

# **Patient Safety Initiatives of the VA National Center for Patient Safety**

**At the Quality Colloquium at Harvard University**



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**Ann Arbor, MI**

**734-930-5890    [www.patientsafety.gov](http://www.patientsafety.gov)**

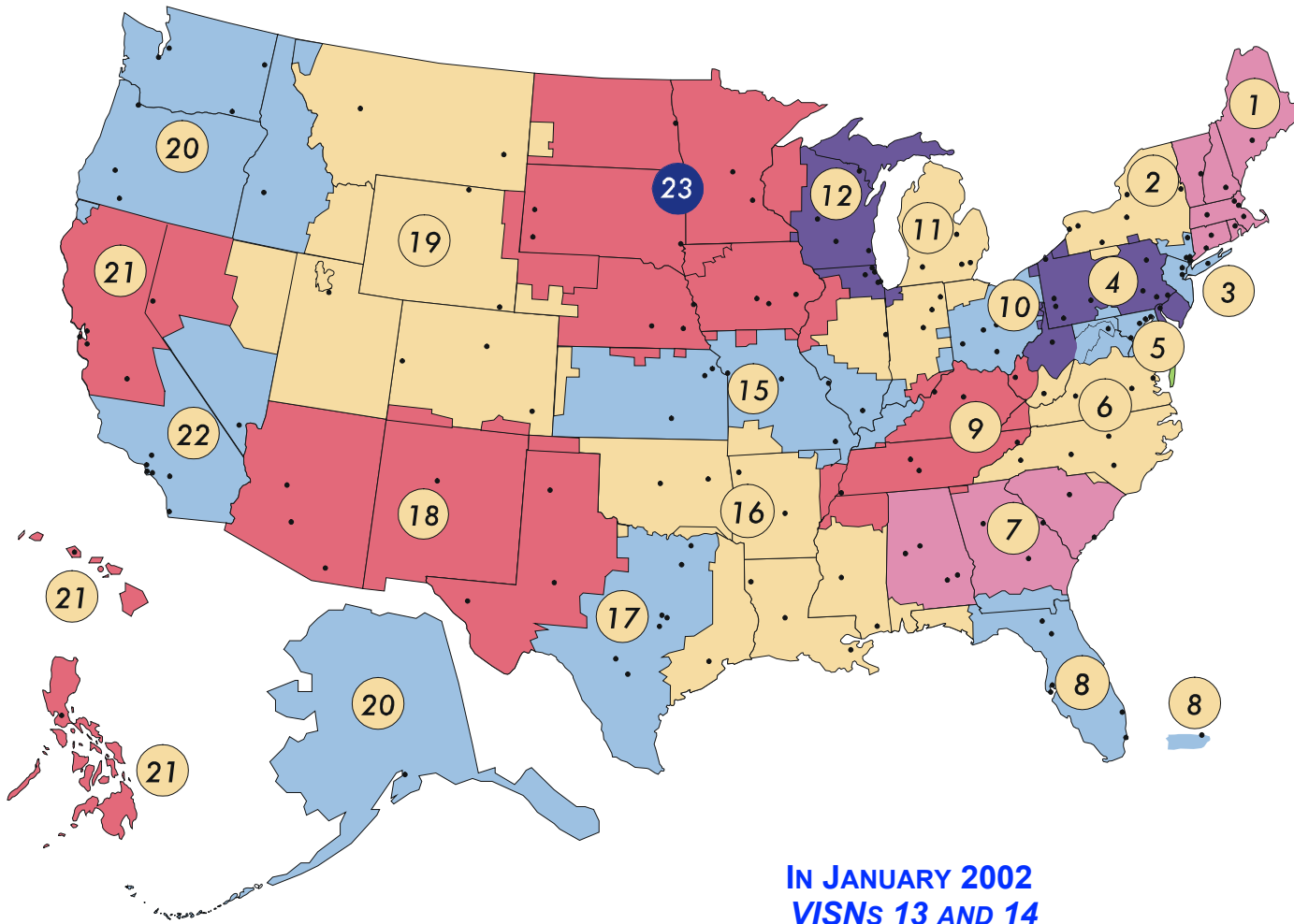


# Presentation Overview

- What is VA?
- What is National Center for Patient Safety?
- Example initiatives
  - Tool development
  - Correct surgery directive
  - Curriculum development
- Lowlights
- Highlights
- My Predictions

# *Veterans Health Administration*

## *21 Veterans Integrated Service Networks*



**IN JANUARY 2002  
VISNs 13 AND 14  
WERE INTEGRATED AND  
RENAMED VISN 23**



# *Veterans Health Administration*

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- **Facilities**
  - 163 Hospitals
  - 800 Hospital and Community-Based Clinics
  - 135 Nursing Homes (Long-Term Care)
- **Size**
  - 21,000 Beds
  - 185,000 Staff
  - 4 Million Patients



# Origin of the VA Patient Safety Improvement Program

- **VA identified patient safety as a high priority issue in 1997 and began a Patient Safety Improvement Initiative.**
- **The VA's National Center for Patient Safety was designed in 1998/1999 to:**
  - **Develop the tools and training to make it happen**
  - **Use local multidisciplinary teams to analyze reports.**
  - **Analyze common safety issues and solutions**
  - **Recognize the importance of close call analysis in strategies to prevent adverse events.**



# It's a Full-Time Job

## ■ NCPS Personnel

- Legal, medical, nursing, pharmacy, engineering, etc
- Senior managers, analysts, information specialists
- Hands-on (e-mail is our enemy!)

## ■ Patient Safety Managers

- Hired or assigned for each of 163 VA hospitals and each of the 21 networks
- Report to facility management, not NCPS.

## ■ Doing RCAs and other safety activities takes

- Additional 200 FTEs/yr – spread throughout VA



# Not Blame Free, But Just and Appropriate Accountability

- **Adverse Events and RCAs are protected by VA-specific statute: 38 USC-5705**
  - Not discoverable
  - Confidential (cannot be used for personnel action)
- **Intentionally unsafe acts → not part of the safety system**
  - *“...defined as “a criminal act; a purposefully unsafe act; an act related to alcohol or substance abuse by an impaired provider and/or staff; or events involving alleged or suspected patient abuse of any kind.”*
- **Adverse events and close calls are screened for**
  - 1) Actual AND potential severity of the event
  - 2) Probability of occurrence according to specific definitions.



# Products of the VA Patient Safety Program

- **Guidance is provided via**
  - Courses (Patient Safety 101 and Patient Safety 202)
  - Regional workshops (RCA and HFMEA)
  - Newsletter (Topics in Patient Safety -- TIPS)
  - Monthly conference calls
- **Patient Safety Alerts and Advisories**
  - Based on information from RCAs and other sources
  - Vulnerabilities are especially serious and specific
  - Measures have been identified to prevent or reduce occurrence



# NCPS-developed Patient Safety Tools

- **Cognitive aid: Triage Questions for RCAs**
  - Series of questions that help the identification of root causes in six major areas
  - Five Rules of Causation (Adapted from David Marx)
- **Other cognitive aids on laminated cards & posters**
  - ✓ Healthcare Failure Mode and Effect Analysis (HFMEA)
  - ✓ Advanced Root Cause Analysis Tools
  - ✓ Escape and Elopement Management
  - ✓ Fall Prevention and Management



# Ensuring Correct Surgery: VHA Directive (Policy) #2002-070

Ensure:

- Correct patient
- Correct site
- Correct procedure
- Correct implant (if applicable)



## Summary of VA Root Cause Analyses:

- 44% were left-right mix-ups on the correct patient
- 36% were wrong patient
- 14% were wrong implant or procedure on correct patient
- 7% were wrong site (*not* left-right) on correct patient



# “Location” of the Event

- Eye
- Groin or Genitals
- Chest
- Leg
- Hand, Wrist, or Finger
- Abdomen
- Back
- Head, Neck, Mouth, Anus, Colon, Buttock

# Ensuring Correct Surgery in the Veterans Health Administration

## Days to hours before surgery



### ✓ Step 1: Consent Form

The consent form must include:

- patient's full name
- procedure site
- name of procedure
- reason for procedure



### ✓ Step 2: Mark Site

The operative site must be marked by a physician or other privileged provider who is a member of the operating team



☞ **Do NOT mark non-operative sites**



## Just before entering OR



### ✓ Step 3: Patient Identification

OR staff shall ask the patient to state (NOT confirm):

- their full name
- full SSN or date of birth
- site for the procedure



☞ Check responses against the marked site, ID band, consent form and other documents

## Immediately prior to surgery



### ✓ Step 4: "Time Out"

Within the OR when the patient is present and prior to beginning procedure, OR staff must verbally confirm through a "time out":

- presence of the correct patient
- marking of the correct site
- procedure to be performed
- availability of the correct implant



### ✓ Step 5: Imaging Data

If imaging data is used to confirm the surgical site, two or more members of the OR team must confirm the images are correct and properly labeled



For more information see the Veteran's Health Administration Directive and your Patient Safety Manager \_\_\_\_\_

Produced by the Department of Veterans Affairs National Center for Patient Safety  
([www.patientsafety.gov](http://www.patientsafety.gov) or [vawww.ncps.med.va.gov](http://vawww.ncps.med.va.gov))

October 25, 2002



# Current Status

## ■ NCPS Implementation materials

- Poster
- Patient Brochure
- Videotape
- Power Point Presentation and CD-ROM

[www.patientsafety.gov/CorrectSurg.html](http://www.patientsafety.gov/CorrectSurg.html)

## ■ Results to date

- No reports of in-OR adverse events

## ■ Related Challenges

- Preventing adverse events associated with out-of-OR invasive procedures



# Patient Safety Curriculum for Medical Residents

- It is the right thing to do
- Necessary part of “treating the whole patient”
- Healthcare facilities need resident participation in RCAs and HFMEAs
- ACGME, AAMC, IOM, JCAHO
  - Example: ACGME core competencies



## Quote...

- “It helps you attack the problem [of patient safety], instead of avoid it”; “I think I was very impacted by your course”...stuff that was thought to be common sense does need study”

(Excerpt from follow-up phone interview to resident patient safety rotation in 1999 at Michigan State University)



# Goals of the VA Curriculum

- ✦ Agent of change towards **systems and quality approach**, and away from “blame and train” model
- ✦ Incorporate understanding of **human performance & high reliability organizations** into
  - Patient care
  - Patient safety activities
- ✦ Become a better **consumer and implementer** of computer and medical device technology



# Six Teaching Modules

1. Patient safety overview  
(interactive presentation - IP)
2. Human factors engineering - patient safety (IP)
3. Effective patient safety interventions (IP)
4. Root Cause Analysis – RCA (exercise)
5. Usability testing group project (exercise)
6. Journal club (interactive – group discussion)



# Pilot Tested at Several VA's and University Affiliates (2002-3)

- Mostly volunteers from over 12 sites
- Mixture of “allies”
  - Leaders in resident education
  - Educators fresh out of residency
  - VA Patient Safety Managers
- Modules tested many times many ways
- Outcome and Findings?
  - Modules “2-5” significantly better than “1”
  - Meeting report from retreat in progress
  - Make it “real”, hands-on, you know, the usual



# RCA Categorization & Analysis

## Field

- Reports of Adverse Events & Close Calls
- Prioritize – SAC Score
- Safety Reports
- Root Cause Categories
  - Based on Triage Card questions used

## NCPS

- Data Classification and Analysis
- Goal Is To Prevent Harm To The Patient
  - Change Happens Locally
  - Validate and Investigate For Widespread Use
  - Pseudo Trends Can Point To Need For RCA



# Major influences

- 1998 VA Patient Safety Advisory Committee
  - Narrative, narrative, narrative
  - Avoid “boxing people in”
- James Farrier (aviation safety database expert)
  - Narrative is key
  - Premature categorization cheapens, hurts reports
  - Even experts can not agree on “agreed upon” terms
- Chris Johnson (Univ. of Glasgow Accident Analysis Group)
  - Most databases serve researchers and policy people
  - Not designers, builders, operations people



# Other Considerations

- Many categories sound logical, easy, fast,...
  - In real-life application, they are not
- NCPS can't use taxonomies that contradict major policies and philosophies
  - Violation of policy is not a root cause
  - Title of person involved with the event is not generally useful and potentially harmful
- If category does not inform us on a solution, it is not useful



# Five Categories Done at NCPS

1. Location (49)
  - Some nested
  - Major and minor
2. Event Outcome (8) (e.g., fall, suicide, other)
3. Activity or Process (24)
4. Actions (32)
5. Outcome Measures (11)



# Special Analysis and Classifications

- Completed and online (see [www.patientsafety.gov](http://www.patientsafety.gov))
  - MRI hazards
  - Oxygen Cylinders (see web site)
- Used to Develop Policy
  - Patient Misidentification
  - Wrong Site Surgery
- In Progress
  - Suicide
  - Elopement/wandering
  - Wrong Tube, Wrong Hole, Wrong Connector
  - Retained Sponges



# Natural Language Processing

- Early stages of scoping this work
- Synonyms for our keywords are many, and some hard to “see” in a sea of text
- As conceptual understanding changes, manual re-categorization unlikely
- It may lead to “learning” system that finds trends we could not across thousands of RCAs



# Recognition of the VA Patient Safety Program

- **Interest and adoption by health care systems of**
  - **Japan**
  - **United Kingdom**
  - **Denmark (translating RCA cognitive aids)**
  - **Australia (implementing some of VA system nationwide)**
- **An honor to receive...**
  - **Innovations in American Government Award (Kennedy School of Government at Harvard University)**
  - **John Eisenberg Award (AHA?)**



# Challenges (Lowlights)

- Implementation of safety interventions
  - Hard to do right
  - Often boring
- Everyone gets “worse”, some stay
  - Learning curve dips down before slow rise
  - Similar findings in aviation, manufacturing
- Enthusiastic, but mostly under qualified personnel
  - Teaching is hard, “thankless”, non-reimbursable



# Implementation of safety interventions

- Hard to do right

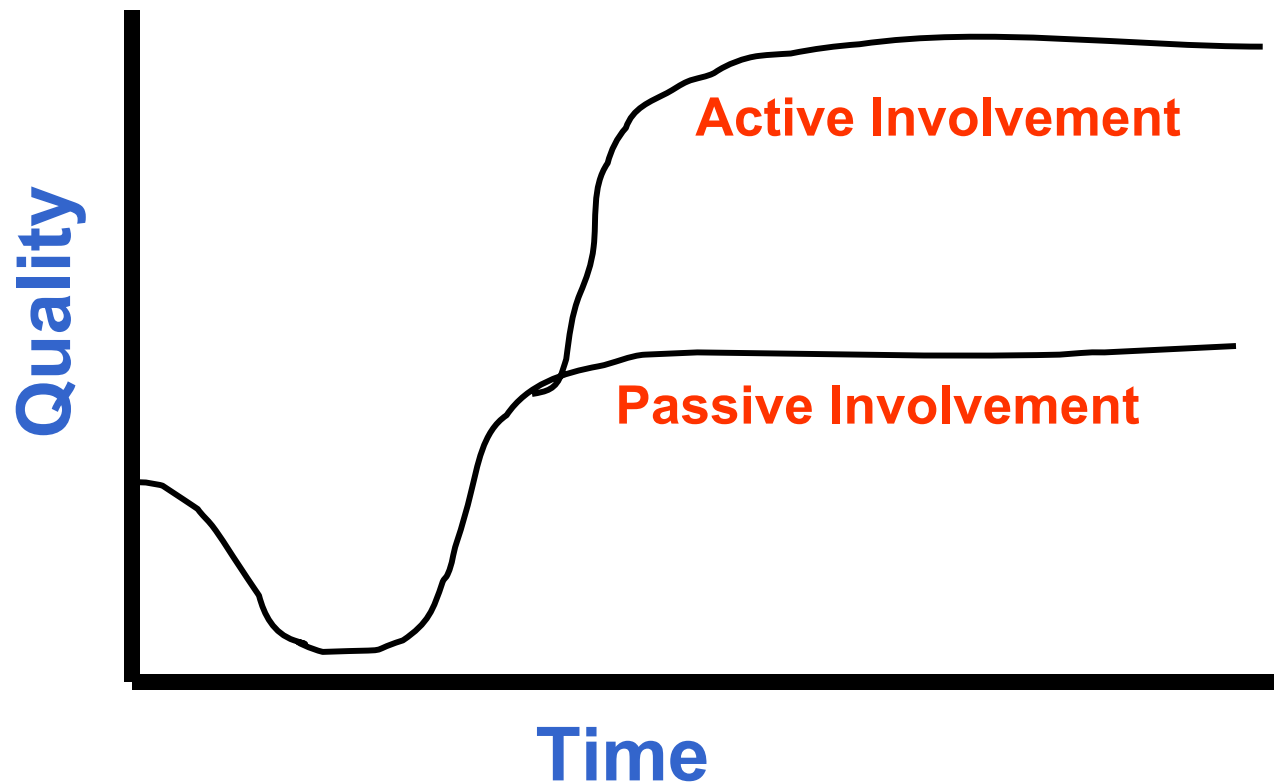
- A theme repeated often in this Colloquium
- Made worse by rare use of human factors engineering iterative design methods

- Often boring

- “Mere details” are the project

# At first, everyone gets “worse”

(Similar findings in aviation, manufacturing)





# Enthusiastic, but mostly under qualified personnel

- Teaching complexity of safety and healthcare system is hard
- Innovation has gone nearly “thankless”
- “Clinical” patient safety work is non-reimbursable



# Successes (Highlights)

- Huge increase in
  - REPORTED close calls
  - Full analyses (RCAs) on close calls
- Honest change of heart by many
- Establishing “primary care” patient safety as acceptable career route
- Changing existing or future device design



# My predictions

- The following are not necessarily the recommendations or conclusions of VA, VA NCPS, or others.



# More Information Available

- NCPS information and resources are available at:  
[www.patientsafety.gov](http://www.patientsafety.gov)
- One-page handouts (backgrounders) in your course packet