

# **Improvement of patient safety in Dutch radiotherapy, by benchmarking data of incident analyses (PRISMA) between 17 radiotherapy departments.**

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## **Purpose:**

To construct a national databank of analyzed incident data, with the help of a collective database 'PRISMA-RT' (Prevention Recovery Information System for Monitoring & Analyses). The aim is to compare incident data on process level to improve radiotherapy processes. These comparisons can occur within individual departments as well as on national level. This co-operation intends to take patient safety in Dutch radiotherapy to a higher level.

## **Method:**

The development of the national initiative for benchmarking incident analyses within Dutch radiotherapy, finds its origin in two co-operation projects between different radiotherapy departments. The OZRC, a co-operation of six independent radiotherapy departments, decided to educate the departments on the PRISMA-method in 2004 collectively. This was the first step to benchmark with incident analyses data between departments, based on PRISMA-data in relation to specified processes. Then three radiotherapy departments started research with focus on patient safety. This research compared PRISMA-data of patient identification and data transfer incidents. To simplify these examinations, it is important to have a collective database. Based on these two initiatives, 17 out of 21 Dutch radiotherapy departments decided to participate in the collective of PRISMA-RT and started participating in a collective national database. The company Grecom (Patient Safety Company) and DHD (Dutch Hospital Data) supported to establish PRISMA-RT. A software module has been adjusted and fine-tuned to be used for benchmarking radiotherapy.

## **Results:**

Since 2008, a national database system has been available, by which 17 radiotherapy departments are able to collect (near) incidents reports digitally, analyze incidents and report these analyses to the organization. The 17 departments all use PRISMA-method to analyze their (near) incidents. PRISMA-data (root causes) and context variables are transferred from individual database to a central benchmark module.

To exchange information and support benchmarking, a website has been founded.

## **Conclusion:**

PRISMA-method has proved to be feasible as a systematic incident analyses method. Based on first collective project (see above) there are expectations that a national co-operation creates another dimension to quality improvement and patient safety in Dutch radiotherapy. This has to be proven in near future, but efforts and expectations of all participating departments are major.

Keywords: Benchmarking, 17 radiotherapy departments , PRISMA, patient safety

Topics: Patient care of QA: Legal issues, risk management and audits?