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Gestione Rischio Clinico
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RLS: methods of analysis and sharing of knowledge

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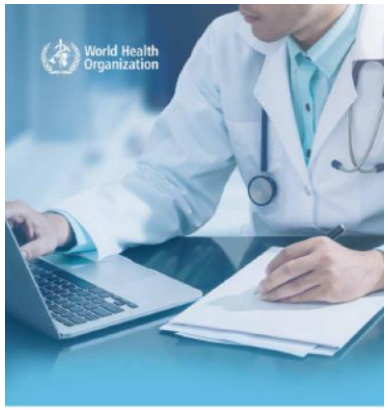
WHO Collaborating Centre
in Human Factors and Communication
for the Delivery of Safe and Quality care

RLS Learning component

Reporting and learning systems are key organisational tools for the management and prevention of clinical risk.

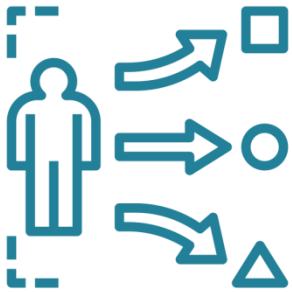
Reporting systems fulfil one or more of five main functions:

- public accountability
- response to the patients and families involved
- communications alert route
- barometer of risk within health care
- **foundation for learning and improvement**



Learning: what does it means?

- When learning is talked about in relation to incident reporting systems, it usually envisages an activity through which information about the incident and why it is thought to have happened is made available and discussed



- The **social or organizational meaning** of learning is that a group or an organization actively changes what it is doing, adapts how it is working, and refines its understanding of how it is working. That social definition of learning implies that the people doing the learning are all those involved in **changing behaviour**, and the output is actual material change and improvement in the organization or system

- A tight and limited definition of learning as being only about the discovery of new information is ultimately of limited value unless it is associated with behavioural and organizational change

Uses of incident reports

- to formulate action to prevent (or reduce the risk of) a similar incident in the care setting where it occurred
- to communicate information that could lead to the prevention of a similar incident elsewhere in a country's health system or globally
- to aggregate with other reports to produce larger volumes of data capable of providing the maximum possible understanding of the problems in the system that led to the harm (or risk of harm)
- for education and training
- for research, development and improvement
- for public reporting and accountability
- for open disclosure to patients and families

Barriers to reporting and learning

Address potential organizational barriers to reporting

- cultivate a patient safety culture, specifically addressing the potential fears associated with reporting, authority gradient, and the risk of reprisal
- develop and train leaders to promote openness, facilitate learning, empower teams, and welcome differing perspectives
- Fear of punishment following errors represents a fundamental barrier to reporting

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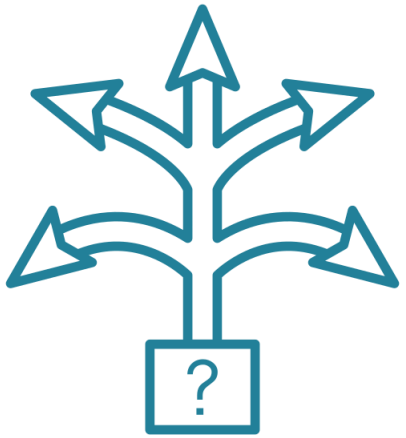
Challenges in data management

Studies have repeatedly shown that insights into patient safety are hampered by:

- volume of data overload
- poor specification of what is to be reported
- overinterpretation of incident analyses to judge safety performance
- selectivity and incompleteness of data
- taxonomies and classifications that do not enable aggregation of reports into categories that reliably highlight system weaknesses
- lack of investment in analysis compared to reporting



Focus on *ameliorating actions*

- typology
- responsibility
- effectiveness monitoring
- diffusion
- sharing

Focus on *ameliorating actions*

- 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

Ameliorating actions

- 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

How to facilitate the analysis

- create easy-to-use data extraction capability to support timely improvement at the local, organizational and system-wide levels
- ensure appropriate data confidentiality and security (including de-identification), in accordance with applicable legislation and organizational policies
- clearly communicate what happens to the information once it is entered into the reporting system
- allocate adequate resources (including technical and administrative) to maintain the reporting system and its related processes including data analysis, follow-up, and system oversight

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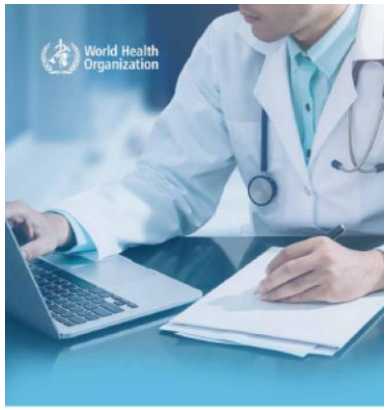
Different ways of analysis

Figure 6. Assessment of patient safety incident reports



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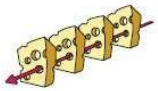
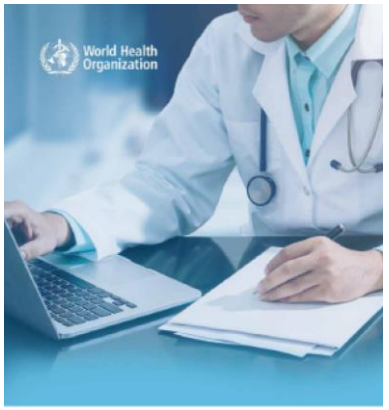
Different ways of analysis

Figure 9. Uses and limitations of aggregated patient safety incident data

	ACTIVITY	SOURCE OF ANALYSIS	STRENGTHS	WEAKNESSES
	**Surveillance**	All incident types	Highlights broad patterns and trends	Weak on systemic insights; little immediately actionable
	**Performance assessment**	Incidents covering particular fields of care	Creates opportunity for system redesign and improved safety within a field of care	Requires extensive further investigation to assess nature of performance weaknesses
	**Breakdown in resilience**	Incidents pointing to failures in standards or control measures	Enables correction of breaks in defences	Causation can be wide ranging and restorative action complex
	**New and uncommon sources of serious harm**	Incidents of novel type showing clustering in time and space	Immediate opportunity to block harm and protect future patients	Needs highly active mining of data

Source: World Health Organization



Patient Safety Incident Reporting and Learning Systems
Technical report and guidance

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

Improvement in safety

Reporting should also inform local responses to risks and drive the improvement in safety.

Five processes could support this:

1. setting of a clear safety agenda
2. communication of risks to relevant staff
3. allocation of accountability for resolving risks
4. engagement of local staff in risk analysis and improvement processes
5. production of actionable and practical information

Sharing learning

Optimize and share learning from reporting systems

- analyze data from the reporting system to identify patient safety gaps
- integrate reporting system information with other data sources to anticipate and mitigate clinical risk and system vulnerabilities as well as to identify system strengths
- provide updates on lessons learned and improvements made as a result of reporting as part of routine processes, e.g. regular agenda item at staff and board meetings, stories in newsletters, summaries at CEO meetings
- consider sharing lessons learned with patients, families, communities, public and tailor communication to the needs of the specific audience, e.g. quantitative analyses, patient stories, trend summaries, poster campaigns, social media, blogs
- evaluate the effectiveness of the reporting system and its related feedback mechanisms on a regular basis and make improvements
- update the data elements collected to ensure relevance and incorporate identification of emerging issues

References

- Bellandi T., Romani-Vidal A., Sousa P., Tanzini M. (2021) Adverse Event Investigation and Risk Assessment. In: Donaldson L., Ricciardi W., Sheridan S., Tartaglia R. (eds) Textbook of Patient Safety and Clinical Risk Management. Springer, Cham. https://doi.org/10.1007/978-3-030-59403-9_11
- World Health Organization. (2020). Patient safety incident reporting and learning systems: technical report and guidance. World Health Organization.
- Card AJThe problem with '5 whys'BMJ Quality & Safety 2017;26:671-677.
- World Health Organization. (2016). WHO Inter-regional consultation on patient safety incident reporting and learning systems in Africa and the Asia Pasific regions: 22-24 March 2016, Colombo, Sri Lanka: meeting report
- World Health Organization. (2016). EU validation of a minimal information model for patient safety incident reporting and learning systems: executive summary
- World Health Organization. (2016). Minimal information model for patient safety incident reporting and learning systems: user guide
- World Health Organization. (2005). World alliance for patient safety: WHO draft guidelines for adverse event reporting and learning systems: from information to action. World Health Organization.
- https://www.patientsafetyinstitute.ca/en/toolsResources/PatientSafetyIncidentManagementToolkit/PatientSafetyManagement/pages/reporting-and-learning-systems.aspx