

Reporting Events and Conducting a Root Cause Analysis

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Empower Our Staff – Share the Knowledge!

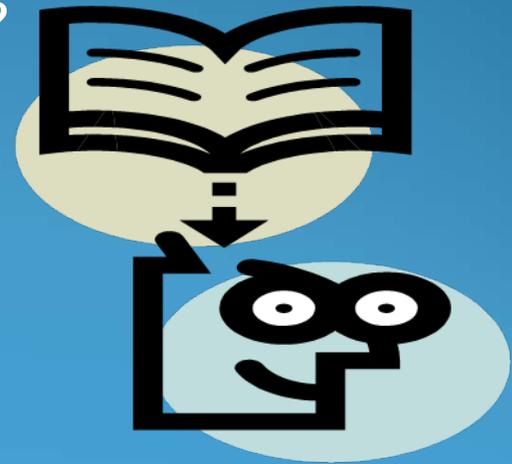
What is a DA Form 4106?

Why do we report events?

Where do you find the report?

Why should we report?

What happens after the report is submitted?



DA Form 4106, INCIDENT REPORT

Documents incidents or unanticipated events that occur in the DTF

- Provides the initial report
- May require additional documentation

Concise, factual, objective and complete details

Forward through OIC to HSS or designated representative

- ASAP but not later than 48 hours after occurrence
- Weekend incident ~ forward first duty day following incident

Copy of the 603A write-up (description of what happened) with the 4106

DA Form 4106 – cont'd

Factual data related to PS event entered in PT's dental record

What happened – injury – immediate corrective actions taken

Disclose incident to patient as soon as possible

Statement by the provider documenting event, if needed

DO NOT state that an adverse event occurred or DA Form 4106 completed in the DTR as this is considered 10 USC 1102 protected information

Objectives

- Discuss what root cause analysis (RCA) is
- Understand the role of individual RCA in achieving a culture of safety
- Understand the five steps in conducting an individual RCA
- Identify strategies for success in conducting RCAs in DENTACs

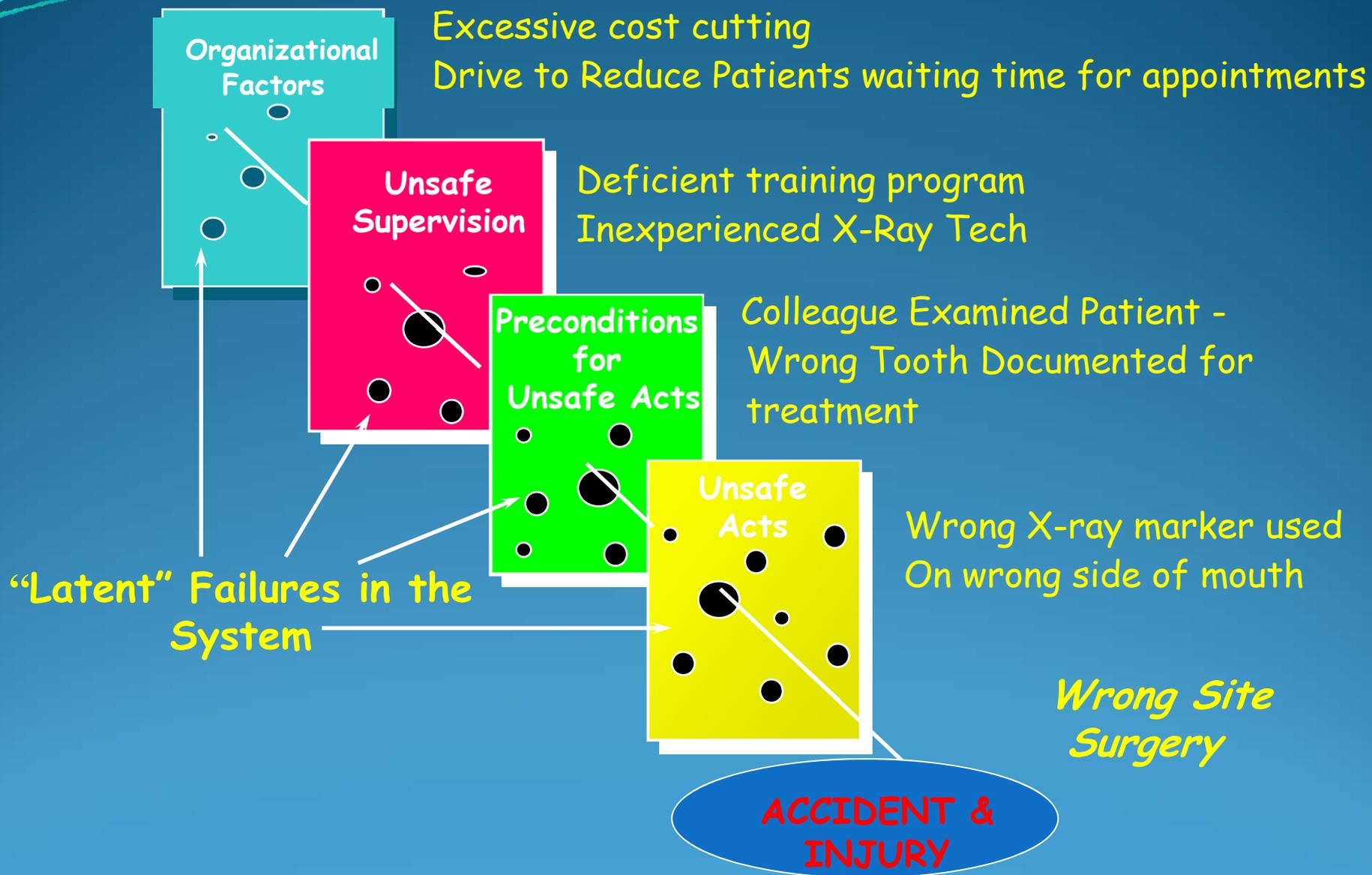
Individual Root Cause Analysis and Adverse Events

- RCA is a tool to understand and prevent adverse events
- Adverse Event- “Unexpected occurrence involving death or serious physical or psychological injury,
OR THE RISK THEREOF..”

➤ Signals the need for immediate investigation and response.



The "Swiss Cheese" Model of Accident Causation (Reason, 1990)



What is a Root Cause Analysis – it is a Tool to help you understand

A process that asks:

What do we do?

When did it fail?

Where did it fail?

Why did it fail?

What can we do to prevent it from happening again?



General process for performing and documenting an RCA-based Corrective Action

- Define the problem.
- Gather data/evidence (Dental records-chart, radiographs, etc).
- Ask why and identify the causal relationships associated with the defined problem.
- Identify which causes if removed or changed will prevent recurrence.
- Identify effective solutions that prevent recurrence, that are within your control, meet your goals and objectives and do not cause other problems within the organization.
- Implement and track the recommendations.
- Observe and monitor the recommended solutions to ensure effectiveness.
- Variability Reduction methodology for problem solving and problem avoidance.

Looking for or at Who – Implies:

Someone made a mistake

What a loser!~

Someone is to blame

Glad it wasn't me

Someone will get in trouble

Did you hear So and So got fired!?

RCA focus on

Human Factors

Equipment Failures

Natural Disasters

Sabotage

Other



Acceptable Root Cause Analysis

- Focuses on systems & processes NOT individual performance
- Progresses from special causes of specific event to common causes in organizational processes
- Repeatedly digs deeper by asking WHY, WHY and HOW...
- Is thorough and credible....

Credible Root Cause Analysis

- Determines human and other factors most directly associated with the event and the processes and systems related to its occurrence
- Determines where redesign might reduce future risk
- Identifies risk points and their potential contributions to the event in question
- Determines potential improvement in processes or systems that would tend to decrease the likelihood of such events in the future

Credible Root Cause Analysis

- Includes participation/support from leadership and by individuals most closely involved in the processes and systems under review
- Be internally consistent, don't contradict itself or leave obvious questions unanswered
- Includes consideration of any relevant literature

Sources of Information for Individual RCA

- Incident Report – 4106
- Near Misses/Close Calls
- Medication Error
- Customer Complaint
- Staff Complaint
- Anonymous Complaint

Five Basic Steps of Root Cause Analysis

1. Gather the facts using a timeline – start at event and work backwards (you can always add information)
2. Understand what happened
3. Identify root causes using causal statements
4. Determine system improvements to minimize risk of repeating the error
5. Create action plans to implement and monitor effectiveness of changes

Facilitator – Step One – Gather the Facts

- Facilitator outlines the basic facts
- Puts together an RCA Team (in collaboration with leadership)
- Review documents related to the event. Includes but not limited to:
 - Incident or error report
 - Medical/Dental record
- Conducts brief interviews of those involved
- Observe the “typical” process

Facilitator Requirements

- Should not be directly involved in the incident
- No preconceived idea of causal factors- maintains objectivity
- Understands purpose, process, outcomes of RCA
- Has credibility within organization
- Possesses skills in quality improvement

Facilitator Skills

- Skills in group facilitation:

- Sets an agenda, keeps all team members on task
- Prevents conflict from escalating
 - Non-verbal cues
 - Verbal...request break

➤ Can facilitate input from all and prevent domination by a few

Gather the Facts

- Facilitator interviews
 - Creates trust with those involved in the event
 - Helps to determine those individuals beneficial for the team (multi-disciplinary)
 - Defuses gossip, speculation and blame if done as soon as possible after the event or discovery of the event

Supporting Materials

- Facilitator guides/assists team in developing timeline of the event
- Obtain a flowchart, gathers policies, and procedures related to the intended process



Putting the Team Together

- The Root Cause Analysis Team
- Inter-disciplinary – Multi-Level
- Clinical Experts knowledgeable about the process
- Dental champions
- Administrative support

➤ EVERYONE ON THE TEAM IS EQUAL



Step Two: Understand What Happened

- Group examines events about the timeline
 - Review each particular event of the process by asking the questions...“Is this the usual way we do it?” and “If not why...why...why?”
 - As questions are answered and discussion proceeds, participants record one idea about system and human factors related to the error per post-it

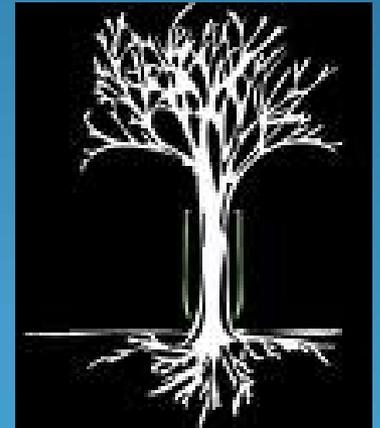


Step Two: Understand What Happened

- Review Ground Rules:
 - Review purpose of RCA...Change the system to minimize risk to patients
 - Everyone is a professional, all on the team are considered equal
 - Use the “parking lot” to validate concerns but stay on task
 - Direct questioning is intended for learning
 - What is said in the room about who said or did what stays in the room....

Step Three: Identify Root Causes

- Group post-its into categories of causal factors
 - Human factors – communication/teamwork
 - Human factors – training
 - Human factors – work direction
 - Human Engineering – Environment/Equipment
 - Management Systems – Rules/Policies/
Procedures
 - Information Management
 - Quality Control
- Create causal statements for each category
- Cause and effect diagrams can be helpful



Five Rules for Casual Statements

1. Clearly show cause and effect relationship
2. Use specific and accurate descriptions
3. Identify the system cause of the error
4. Identify preceding cause or policy or procedure violation
5. Acknowledge: failure to act is only causal when there is a preceding duty to act

**What is the number 1 contributing
or causal factor ?**

Communication

- The reasons behind miscommunication need understanding in order to find the right solutions
- A study found that 31% of all communications could be categorized as a failure in some way—whether the information was missing or the timing was poor, or where issues were not resolved or key people absent.
- The best way to ensure that the information especially implicit information, gets communicated is to develop appropriate systems.
- We need to develop processes that make this kind of communication systematic. Solutions include regularly scheduled communication meetings with question periods, and effective orientation programs.

Different types of Dental RCAs

Wrong patient

Wrong treatment

Wrong location

Wrong site anesthesia

Death

Anything that results in hospitalization as a result of treatment we provided

Sterilization – non-sterile instruments used in patient care

Swallowing/aspiration of teeth or instruments “Retained foreign body”

Causal Statement: Policy/ Procedure

- **Error: Wrong Patient Called/Seated - Pt ID**

- **Description of Event:** Assistant called the name of the patient and brought the patient who answered to the operatory. Provider had already reviewed the record and date of birth of the patient. The patient brought to the operatory was a child; the scheduled patient was an adult. Provider asked the patient her name and determined her appointment was with another provider. The patient was escorted back to the waiting room and the correct patient was called. When seated, provider verified name, SSN and date of birth.

- **Causal Statement:** It is assumed that the person answering to a certain name is that person, but once seated, the provider should always verify name, SSN and date of birth to make sure you have the correct patient. The error was immediately corrected and no harm was caused. **GOOD CATCH!**

Causal Statement: Equipment

- **Error: Operative/Other Procedure Related; Unintentional Treatment Outcomes**

- **Description of Event:** Instrument broken off in patient's gingiva. Instrument 13/14 Scaler tip broke off during routine cleaning appointment into patient's 5 mm pocket during routine hygiene treatment. Sick call provider ordered PA and WB and removed tip without incident by laying a triangle flap.

- **Causal statement:** Incident related to metal fatigue from extended usage and multiple sterilization in the autoclave. Recommend new prophylaxis instruments.

Step Four: Determine System Improvements

- Relate causal statements to current process, policies/procedures
- Consult the literature, evidence-based guidelines, best practices from ADA, ISMP, USP, ECRI, - group member presents to all
- Consult similar dental facilities for benchmarking
- Desired improvements must be within the organization's control

Step Four: Determine System Improvements (Cont)

- Prioritize necessary system improvements
- Address the system sources of error WITHOUT adding complexity
- Be internally consistent...

Step Five: Create The Action Plan

- Confirm WHAT needs to be done
- Determine WHO will be accountable
- Determine WHEN change will be initiated
- Determine HOW you will know change is successful
- Implement action in all areas where applicable, not just where the event occurred
- Decide how to measure the effectiveness of the action...
- The selected measure must provide data that will truly assess the action's effectiveness and will need to be monitored to ensure it was implemented correctly and timely.

Step Five: Create the Action Plan (Cont)

- Assign someone to be accountable for measuring effectiveness of change and reporting results
 - To quality council, safety committee, performance improvement, etc.
 - To dental staff
- Keep a log of your action plans

Step Five: Tracking Measures

- Implement, monitor and adjust as necessary
- Readdress actions if measurements reveal they are not effective
- As in any PDSA cycle (Plan, Do, Study, Act), it may take a couple of tries to get the process improvement right
- Do not give up until measurements and people agree that system source of error is minimized

Special Concerns

- Fewer staff to draw interdisciplinary team from
 - Management must encourage & adjust staff to allow participation in RCA teams
 - Create an incentive system for participation
 - Ensure feedback / appreciation to participants
- Team members must be equal...titles are dropped at the door
- Maintain the firewall

Firewall Solutions

- Assume system failure NOT individual fault
- If evidence points to an intentional unsafe act, continue RCA and coordinate with Risk Manager for review and action
- Those involved in discipline DO NOT facilitate the RCA team
- Team is truly interdisciplinary & diverse
- Train multiple people to facilitate an RCA
- Consider external facilitator for sensitive events



Symptoms of Inadequate RCA

- Staff will quit or lose interest during/after an RCA
- Staff in many cases may be fired as a result of an event and then may be unavailable during the RCA process
- Staff associate RCA with assigning individual blame--breach of firewall
- Action plans stall or fail

As a result of RCAs

- Time out was developed
- 2 Identifiers determined and standardized
- Team STEPPS adopted by DoD and deployed by many organizations

Unintentional Placement of Wrong Size Implant

Description of Event: On 20 Aug 07, the pt was placed under intravenous sedation for placement of an endosseous dental implant. The intention was to place a 4.3mm x 13mm implant at edentulous site #30. A 4.3mm x 16mm dental implant was mistakenly placed.

Immediate Care and Action

The pt was aroused from anesthesia and transferred to a wheelchair. During this time the provider was writing-up the pt's chart and noted the erroneous length of the implant and immediately ordered a panoramic radiograph. After viewing the radiograph the provider made the decision to send pt home with pain meds, mouth rinse and antibiotics and to reevaluate pt in the a.m.

Immediate Care and Action (Cont)

The pt was reevaluated on 21 Aug 07 and was noted to have tingling involving the right V₃ nerve distribution. The pt was advised of the wrong sized implant and was given the option to replace the implant with the correct sized implant. The pt stated she understood and all questions were answered to pt's satisfaction. Pt chose to replace implant. Pt returned later that day and correct implant was placed with no complications.

CA: Prior to placement of implant, the surgical tech handling the implant will verbally verify complete implant dimensions with Dental Provider and a Read Back will be required by Dental Provider.

Immediate Care and Action

Asst called the 1430 pt from the waiting area. Pt had been talking on cell phone, stood up and followed asst back to operatory. Asst seated the pt without following the identification verification protocol. Provider came into operatory, asked pt if she was experiencing any pain and explained the treatment that was in the treatment plan. Pt was anxious and asked if she was getting a cleaning. Pts routinely don't know the type of treatment they are having so he didn't think to much about this and explained that she was having fillings done. No timeout was performed. Provider completed the treatment. At the end of the treatment provider was paged to the front desk and as his 1430 pt was asking why they hadn't been seen yet. He went back to his operatory and asked the pt in the chair what there full name was a realized that the wrong pt had been treated. Immediate care was taken to inform the pt of what had transpired and correct 1430 pt was appropriately treated.

CA: Time-Outs and verification of identification **MUST** be performed. Completion of either of these would have prevented this incident.

Conclusion

- ✓ Defined what a root cause analysis (RCA) is
- ✓ Discussed the role of individual RCA in achieving a culture of safety
- ✓ Discussed the five steps in individual RCA
- ✓ Identified strategies for success in conducting RCAs in DENTACs

Resources

REGULATORY

DoD 6025.13

AR 40-68 Quality Management in AMEDD

MEDCOM Reg 40-41, The PS Program

MEDCOM Cir 40-54, Surgical Site Verification

DENCOM Policy 09-46 Correct Site Surgery

Tap Root

Patient Safety Materials

www.QMO.amedd.army.mil

Veterans Administration

www.patientsafety.gov

Medcom psc@amedd.army.mil if you should have any questions or need assistance.

Questions

