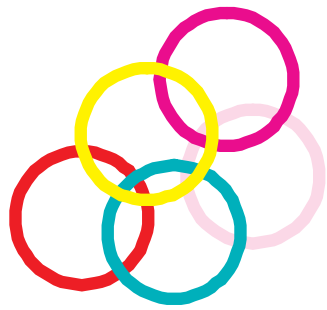
Staff Education

Staff education regarding color-coded alert wristbands will occur during the new orientation process and reinforced as indicated.

(Note to Hospitals: You should insert your specific language in this section so it matches your annual processes and competencies, should you decide to include color-coded alert wristbands in that process)

Patient Refusal

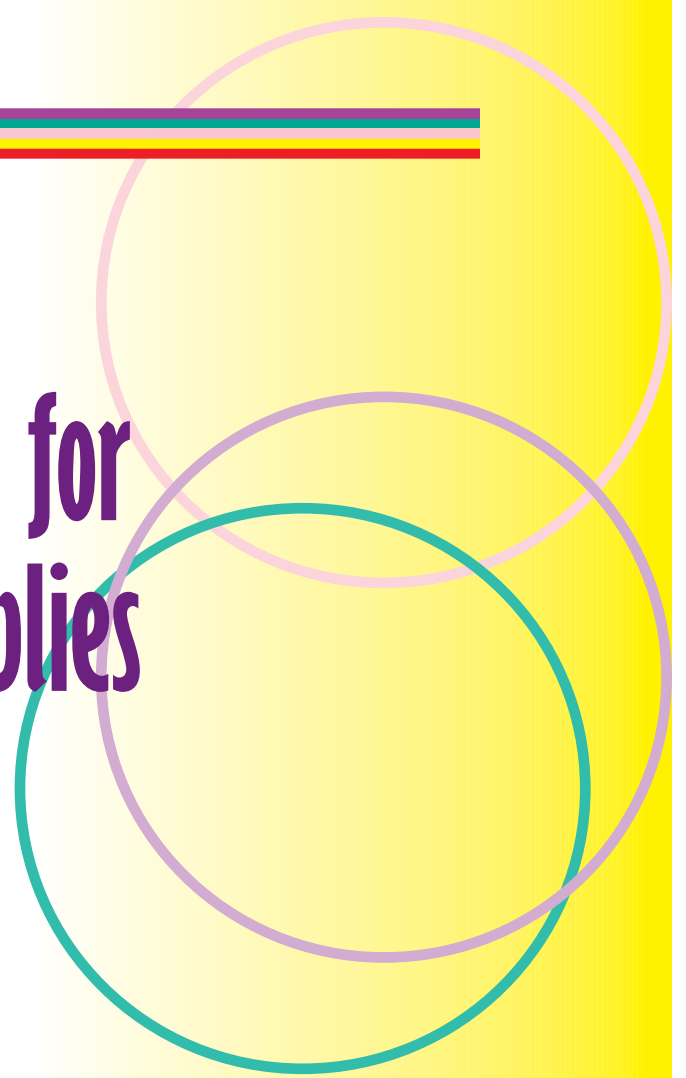
If the patient is capable and refuses to wear the color-coded alert wristband, an explanation of the risks will be provided to the patient and/or family. The designated staff member will reinforce that it is the patient's and/or family's opportunity to participate in efforts to prevent medical errors, and it is their responsibility as part of the healthcare team. The designated staff member will document in the medical record patient refusals, and the explanation provided by the patient or their family member. The patient will be requested to sign a refusal form.



Colorado Wristband Standardization Project



**Information for
Vendor Supplies**



INFORMATION FOR VENDOR SUPPLIES

In addition to standardized use of color-coded alert wristbands, hospitals should be aware of the need to be consistent with use of color tone, alert label, font size and font type when ordering colored alert wristbands for use in their facilities.

Please use the following recommendations to assure consistency throughout all hospitals in the state of Colorado.

Allergy

Label: ALLERGY

Font Type: Arial Bold

Font Size: 48 pt.

Font Color: Black

Band Color: PMS 1788

Latex Allergy

Label: LATEX ALLERGY

Font Type: Arial Bold

Font Size: 28 pt.

Font Color: Black

Band Color: Pantone Green C

DNR

Label: DNR

Font Type: Arial Bold

Font Size: 48 pt.

Font Color: White

Band Color: PMS 254

Restricted Extremity

Label: RESTRICTED EXTREMITY

Font Type: Arial Bold

Font Size: 28 pt.

Font Color: Black

Band Color: 1905c

Fall Risk

Label: FALL RISK

Font Type: Arial Bold

Font Size: 48 pt.

Font Color: Black

Band Color: PMS 102



Colorado Wristband Standardization Project



Acknowledgments



CHA's QUALITY PROFESSIONALS' GROUP

The Colorado Wristband Standardization Project would not have been possible without the hard work and collaboration of CHA's Quality Professionals' Group. This group is comprised of quality professionals who represent many hospitals and healthcare systems from across the entire state of Colorado, including urban, rural and critical access facilities. This group meets on a regular basis to discuss various quality improvement and patient safety concerns in Colorado hospitals.

WESTERN REGION ALLIANCE FOR PATIENT SAFETY (WRAPS)

In April 2006, the Western Region Alliance for Patient Safety (WRAPS) was formed with the purpose of collaboratively working to improve quality and safety of healthcare in the western regional states. The goal of WRAPS is to enhance and promote patient safety by advocating the adoption of regional safe practices in healthcare when possible. By working together, this group can make improvements in healthcare safety at a higher level than organizations working alone.