

# Nonconformities, Corrective Actions and Root Cause Analysis for Latent Print Decisions

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# Definitions

Nonconformities - When something doesn't go right

Corrective Actions - action to eliminate the cause of a detected nonconformity or other undesirable situation

Root Cause Analysis – a set of analyzing and problem solving techniques targeted at identifying the actual root cause or the reason that caused the problem

Preventative Action - action to eliminate the cause of a potential nonconformity or other undesirable potential situation

Conflict Resolution – procedure to resolve conflicting opinions among examiners.

# Nonconformities

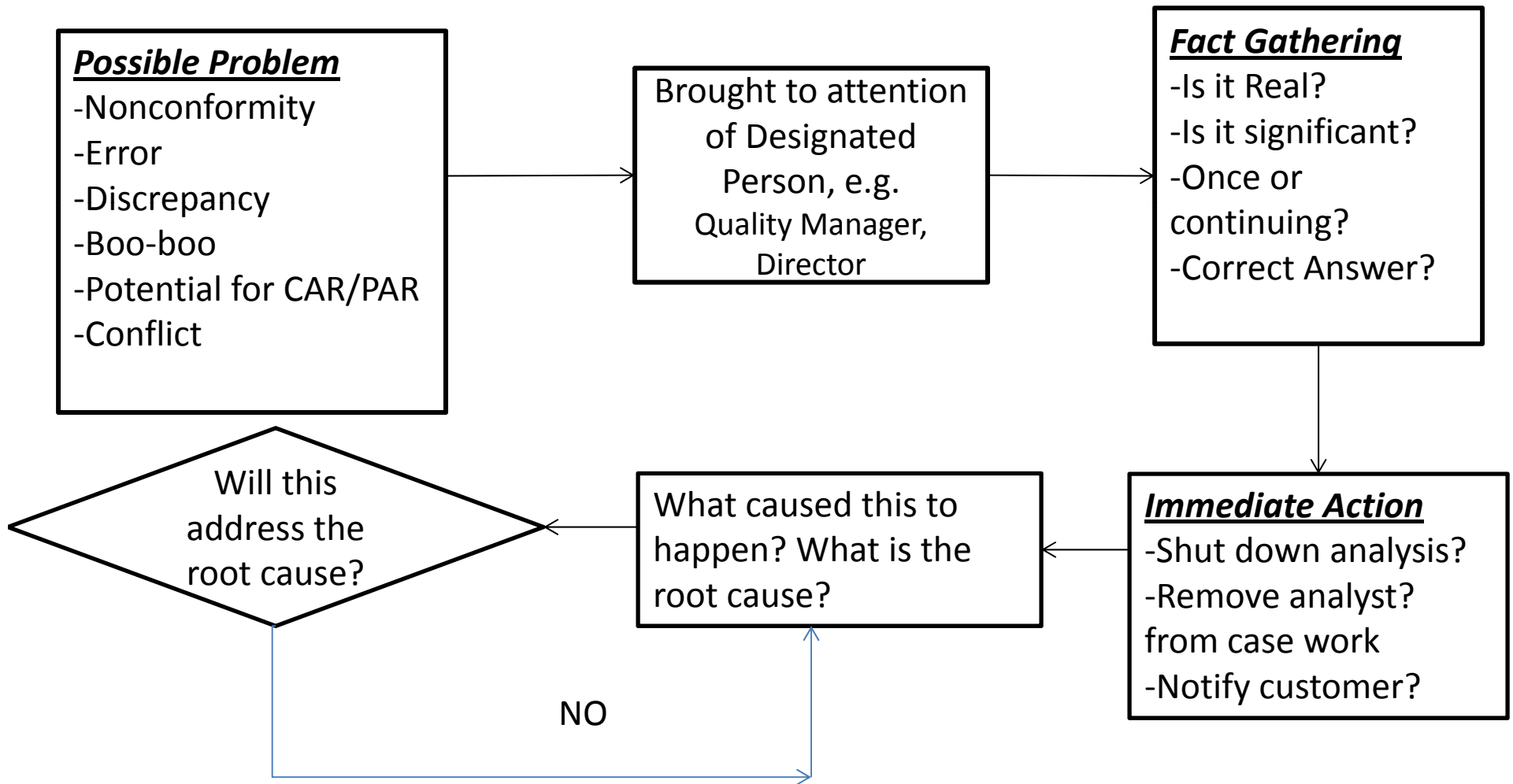
## Why do we Care?

- If you are accredited, seeking accreditation or care about your work, it is a vital component of a quality assurance program.
- ISO17020 7.8            The inspection body shall have documented procedures for dealing with feedback and **corrective action whenever discrepancies are detected** in the quality system and/or in the performance of inspections.
- ISO 17025 4.9            Control of nonconforming testing and/or calibration work 4.9.1 The laboratory shall have a policy and procedures that shall be implemented **when any aspect of its testing and/or calibration work, or the results of this work, do not conform to its own procedures** or the agreed requirements of the customer.

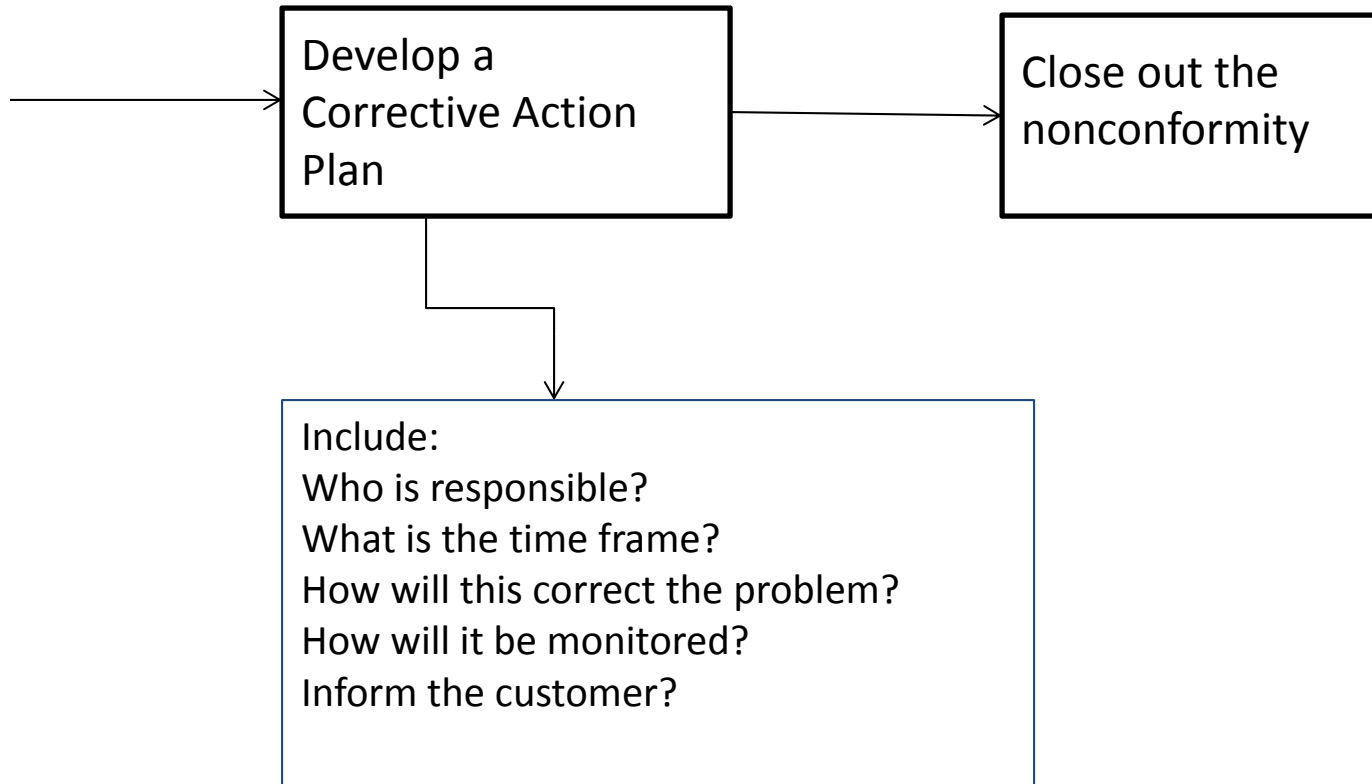
# Corrective Action Policy

- To be used as a method of improving practices
- Not to be used as a punitive system
  - Although some nonconformities could lead to personnel actions
    - Houston Police Department

# Corrective Action Policy



# Corrective Action Policy



# Corrective Action Policy

What are some changes the Corrective Action Plan could bring about:

- Counseling
- Re-training/Training
- Training Curriculum Changes
- Procedure/Method Changes
- Policy Changes

# Corrective Action Policy

## What or Who Can Cause Nonconformities?

- Analyst/Examiner
- Analytical
- Clerical
- External to the Agency
- Instrument-Procedural
- Method-Procedural
- Testimony-Examiner
- Training-Examiner



# Is this a Nonconformity?



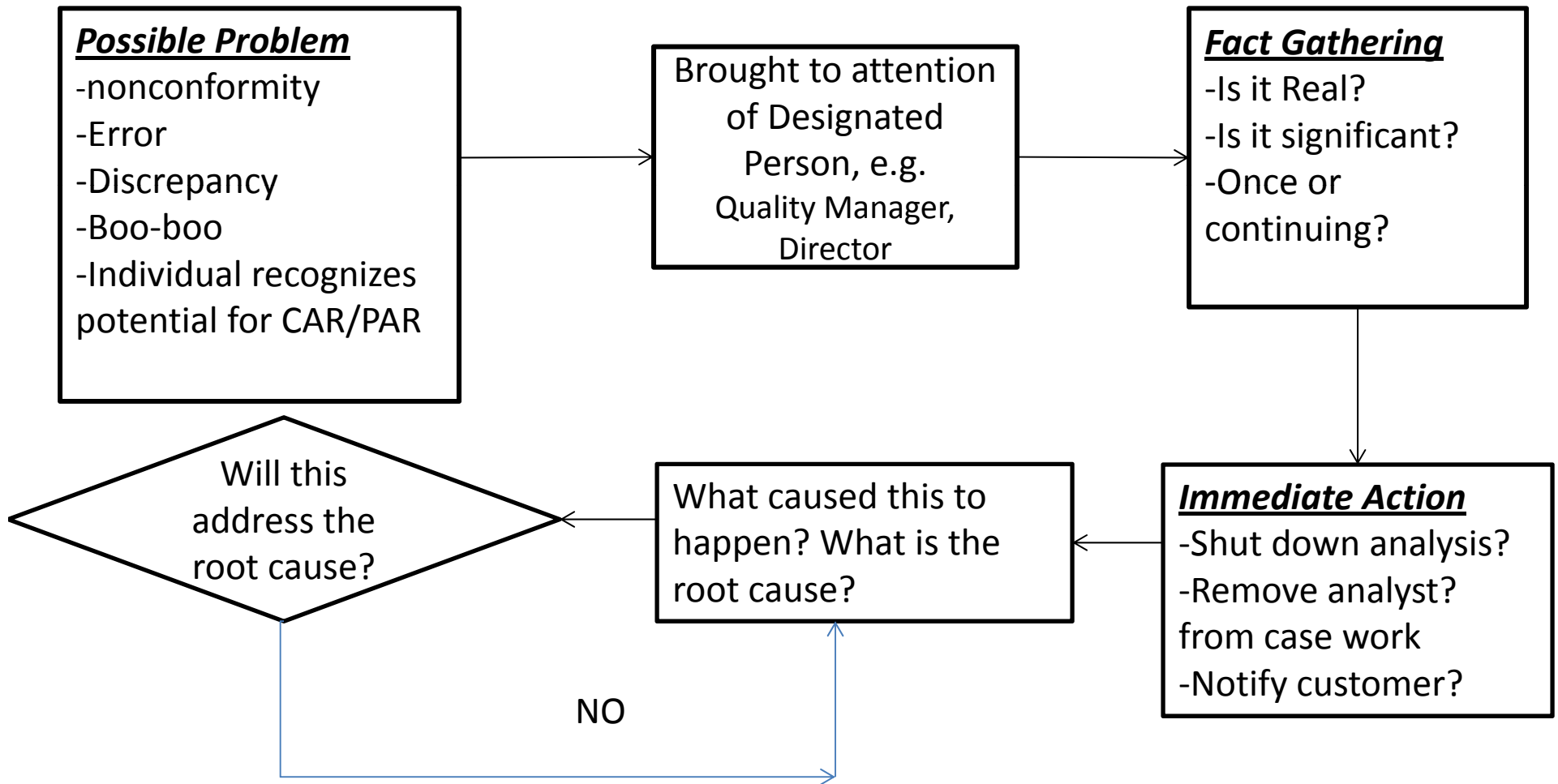
A Burned Steak at a backyard barbeque

Is it a nonconformity?

From ISO 17025....(t)he results of this work, do not conform to its own procedures or *the agreed requirements of the customer.*

What do you do?

# Corrective Action Policy



# Corrective Action Policy

Bring it to the attention of the Designated Person

## **Fact Gathering**

- Is it real? Sure looks burned
- Is it significant? No part of it looks salvageable
- Once or continuing? Don't know yet. May be look at the other food on the grill

## **Immediate Action**

- Shut down analysis (Cooking)?
- Remove analyst (Chef) from case work
- Notify customer?
- Recall work product?

# Corrective Action Policy

What caused this to happen? What is the root cause?

Anything else burned?

Hamburgers

Veggies

Other Steaks

Has this happened in the past? (Is there a corrective bbq log to consult – very common in DNA)

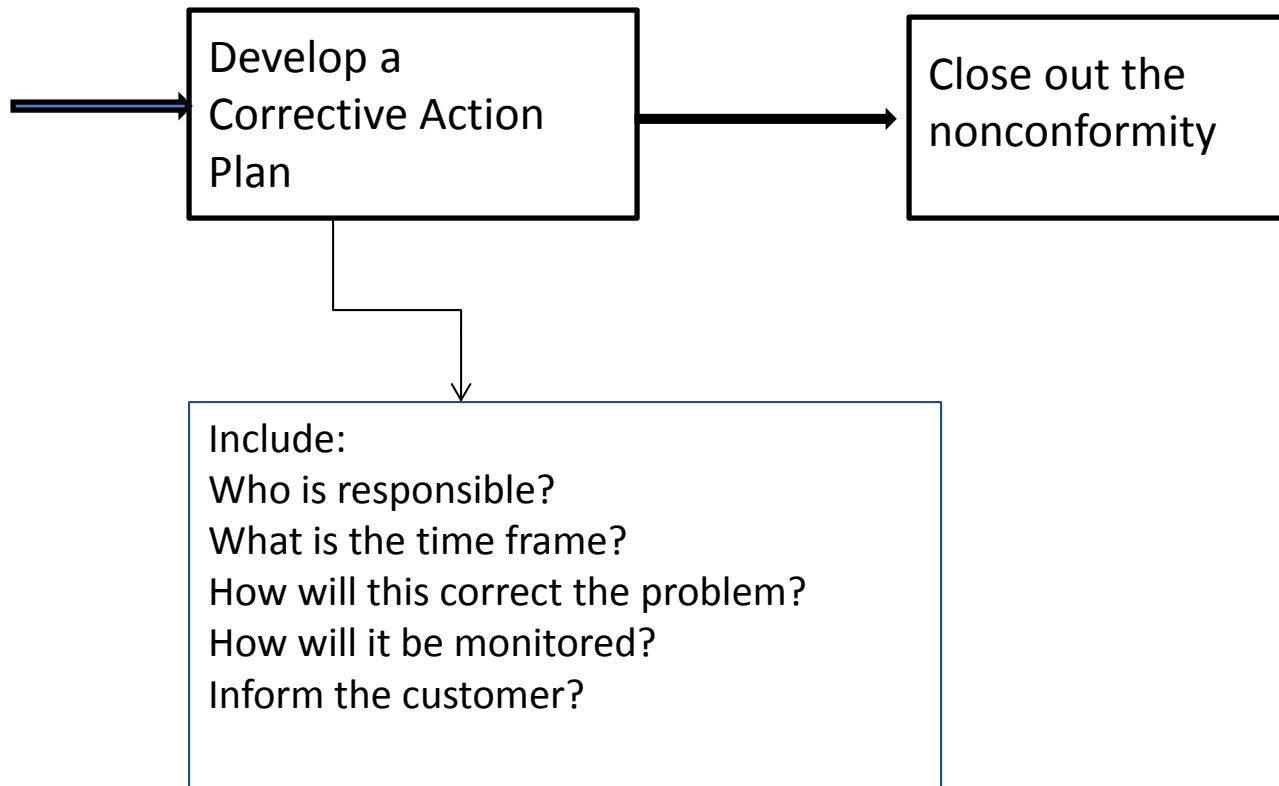
Is the grill too hot? (Instrument problem)

Is the steak too fatty? (Procedural-method)

Did the Chef wander away for a cold one? (inattention)

Has the Chef been trained on grilling? This type of steak?

# Corrective Action Policy



# Corrective Action Policy

Once root cause is established, what is the Corrective Action Plan?

Re-training – Emphasize the need to check the grill temperature

Training Changes – add a module on recognizing burning food

Procedural Changes – drag cooler closer to Chef so he doesn't wander away

Policy Changes- only buy lean steaks or cook over indirect heat

Implement Corrective Action

Let Chef back at the grill

Review at next barbeque if CA was adequate

We can see burned meat as a nonconformity but  
what could be  
Latent Print – Specific Nonconformities

Conclusion Differences

Identification v Elimination

But what About

Identification v Inconclusive

Suitable v Non-suitable for comparison

Suitable for AFIS v Non-suitable for AFIS

# Identification v Elimination

## Is this difference of conclusion a nonconformity?

How would it be discovered? Verification, technical review, reanalysis

Yes. Examiners trained to competency should never have such divergent conclusions

No. We don't know the ground truth, so how do we really know what the correct answer is?

### How should an agency handle these differences?

Ignore?

Log?

Consider a nonconformity and use the Corrective Action Policy and determine root cause?



# Identification v Inconclusive

## Is this difference of conclusion a nonconformity?

How would it be discovered?

No. Every examiner has a different threshold for Identification. The same standards can't be applied since every examiner is different.

Yes. Differing conclusion will affect whether additional work will be done on this latent.

How should an agency handle these differences?

Ignore?

Log?

Consider a nonconformity and use the Corrective Action Policy and determine root cause?

# Suitable v Non-suitable for comparison or AFIS

## Is this difference of conclusion a nonconformity?

How would it be discovered?

No. Every examiner has a different threshold for suitability. The same standards can't be applied since every examiner is different.

Yes. Differing conclusion will affect whether additional work will be done on this latent.

How should an agency handle these differences?

Ignore?

Log?

Consider a nonconformity and use the Corrective Action Policy and determine root cause?

A robust quality assurance program is designed to improve the work product for our criminal justice partners. Corrective action policies, an integral part of that program, only work if we are forthright about what is a nonconformity, and if we do a diligent root cause analysis, correct the nonconformity and prevent its future occurrence

