

Lagtime in incident reporting at a university hospital in Japan

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Objective:

To determine the factors associated with delays in incident reporting after medical accidents at Kyoto University Hospital in Japan.

Methods:

An Incident Reporting System was implemented at Kyoto University Hospital in March 2000, just after the occurrence of a serious medical adverse event. We used 6,901 reports of medical accidents filed by physicians and nurses between 2002 and 2004. We examined the lagtime, defined as the length of time between the accident and submission of an incident report about it, and characteristics of the incident reports for significant associations. We performed univariate and multivariate analysis for lagtime using Poisson regression with over-dispersion.

Results:

Table 1. Incident report characteristics (n=6,901).

Level of injury	Major (Disability or prolonged hospital stay)	241 (3.5%)
	Minor or none	6660 (96.5%)
Reporting clinician	Nurse	6432 (93.2%)
	Doctor	469 (6.8%)
Year	2002	2322 (33.7%)
	2003	2533 (36.7%)
	2004	2046 (29.6%)
Lagtime (time between accident and report)		Mean 2.3 days (standard deviation +/- 4.9 days)

Table 2. Factors associated with differences in lagtime.

Profession	Physician		Nurse	
Mean lagtime (s.e.)	3.79 days (0.09)*		2.20 days (0.02)*	
Level of injury	Major		Minor	
Mean lagtime (s.e.)	2.88 days (0.11)*		2.29 days (0.02)*	
Year of system	Year 1 (2002)	Year 2 (2003)	Year 3 (2004)	
Mean lagtime (s.e.)	2.52 days (0.03)*	1.90 days (0.03)*	2.57 days (0.04)*	

*p<0.001

Lagtime was significantly longer for physicians than nurses, patients with major injuries vs. minor injuries, and for the second year of the system's implementation. There was no significant difference in lagtime between medical wards (59% of patients) and surgical wards (41%).

In multivariate analysis, profession and year of reporting remained significant, while level of injury was no longer significant. Physicians had an adjusted lagtime in reporting accidents 1.7 times longer than nurses (p=0.01). Reports in the second year of the system (2003) had a lagtime 0.7 times shorter than in the first or the third year (p=0.01).

Conclusions:

The extent of awareness of health care professionals on patient safety culture was observed from the view point of the lag time of reports. The results show the importance of patient safety culture to incident reports by doctors.

To foster patient safety culture much more at the hospital, we found that the following must be addressed:

- a) It is very important to motivate doctors to be attentive to patient safety;
- b) There can be significant year-to-year differences in performance of incident reporting systems.