



# Case study: structured analysis

## Adapting method to context

Tommaso Bellandi e Michela Tanzini  
Center for Clinical Risk Mangment and Patient Safety,  
Tuscany Region  
[bellandit@aou-careggi.toscana.it](mailto:bellandit@aou-careggi.toscana.it)  
[tanzinim@aou-careggi.toscana.it](mailto:tanzinim@aou-careggi.toscana.it)

# Main analysis issue

---

- Scope of reporting
- Analysis
  - Methods and tool
  - Classification
- Ameliorating actions
- Learning component
  - Monitoring
  - Feedback and dissemination



# Scope of reporting

---

Reporting is a **tool** for obtaining safety information

- to identify new and previously unsuspected hazards
- to discover trends
- to prioritize areas for remedial efforts
- to uncover common contributing factors
- to develop strategies to decrease adverse events and patient harm
- to learn from experiences

# Analysis

---

Reporting of events is of little value unless the data are analyzed

- What happened?
- Why did it happen?
- What has been learned?
- What has been changed?



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Analysis – Wrong procedure on the correct patient

---

*A 76 years old woman, goes to the digestive endoscopy service of a tuscan hospital on 26th March 2015 at 11.00 am to perform gastroscopy which had been booked at a local pharmacy.*

*The patient is accepted by health workers that provide the usual information on the acquisition of informed consent about the procedure. Also the endoscopist, who will perform the exam, asked the patient the reasons for which the examination was requested. The woman has referred that the main problem for which she has gone to the hospital was gynecological even though in recent times she has been often suffering from gastric burning.*

*The examination has been carried out without having problems although it was found hiatal hernia, antral hyperemia and atrophic mucosa so that it has been necessary to perform biopsies.*

*Once she has acquired all the necessary information to withdraw the medical report of the biopsy, the patient asked where she should have gone to perform hysteroscopy for which she has an appointment in the same morning.*

*Then health workers have had a doubt checking the request. The prescription has been interpreted as "gastroscopy" instead of "hysteroscopy".*

*The prescription's handwriting was in fact not very clear and readable.*



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Method of analysis

---

A process in which individual episodes (when there has been a significant occurrence either beneficial or deleterious) are analyzed in a systematic and detailed way to ascertain what can be learnt about the overall quality of care, and to indicate changes that might lead to future improvements

Pringles 1995

Clinical audit is a process of quality improvement, designed to improve health services through systematic review of care processes against explicit criteria and to the implementation of change

Principles for best practice in clinical audit - NICE, UK 2002



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Main steps of the CRM Audit

## Preparing the Audit

- Review of the clinical documentation available
- Direct talk to clinical staff involved in the event
- Gathering data from literature and standards



## Analyses of the clinical case

- Analyze the case focusing on the main critical phases
- Drafting an improvement strategy

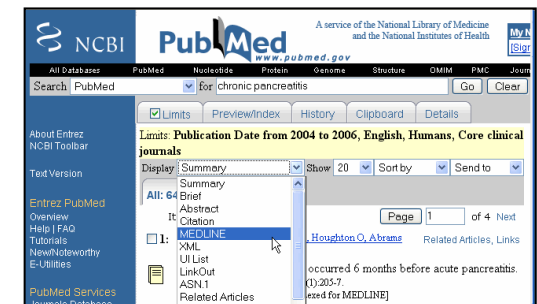


## Planning the improvement strategy

- Identify the ameliorating actions
- Plan the implementation

## Drafting and sharing an Alert Report

## Monitoring and evaluating improvement strategy



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

REGIONE TOSCANA  
**GRC** Gestione  
Rischio  
Clinico  
SICUREZZA DEL PAZIENTE

# Analysis – What happened next?

---

*Healthcare workers have tried to understand better what happened by calling to the operating rooms, which are commonly used to make hysteroscopies. They got the confirmation that there was no prescription of that procedure for the woman.*

*Healthcare workers have explained to the gynecologist on duty what happened and they asked if it would be possible to add an exam that morning, in order to solve the problem. They received a negative response and moreover they had to talk to the patient to explain that she should book again the procedure. So the healthcare workers of the endoscopy service have decided to report to the clinical risk department for taking charge of the patient.*

*The patient has concluded her diagnostic path. The hysteroscopy's procedure was performed on the 3<sup>rd</sup> April (negative). The same day, the lady has received the biopsy samples' report from the endoscopist who has prescribed the appropriate therapy for her clinical situation.*



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care



# Classification of the event

---

- The purpose of a taxonomy or classification system is to produce valid data
- Classification makes it possible to compare events across the healthcare system
- Classification maps risks within the facility and set priorities for action in order to implement the relative risk reduction strategies
- In addition, disease-specific classifications and other classifications can be used as needed



# Type of event - Classification

**Classificazione - Tipo di Incidente \***

*Specificare il tipo di incidente a cui appartiene l'evento che si è verificato. Compilate più volte questo tipo di informazione tante volte quante ritenete sia necessario per chiarire esattamente la tipologia di evento*

TIPO DI INCIDENTE

DOCUMENTAZIONE

TIPO DI DOCUMENTO IN...

- ☐ Prescrizione/Richiesta esame (Orders/Requests)
- ☐ Cartella/Documentazione Sanitaria/Diario Clinico/Consulenza (Charts/Medical Records/Assessments/Consultations)
- ☐ Checklist (Check Lists)
- ☐ Modulo/Certificato (Forms/Certificates)
- ☐ Istruzioni/Informazioni/Linee di indirizzo/Procedure/Linee Guida (Instructions/Information/Policies/Procedures/ Guidelines)
- ☐ Etichette/Adesivi/Braccialetto/Badge (Labels/Stickers/Identification Bands/Cards)
- ☐ Lettere/E-mail/Comunicazioni Archivate (Letters/E-Mails/Records of Communication)
- ☐ Referti/Risultati/Immagini (Reports/Results/Images)

- ☐ Comportamento (Behavior)
- ☐ Incidente al Paziente (Patient Accidents)
- ☐ Edificio/Infrastruttura/Impianti (Infrastructure/Building/Fixtures)
- ☐ Gestione delle Risorse/dell'Organizzazione (Resources/Organizational Management)

## Type of event

Documentation/ Document involved/ Orders – requests

Documentation/ Problem/ Unclear/Ambiguous/Illegible/Incomplete information in document



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Contributing Factors and mitigating factors - Classification

**Classificazione - Fattori Contribuenti**

*Specificare tutti i fattori contribuenti che hanno potuto determinare l'evento. Compilate questo tipo di informazione tante volte quante ritenete sia necessario*

FATTORI CONTRIBUENTI	FATTORI UMANI	FATTORI LEGATI ALLA ...
		<ul style="list-style-type: none"><li><input type="radio"/> Mezzo di Comunicazione (Communication Method)</li><li><input type="radio"/> Competenza Linguistica (Language Difficulties)</li><li><input type="radio"/> Alfabetizzazione Sanitaria (Health Literacy)</li><li><input type="radio"/> Problemi di Comunicazione con (With Whom)</li></ul>

## Contributing factors

Staff Factors/ Communication Factors/ With Whom

Staff Factors/ Behaviour/ Attention Issues/ Distraction/ Inattention

## Mitigating factors

Directed to staff/ Effective communication

Directed to patient/ Patient education/ Explantation



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Ameliorating actions

---

The systemic analysis of the process allows to identify a series of ameliorating actions to **prevent the recurrence of the same type of event**

The clinical risk manager, in collaboration with the working group, is in charge of planning and initiate the improvement processes suggested with the involvement of management



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Ameliorating actions number 1

---

## **Description on ameliorating action**

To add next to the diagnostic prescription the code provided by the new regional catalog as DGRT 3276 of 12.15.2014 (unique performance code, currently in "test environment" will enter into force by mid-2015)

## **Level of application**

Healthcare trust

## **Person in charge**

Corporate Healthcare Management

## **Application time ameliorating action**

within 6 months

## **Evaluation measures**

number of prescriptions with a unique code / total number of prescriptions in a predefined sample

## **Day of the measure**

20 October 2015

## **Frequency of evaluation measures**

quarterly

## **Management involvement**

Yes



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Ameliorating actions number 2

---

## **Description on ameliorating action**

Specialist services traced with e-prescription

## **Level of application**

Local Healthcare trust

## **Person in charge**

Department Director

## **Application time ameliorating action**

within 6 months

## **Evaluation measures**

% of e-prescription on the total specialist services prescribed in a specific period of time

## **Day of the measure**

20 October 2015

## **Frequency of evaluation measures**

quarterly

## **Management involvement**

Yes



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Monitoring

---

Monitor over time that the planned ameliorating actions have actually been carried out, and assess the effects on risk levels

The working group, based on the results of monitoring, has to define new priority areas of intervention and possible further actions to be taken



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Possible outcome of analysis

---

- No action required
- A celebration of excellent care
- Identification of a learning need
- Immediate action is required
- A further investigation is needed
- Sharing the learning component



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care



# Learning component

---

To be effective, lessons learnt from the analysis should feed into a **mechanism for developing and disseminating changes** in policy and practice that improve safety

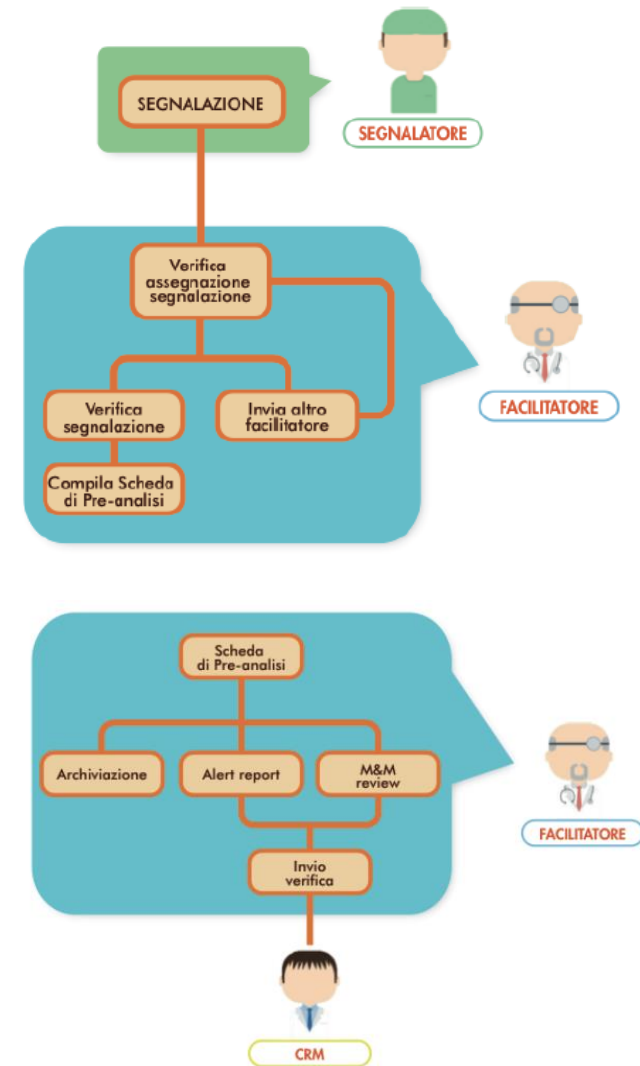
- preventive recommendations should be disseminated
- at all levels, focus on qualitative analysis rather than quantitative statistics
- once the learning component will increase new issues on patient safety will be revealed and they have to be analyzed



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

# Feedback

- Feedback is one of the key success activity related to learning component of RLS
- It is important to give feedback on what we have learned about risk processes at all levels (local - regional - national - global)
- Feedback to those who have reported is necessary: the reporter should have the awareness of what it has been analyzed and he has to be kept informed of action taken
- Feedback is a key factor to motivate health professionals to report future incidents



# Thank you

---



WHO Collaborating Centre  
in Human Factors and Communication  
for the Delivery of Safe and Quality care

REGIONE TOSCANA  
**GRC** Gestione  
Rischio  
Clinico  
SICUREZZA DEL PAZIENTE