Network CIRS-Berlin – a regional patient safety incident reporting network

Netzwerk **CIRS-Berlin**

Hoffmann B[1], Bielecki E[2], Koehr M[2], Sanguino Heinrich A[3], Schaefer H[1], Thomeczek C[3], Jonitz G[1], Wyrwich W[1]
[1] Berlin Chamber of Physicians, [2] Berlin School of Public Health, [3] German Agency for Quality in Medicine

Context and problem:
Since 2005, internal patient safety incident reporting systems have been implemented in many acute hospitals throughout Germany. They are perceived to be an important instrument to identify errors and learn from them. Many similar incidents continue to occur in hospitals all over the country. We have therefore implemented a common regional platform for hospitals which opens the opportunity to learn collectively and to directly involve clinicians in the analysis of reports and quality improvement.

Assessment of problem and analysis of its causes:
At the start of the project, internal incident reporting systems were already in use in some hospitals in Berlin. No central system and no cooperation existed between hospitals run by different trusts.

Intervention
A regional reporting system ("Netzwerk CIRS-Berlin") was implemented in 2008 (see figure 1). It consists of a central database that is publicly available on a website (www.cirs-berlin.de), and hospital-specific (internal) reporting groups from 19 hospitals in Berlin run by ten trusts (see table). Health care professionals, mostly doctors and nurses, report near misses to their internal reporting systems. These reports are then transferred to the central system if the local administrators consider them to provide good learning opportunities for other hospitals.
Hospital representatives also collectively analyse them at bimonthly meetings ("forum of users"). Measures to prevent similar incidents are then developed, and monthly newsletters published as a means of informing staff in the member hospitals about the incidents and how to prevent them in the future. Staff of the providers of the network give support by guiding the meetings, the development of preventive measures, and by providing relevant literature and other material to the hospitals.

Study design
1) We analysed the data base of reports regarding the incident type and other characteristics of the reports. 2) We conducted a self-administered survey amongst the representatives of the member hospitals regarding characteristics of the internal reporting systems. 3) We carried out in-depth interviews with the representatives to detect barriers and incentives to reporting within hospitals, and regarding strengths and weaknesses of the network reporting system.
The survey and interviews were analysed anonymously.

Number of beds	No. of trusts
< 300	3
300-600	5
> 600	2
Number of admissions per year	No. of trusts
< 10.000	4
10.000 – 100.000	4
> 100.000	2
Number of hospitals per trust	No. of trusts
1	8
3	1
8	1
Internal reporting system run since [years, range]	3 (1 to 6)

Figure 1:

Figure 2:
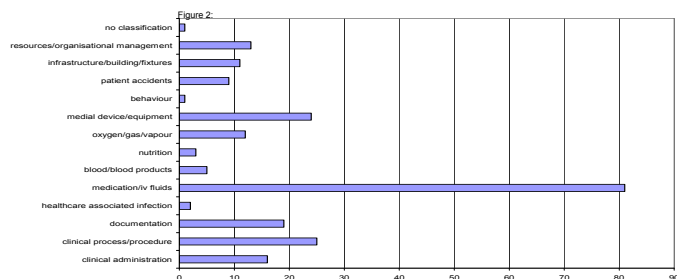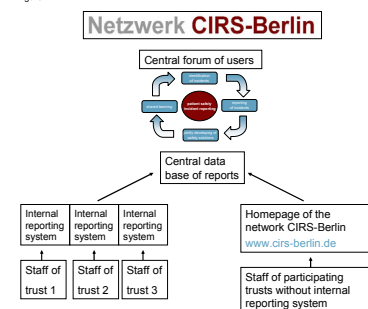
[1] World Health Organization. The Conceptual Framework for the International Classification for Patient Safety Version 1.1 Technical Annex 1. International Classification for Patient Safety Concepts by Class. January 2009

Effect of changes
In August 2012 185 incidents from around 1,200 reports received by the internal systems have been transferred to the central system. Doctors and nurses contributed reports in equal shares to the system. The majority of the 185 reports dealt with medication incidents (36.7 %), medical device incidents (10.9 %) and documentation incidents (8.6 %) (see figure 2).
In seven trusts a dedicated group of health care professionals regularly analysed internal reports, in five of the trusts staff was receiving feedback on reports via more than one information channel (e. g. e-mail, intranet, or staff journal). Trusts that systematically implemented their internal reporting system or providing feedback to their staff on various ways more often reported increasing numbers of incoming reports whereas other trusts more often demonstrated a decreasing frequency of reports.
Participants gave several strengths of the network: It provides a broader base of knowledge about incidents and their causes, practical learning based on concrete incidents, and the opportunity to exchange experiences and knowledge amongst peers. Support by the regional chamber of physicians was felt to be helpful amongst others because of its good reputation.
Under reporting was perceived to be a problem in most trusts and contributed to the only small number of reports in the network system. Due to legal reasons in Germany, only near misses are to be reported into publicly available reporting systems. For more details see box.

Strenghts and weaknesses of the network
"Without the network our own reporting system would have encountered much more difficulties, we would not have gone so far as we are now." (interview 8)
"I like to attend the forum of users. In my opinion, with this forum the network comes to life … and with the things that result from the forum's work." (interview 8)
"I perceive a great advantage of the network - to learn that others experience the same incidents as we do." (Interview 2)
"We look at the reports from other hospitals and check if those incidents can happen in our hospital too." (Interview 5)
"I am worried that the public may understand that a high number of reports indicate a high number of errors." (Interview 1)

Lessons learnt
A successful reporting platform depends on well functioning internal reporting systems. However, a central platform is able to support internal reporting systems also by providing assistance with issues regarding implementation of internal reporting systems and strategies for education of staff, analysis of incidents, and development of preventive measures.
Message for others
A regional reporting network is perceived as beneficial to promote a learning culture in hospital care. To this end, involvement of clinicians seems to be a crucial component.