

# Morts evitables i potencialment evitables en politrauma. Quins errors cometem?

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# OBJECTIUS

- Detectar la mortalitat evitable i potencialment evitable en pacients politraumatitzats
- Analitzar els errors en el maneig dels pacients que han mort

# Com ho hem fet?



Pacients politraumatitzats >16a ingressats en àrea de crítics, que han estat exitus.



En sessions multidisciplinàries...



Mortalitat evitable

Mortalitat potencialment evitable

Mortalitat no evitable

# Com classifiquem els errors?

World J Surg. 2014 Dec;38(12):3125-32. doi: 10.1007/s00268-014-2755-0.

**Preventable and potentially preventable deaths in severely injured elderly patients: a single-center retrospective**

Bone Joint J. 2014 Sep;96-B(9):1178-84. doi: 10.1302/0301-620X.96B9.32814.

**Preventable mortality in geriatric hip fracture patients**

J Trauma. 2011 Apr;70(4):970-7. doi: 10.1097/TA.0b013

J Clin Neurosci. 2000 Nov;7(6):507-14.

**The preventability of death in road traffic fatalities: a**  
**Committee on Road Traffic Fatalities**

J Trauma. 1999 Aug;47(2):243-51; discussion 251-3.

**Analysis of preventable pediatric trauma deaths**

J Trauma. 1995 Nov;39(5):955-62.

**Analysis of preventable trauma deaths among major trauma**

Injury. 1996 Apr;27(3):189-92.

**Preventable deaths among major trauma patients**

Aust N Z J Surg. 1998 Dec;68(12):820-5.

**Preventable trauma deaths in Singapore**

JAMA. 1989 Jan 27;261(4):566-70.

**Evaluation of potentially preventable trauma deaths**

Rivara FP<sup>1</sup>, Maier RV, Mueller BA, Luna GA, Dicker BG, Herman CM, Kenagy JW, Copass MK, Carrico CJ.

Ann Surg. 1991 Oct;214(4):510-20; discussion 520-1.

**Analyses of preventable deaths by mechanism of injury among 13,500 trauma admissions.**

Cayten CG<sup>1</sup>, Stahl WM, Agarwal N, Murphy JG.



oria, Australia. The Consultative

are in Montana.

rural state.

n Wales and the Isle of Man.

clist fatalities.

# Com classifiquem els errors?



Parc Taulí Sabadell  
Hospital Universitari

*International Journal for Quality in Health Care* 2005; Volume 17, Number 2: pp. 95–105  
Advance Access Publication: 21 February 2005

10.1093/intqhc/mzi021

## **The JCAHO patient safety event taxonomy: a standardized terminology and classification schema for near misses and adverse events**

ANDREW CHANG, PAUL M. SCHYVE, RICHARD J. CROTEAU, DENNIS S. O'LEARY AND JEROD M. LOEB

JCAHO, Division of Research, Oakbrook Terrace, Illinois, USA

## Aplicat al pacient politraumatitzat...

*J Trauma*. 2008 Feb;64(2):265-70; discussion 270-2. doi: 10.1097/TA.0b013e318163359d.

**Patient safety in trauma: maximal impact management errors at a level I trauma center.**

Ivatury RR<sup>1</sup>, Guilford K, Malhotra AK, Duane T, Aboutanos M, Martin N.

*Am J Surg*. 2014 Aug;208(2):187-94. doi: 10.1016/j.amjsurg.2014.02.006. Epub 2014 Apr 13.

**Classifying errors in preventable and potentially preventable trauma deaths: a 9-year review using the Joint Commission's standardized methodology.**

Vioque SM<sup>1</sup>, Kim PK<sup>2</sup>, McMaster J<sup>2</sup>, Gallagher J<sup>2</sup>, Allen SR<sup>2</sup>, Holena DN<sup>2</sup>, Reilly PM<sup>2</sup>, Pascual JL<sup>3</sup>.

# Resultats

Març 2006 – Desembre 2014: 1236 pacients registrats

ISS mig 20.77 – Mortalitat global 9.3%

Mortalitat global (115p)

46% Neurològica  
32% Shock hipovolèmic  
9% FMO  
9% Respiratòria  
4% Cardíaca

Mortalitat evitable i  
potencialment evitable (19p)

37% Shock hipovolèmic  
26% Neurològica  
16% FMO  
16% Respiratòria  
5% Cardíaca

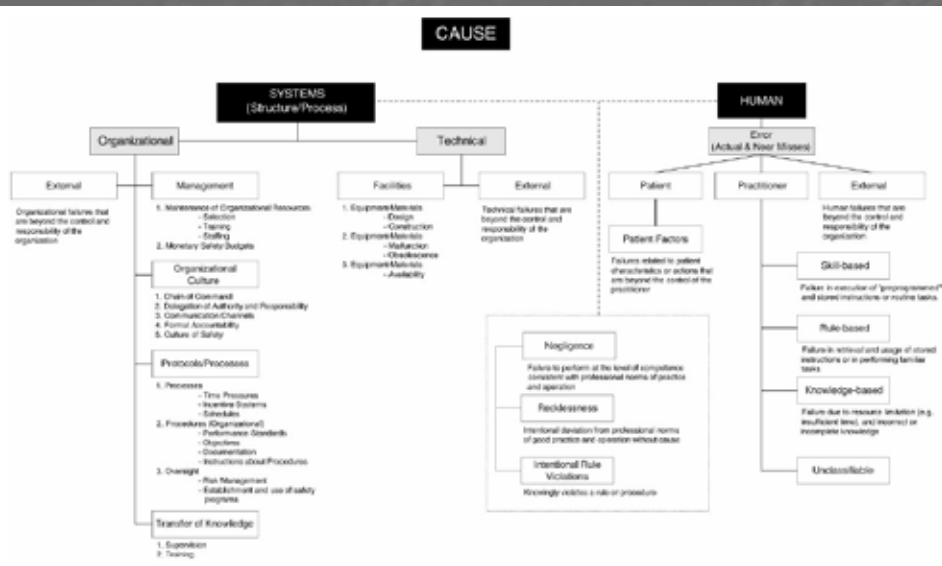
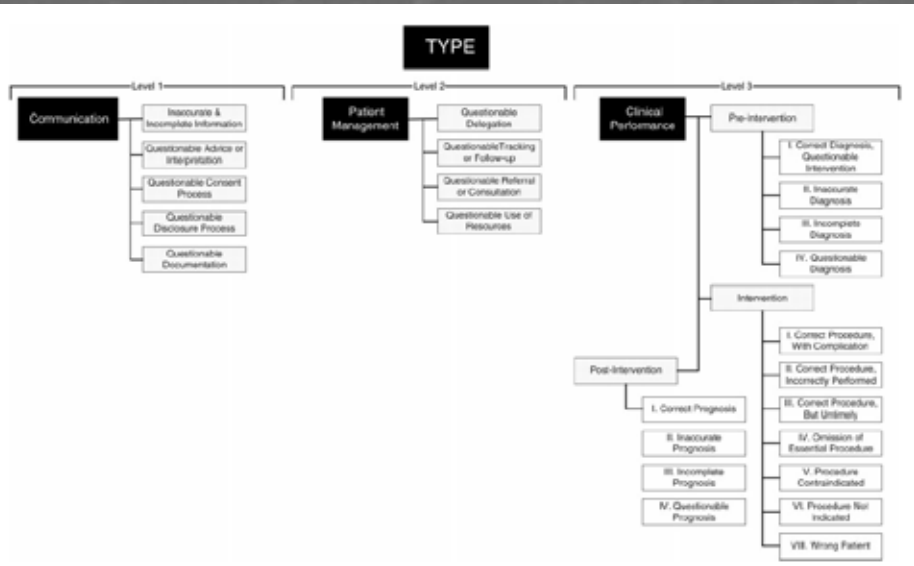
# Resultats

**16.5%** de mortalitat evitable i potencialment evitable sobre el total de mortalitat.

**130 errors**

84 Mortalitat no evitable

46 Mortalitat evitable o potencialment evitable



### DOMAIN

SETTING				STAFF			PATIENT	TARGET
Hospital	Practitioner Office	Ambulatory Care Clinic	Nursing Home	Physician-Intern/Resident	Nurses Aide	Pharmacist	Age	Therapeutic
Emergency Dept.	Ambulatory Care	OR	Home	Physician	Nurse-LPN	Pharmacy Technician	Gender	Diagnostic
Skilled Nursing Facility			Hospice	Dentist	Nurse-RN	Radiation Technician	Diagnosis	Rehabilitative
Clinical Laboratory	Diagnostic Procedures	Rehabilitation Facility	Mental Health Facility	Psychologist	Nurse Practitioner	Optometrist	Coexisting conditions	Preventive
Psychiatric Unit	Rehabilitation	Long Term Care Facility	Psychiatric Hospital	Chiropractor	Physical Therapist	Other	Duration of disease	Palliative
Pharmacy	Hospice	Physician Assistant	Health Profession Student	Podiatrist	Occupational Therapist	Other	Social economic status	Research
Interventional Radiology	Cath. Lab	Speech Therapist	Other Caregiver	Other	Other	Other	Education level	Cosmetic
Outpatient Behavioral Health	Other	Other	Other	Other	Other	Other	Race and Ethnicity	Other
							Other	Other



# Resultats (JCAHO)

Type error	130 errors (M.Global)	46 errors (ME-MPE)
<b>Communication</b>		
Questionable advice or interpretation	12	3
Questionable documentation	8	0
<b>Management</b>		
Questionable tracking or follow-up	5	12
Questionable use of resources	2	7
Questionable delegation	1	1
<b>Clinical Performance</b>		
<b>Diagnosis (Pre-intervention)</b>		
Inaccurate diagnosis		
<b>Intervention</b>		
Correct procedure, but untimely		
Omission of essential procedure		
Procedure contraindicated	26	9
Correct procedure, incorrectly performed		3
Procedure not indicated		4
Correct procedure, with complication		1
<b>Prognosis (Post-intervention)</b>		
Questionable prognosis	6	2
Inaccurate prognosis	2	2

Damage control  
correctament realitzat,  
però que dura 3h.

Fx pelvis  
hemodinàmicament  
inestable a qui no es  
realitza arteriografia

Anar al TC en pacient  
hemodinàmicament  
inestable

Ü

Ü

# Resultats (JCAHO)

Domain error	130 errors (M.Global)	46 errores (ME-MPE)
Setting		
Emergency department	54	19
Diagnostic Procedures	26	9
Operating room	19	6
Interventional Radiology	14	6
Pre-hospital care	10	0
ICU	7	6
Staff		
Physician	120	43
Nurse	8	2
Target		
Therapeutic	62	26
Diagnostic	63	20
Other	1	0

# Resultats (JCAHO)

\* Anar al TC hemodinàmicament inestable

\* No fer Rx pelvis durant Revisió Primària.

Cause error	IS (M. Global)	46 errors (ME-MPE)
Human		
Rule-based (failure of recall of stored instructions)	56	
Knowledge-based (insufficient time, incomplete knowledge)		
Skill-based (failure in execution of stored instructions)	27	
System Organizational		
Protocols - Procedures: Instructions about procedures	8	
Protocols - Procedures: Documentation	0	
External	1	0
System Technical		
Equipment/Material Obsolescence		1

\* Fx costals múltiples amb mal control del dolor i ingrés a urg per infravaloració del pronòstic

\* FAST que no veu sang en pericardi, però n'hi ha

\* IOT amb intubació esofàgica

\* Drenatge pleural mal col·locat

# CONCLUSIONS

- L'anàlisi dels propis resultats és imprescindible per millorar la qualitat assistencial dels nostres pacients.
- Amb l'ús d'una terminologia variada en la classificació dels errors, podem extreure conclusions pobres i en absolut comparables amb altres sèries.
- Un llenguatge comú com la taxonomia de la Joint Comission que combina la terminologia, la ciència i la classificació, permet una estandardització en la seguretat i la qualitat assistencial del pacient.



Moltes gràcies