KVIST group at NRPA

(KVIST is Norwegian abbreviation for:
Quality assurance in radiotherapy)

Statens strålevern
Norwegian Radiation Protection Authority
NRPA

National incident reporting system for Norway

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Background:
New regulations (2002) ordered Norwegian radiotherapy centres to establish a system for incident management. The KVIST group set up a national Working Group to develop a general incident management system. This system has subsequently been implemented in all ten radiotherapy centres in Norway.

Key aspects of the system:
Designed as a **local system** for incident management and learning, a filter for reporting incidents/accidents to the hospital safety system
- Common: definition of (low) reporting level, taxonomy/classification and incident codes, administered by quality group

Organized as a **National system,** a superstructure for all local systems (administrated by KVIST)
- Coordinates activities, generates national statistics, collects information internationally about incidents and similar systems, arrange meetings

Local system:
Initial incident registration done immediately when discovered:
- short preliminary description, immediate actions taken
- signed by at least one person

NB! Signature is for easy identification of a person who can give more information later, not necessarily the person who caused the incident!

Local multidisciplinary Quality Group will follow up initial registration:
- making full description, taking further necessary actions
- do the coding according to national taxonomy and codes

Local Quality Groups responsible for:
- information to leaders and actual personnel groups
- suggesting changes/solutions, making statistics
- reporting to hospital safety system (grade 3) and KVIST

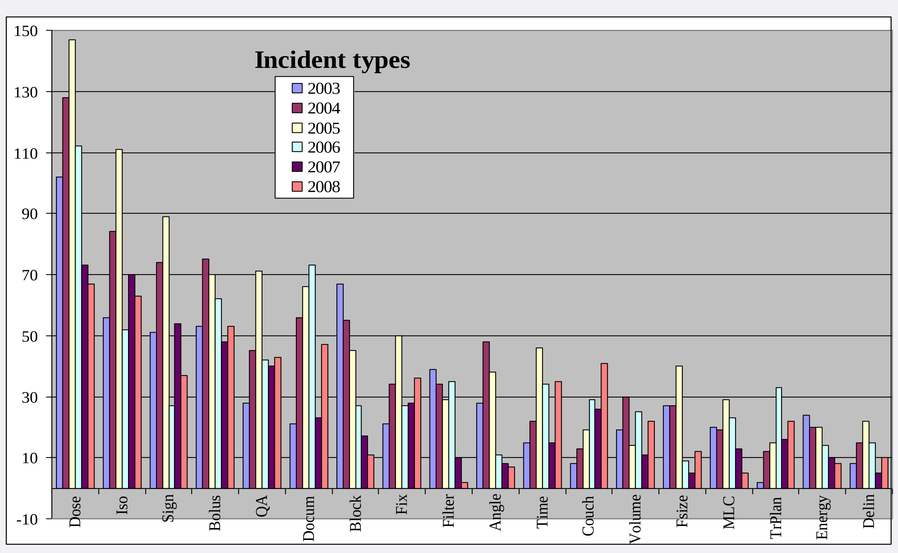
To counteract a blaming culture, the system has been introduced as an incident learning system instead of an incident reporting system

National system:
Statistics from local registrations collected and national statistics generated
Descriptions of severe incidents (grade 3) collected and follow-up considered
Annual reports with registered data shared with Local Quality Groups

Maintaining common taxonomy, codes, definitions
Established separate web pages (part of KVIST-portal) as forum for national Incident Working Group
- Contains statistics, presentations and reports from meetings, literature
- Acts as information channel for members of group

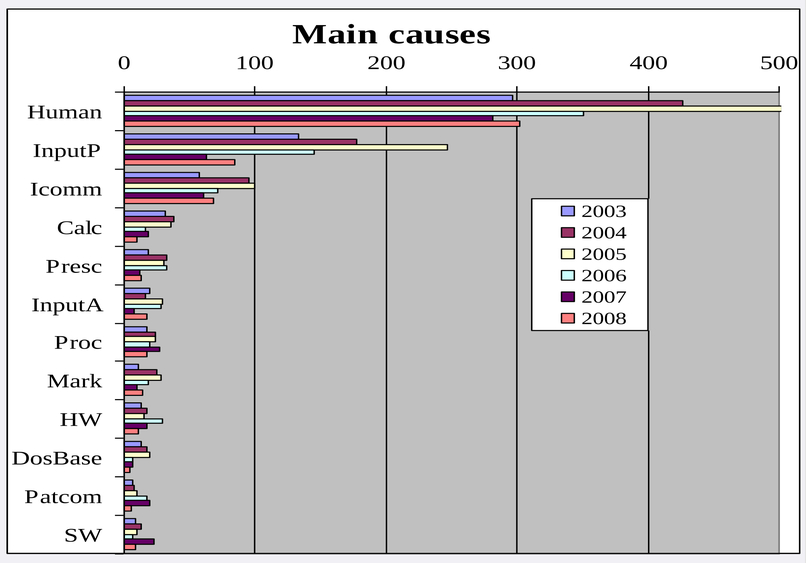
Arrange annual meetings with workshops
- For information, learning and inspiration
- Discussing incidents and solutions to reduce probability of incidents
- Discussing improvements of system

Collects information on incidents/accidents and reporting systems from other countries. Keeps Working Group updated of international work on patient safety



Impact level

Grade	Potential	2006	2007	2008
1	Insignificant	439	238	153
2	Moderate	104	125	112
3	Considerable	30	23	42
Grade	**Patient**	**2006**	**2007**	**2008**
1	Insignificant	613	422	413
2	Moderate	90	52	76
3	Considerable	15	4	8



Examples of data reported to KVIST group for four of the classes. Only data for selected codes are shown for incident type and main cause

What should be reported in an incident learning system?
Incident has been defined in many different ways.
For an incident learning system a low level threshold should be used, and the national Incident Working Group decided to define the term "**Incidents obligatory for registration**".
That is incidents or near misses that have **passed a control point** without correction.
Hence necessary control points and checks during planning and treatment process had to be defined in all centres to cover all aspects of the process.

Taxonomy/classification used (number of codes in brackets):
- Type of incident (25),
- Main cause and contributing factors (20),
- Origin (11),
- Number of patients involved,
- Impact level (for patients) (3),
- Potential impact level (general case) (3),
- Corrective actions (5),
- Physician/patient informed (3),
- Reported to hospital safety system (2)

Conclusions:
The incident reporting system is implemented at all radiotherapy centres in Norway. During a six years period, over 4500 incidents are registered and stored into a learning database.
Experience shows that the system:
- facilitates a low threshold for reporting; the aim is quality assurance and constant improvement by learning, not blaming
- raise the awareness of incidents locally
- has provided significant knowledge locally and nationally through inter centre cooperation and from the national data base for incidents
- needs constant development to maintain the utility value and user friendliness

A national multidisciplinary group is necessary for constant development and maintenance of the system and to inspire the radiotherapy centres. This group should be conducted by an independent body with expertise in radiotherapy like for instance the KVIST group.

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Information about the KVIST initiative and ongoing work is found on www.nrpa.no : click Publications/NRPA bulletin 8:2008 "Quality Assurance in Radiotherapy – eight years outcome"