HOSPITAL
MOINHOS DE VENTO

Near Miss analysis in a large hospital: a 5-year retrospective study

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Hospital Moinhos de Vento

Located in Southern Brazil, Hospital Moinhos de Vento is one of the six hospitals of excellence of the country and delivers clinical and hospital care with an emphasis in complex pathologies.

capacity
497 beds
28k hospitalizations

intensive care unit
85 beds

maternity
50 beds
4k deliveries

surgery center
17 operation rooms
23k surgeries

Data from 2017

High Reliability Organizations

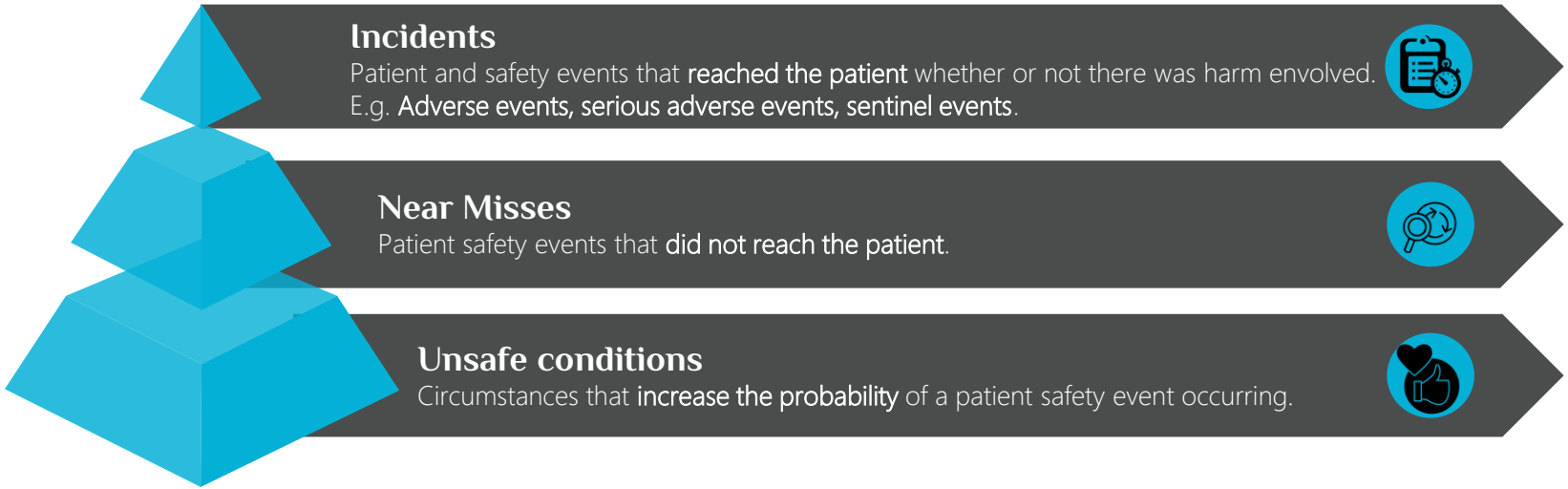
A High Reliability Organization (HRO) is an organization that has successfully **avoided catastrophe** in an **environment where accidents can be expected** due to **risk factors and complexity**.

- SITUATIONAL AWARENESS
- PREOCCUPATION WITH FAILURE
- DEFERENCE TO EXPERTISE
- COMMITMENT TO RESILIENCE
- RELUCTANCE TO SIMPLIFY INTERPRETATIONS

https://psnet.ahrq.gov/resources/resource/7076/becoming-a-high-reliability-organization-operational-advice-for-hospital-leaders.

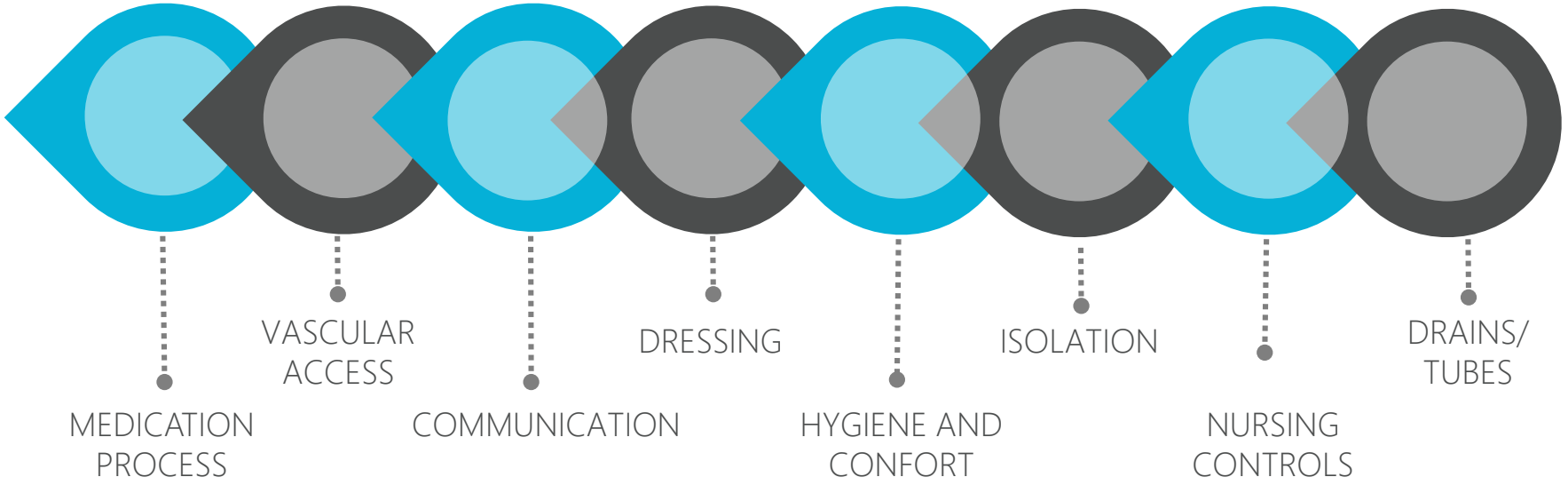
And when this environment is a hospital?

Adverse Events Classification



https://psnet.ahrq.gov/primers/primer/13/Reporting-Patient-Safety-Events

Near Miss Incidents Report



Objective and Methods

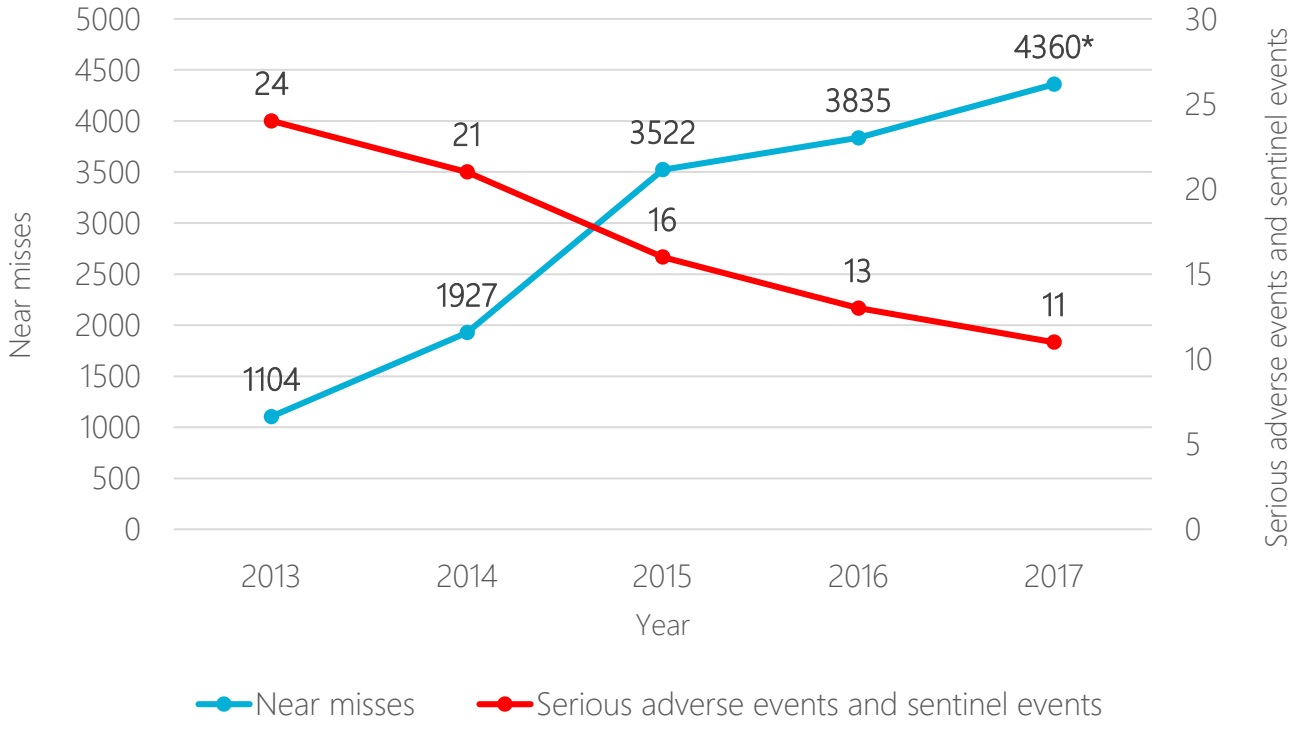
OBJECTIVE

To analyze all near miss incidents
in a private, non-profit, Hospital in the South of Brazil.

METHODS

- Descriptive, retrospective study
- Data colection was performed on August 25, 2017
- Inclusion criteria: near miss events related to medication process and patient care recorded between January 1, 2013 and August 24, 2017.

Results – number of reports



* Jan-Aug 2017

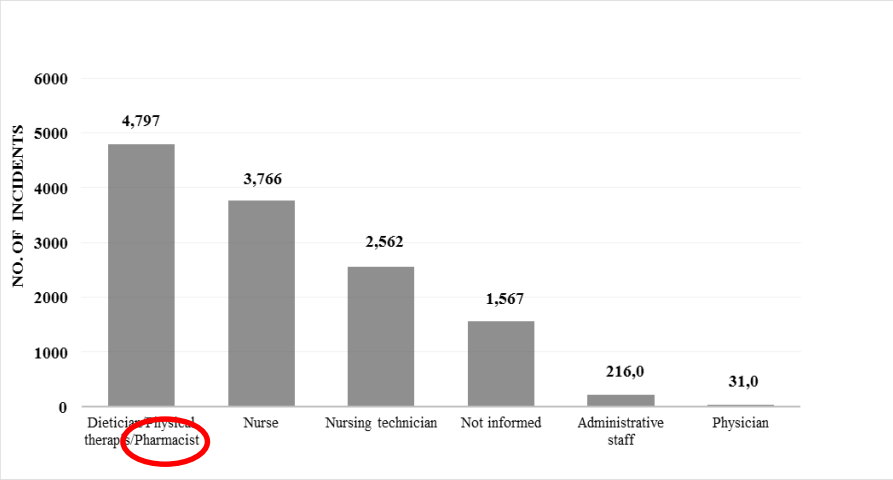
Results – number of reports by category

Near Miss	Year									
	2013 (n=1,104)		2014 (n=1,927)		2015 (n=3,522)		2016 (n=3,835)		2017 (n=2,551)	
	n	%	n	%	n	%	n	%	n	%
Venous/vascular access	–	–	6	0,3	177	5,0	291	7,6	188	7,4
Sterile materials	–	–	4	0,2	48	1,4	96	2,5	44	1,7
Communication	1	0,1	23	1,2	72	2,0	91	2,4	64	2,5
Fall prevention/restraint measures	–	–	6	0,3	32	0,9	34	0,9	17	0,7
Dressing	–	–	3	0,2	58	1,6	70	1,8	42	1,6
Drains/Tubes	–	–	8	0,4	76	2,2	93	2,4	58	2,3
Gas therapy	–	–	10	0,5	119	3,4	60	1,6	35	1,4
Glycotest	–	–		0,0	2	0,1	14	0,4	9	0,4
Hygiene/Comfort	–	–	11	0,6	54	1,5	59	1,5	49	1,9
Patient identification	–	–	19	1,0	171	4,9	176	4,6	114	4,5
Isolation precautions	–	–	6	0,3	33	0,9	53	1,4	24	0,9
Maintenance/Hotel services	–	–	7	0,4	29	0,8	18	0,5	16	0,6
Miscellaneous materials	–	–	15	0,8	81	2,3	230	6,0	124	4,9
Other		–	162	8,4	714	20,3	888	23,2	654	25,6
Control spreadsheets/recording info in patient chart/ fluid balance	1	0,1	54	2,8	189	5,4	242	6,3	289	11,3
Vital signs/Thermotherapy			3	0,2	21	0,6	26	0,7	19	0,7
Medication process	1,102	99,8	1,590	82,5	1,646	46,7	1,394	36,3	805	31,6

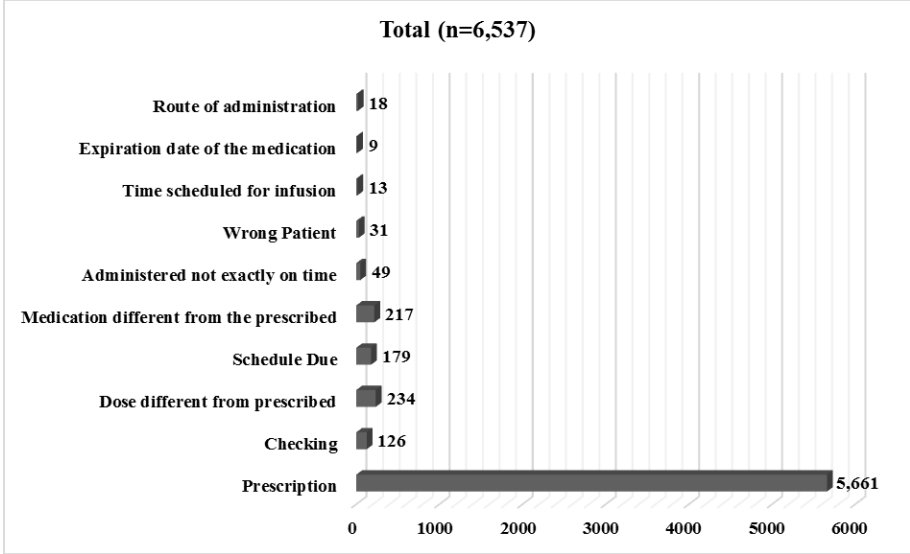
Shaded cells indicates statistical association between year and number of near miss incidents reported during the year. Fisher's chi square test; $p<0.001$).

Results

Number of Reports by Professionals



Number of Near Misses in the Medication Process



Conclusion

We analyzed 12,939 near miss events related to the medication process and patient care recorded between January 1, 2013 and August 24, 2017.

Considering the number of admissions of the period (125,430 patients)
the prevalence of reported near miss events was 10.3%.

Medication-related near miss incidents were the most frequent.
Near misses associated with the recording of patient information (mainly related to fluid balance) and venous/vascular puncture were also frequent in the analyzed events.

Safety culture is well-established and connected to the organizational culture in the institution.
There is good adherence of professionals to the reporting system.

When a near miss occur, the teams that reported the event are always involved in the design and implementation of strategies to improve safety.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Mohamed Parrini, CEO
THANK YOU