

Experience feed back committee and evaluation of weaknesses and critical steps in the radiation treatment process through precursor events reporting

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1. Introduction:

Radiotherapy is a powerful continuously evolving effective treatment tool. Our aim is to offer the best treatments and assure security for patients and personnel. A proactive quality approach copied from the one implemented in the air transport industry has been established in our department. An Experience Feed Back Committee (EFBC) has been set up to identify, record and analyze systematically all reported precursor events. Our final objective is to test and strengthen the security of the organization and the quality of care for patients.

On a period of 34 months, we collected 2660 precursors events with an average of 80 PE per month of which less than 4 % are incidents. We have implemented 317 improvement actions. Actions have been performed for more than 15% of PE. We have already observed a reduction in precursor events and we are able to achieve a mapping of steps considered as "risky" in our workflow.

In order that all the professionals appropriates the approach of Quality and Safety of treatment, it is essential that we continually improve our **communication** on this subject. For this, we work on three areas: 1) involvement of staff, 2) active communication and 3) research.

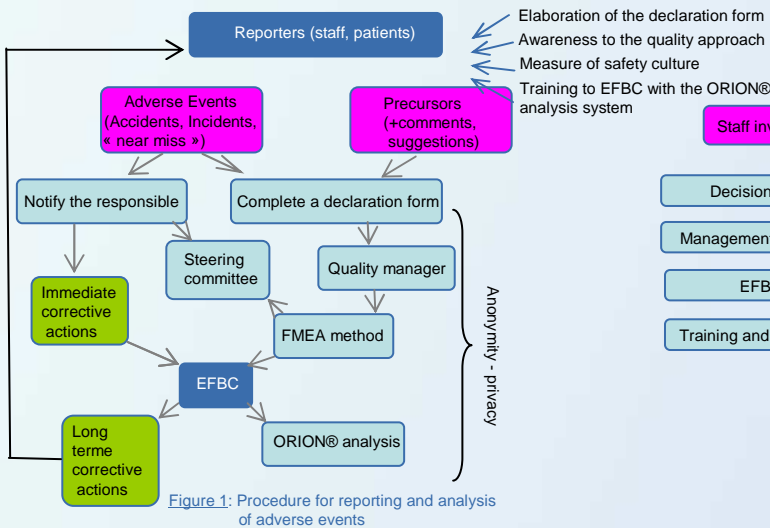


Figure 1: Procedure for reporting and analysis of adverse events

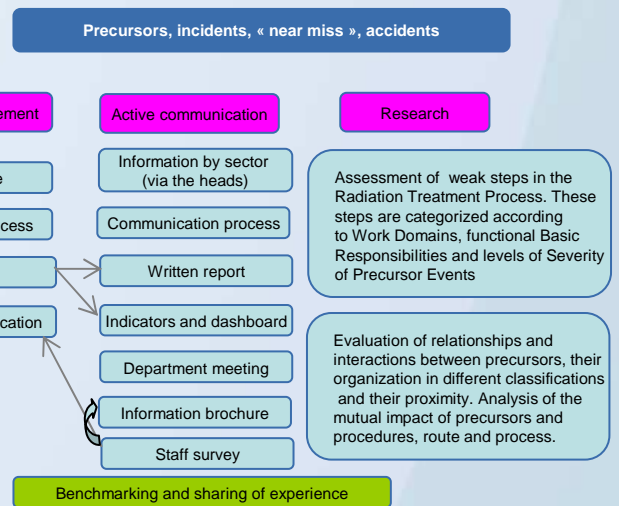


Figure 3: Organization of communication in relation to precursors, incidents, « near miss » and accidents

2. Results:

The first EFBC has been organized in January 2009. The majority of staff members quickly adopted the reporting of precursors. The management reassured the staff that reports are aimed at creating awareness to safety and not designed to identify "a" responsible person to "punish". A registration chart was designed to ensure anonymity, confidentiality and reactivity.

EFBC composition: physicians, physicists, nurses, secretaries, psychologists, and a Quality manager

EFBC function: prioritize and analyze events, then decide on the type of actions. Monitor and communicate on the 4 steps of the Deming's wheel.

We have identified 3 major indicators to evaluate the effectiveness of this approach:

1. the number of precursor events by month,
2. the regularity of the reporting and the EFBC meetings,
3. the number of improvement actions decided and carried out on time.

These indicators have been introduced in the general dashboard of the service and allow monitoring of quality and safety process. This dashboard is available and regularly presented to all staff

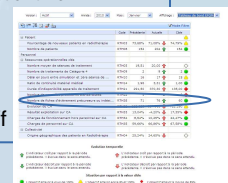


Figure 4: EFBC indicators were in the dashboard, axis key operational resources

Harvest of adverse events

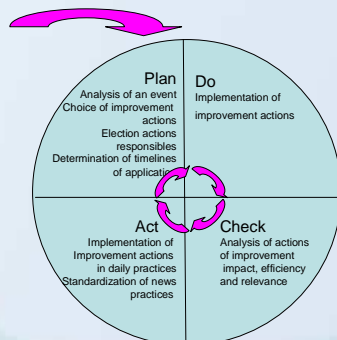


Figure 2: EFBC by four steps of Deming's wheel

3. Conclusion: The collection of precursors and the implementation of EFBC resulted in a fundamental change in the culture of the department. It does not look for individual mistakes but targets defects of the whole system. This EFBC is a powerful management tool which is considered essential to evolve in Quality and Safety. Specific parameters issued from this approach are integrated to pilot and manage the department. The EFBC requires the active participation of all health professionals and the involvement and continuous support of the management team. It enables to secure, standardize and formalize our practices. It empowers staff to share and communicate on the corrective actions, to implement and follow the effectiveness of these corrective actions on the long run.