

QUALITA' DELLE CURE E SICUREZZA DEL PAZIENTE

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SAFETY ON THE CURRICULUM

WHO wants patient safety to be included from the start of medical education. **Oliver Ellis** reports

Until now, little has been done to educate future doctors about the idea that health care harms patients. The World Health Organization hopes that this will change with the publication of its curriculum guide next year. The new curriculum, currently being piloted, will detail how medical schools should teach patient safety to undergraduate doctors.

The publication builds on growing concerns that medical errors have high human and financial costs. In 2000, the Institute of Medicine's Committee on Quality of Health Care in America found that in the US alone up to 98,000 deaths a year could be attributed to medical errors, costing between \$17bn (£10bn; €12bn) and \$296n. It concluded that "The status quo is simply not acceptable and

tion on patient safety as well as a detailed undergraduate curriculum and sample exam questions.

The authors expect that much of the material will be integrated into existing educational modules. Merilyn Walton, director of patient safety at Sydney Medical School and lead author of the report, says: "Many components can be easily incorporated through further development of existing subjects or topics. Areas such

WHO curriculum on patient safety¹

- What is patient safety?
- What are human factors and why is it important for patient safety?
- Understanding systems and the impact of complexity on patient care
- Being an effective team player
- Understanding and learning from errors
- Understanding and managing clinical risk
- Introduction to quality improvement methods
- Engaging with patients and carers
- Minimising infection through improved infection control
- Patient safety and invasive procedures
- Improving medication safety

currently is lacking." He is more guarded about the practicalities of implementation, however, as he thinks that the curriculum is necessarily too specific so that it is applicable worldwide. "It depends on the curriculum in that particular medical school. In the UK it needs to be considered and implemented within the current content of the curriculum." The curriculum is currently being tested

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graduates reported that principles. Showed that medical students should have some consideration of patient safety about the time that they start to come into contact with patients, which currently is lacking"

Medical schools piloting WHO curriculum

- School of Medicine, Cardiff University
- University of Aberdeen Medical School
- College of Medicine, King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia
- Sydney Medical School, Australia
- Sackler Faculty of Medicine, Tel-Aviv University, Israel
- School of Medicine, del Salvador University, Buenos Aires, Argentina
- Patan Academy of Health Science, Kathmandu, Nepal
- Hawassa University College of Health Science, Faculty of Medicine, Ethiopia
- Maulana Azad Medical College, New Delhi, India
- Faculty of Medicine, University of Manitoba, Winnipeg, Canada

SOMMARIO

- ALCUNI ESEMPI DEL PROBLEMA
- DIMENSIONI STIMATE DEL PROBLEMA
- COME AFFRONTARE IL PROBLEMA
 - STRATEGIE
 - METODOLOGIA
- CONCLUSIONI

IL CASO DELLA VINCRISTINA

Vincristine... should only be administered intravenously.

Patients receiving intravenous vincristine can also receive other medication via a spinal route as part of their treatment protocol.

This has led to errors where vincristine has accidentally been administered via a spinal route, which leads to death in almost every case.

Vincristine delivered by spinal route

IL CASO DELLA VINCRISTINA

Over the last

35 years,

this error has been reported approximately

55 times

in a variety of international settings.

However, errors related to the accidental administration of vincristine via a spinal route continue to occur.

WHO/IER/PSP/2008.09
World Health Organization 2008

Vincristine
delivered by
spinal route

PRESCRIZIONE DI UN
CHINOLONICO ORALE A
PAZIENTE CHE HA GIA'
AVUTO EFFETTI
COLLATERALI E CHE DICE
DI AVERLO COMUNICATO
ALL' ATTO DEL RICOVERO

Rischio Clinico: Epidemiologia AE Prevenibili

	Harvard Medical Practice Study	To err is Human	Australian	New Zealand	UK
Adverse Events (AE)	3.7 %	4 %	16.6 %	12.9 %	10.8 %
AE prevenibili sul totale degli AE	58 %	53 %	53 %	35 %	47 %
Fonte	Leape et al N.Eng.J.Med: 370-84,1991	Kohn et al IOM 1999.	Wilson et al Med J Austr 163:158, 1995	Davis et al Ministry of Health 2001	Vincentd et al BMJ 322: 517, 2001.

Rischio Clinico: Epidemiologia AE % Mortalità

	Harvard Medical Practice Study	To err is Human	Australian	New Zealand	UK
Adverse Events (AE)	3.7 %	4 %	16.6 %	12.9 %	10.8 %
AE prevenibili sul totale degli AE	58 %	53 %	53 %	35 %	47 %
Mortalità sul totale degli AE	13.6 %	6.6 %	4.9 %	<15 %	8 %
Fonte	Leape et al N.Eng.J.Med: 370-84,1991	Kohn et al IOM 1999.	Wilson et al Med J Austr 163:158, 1995	Davis et al Ministry of Health 2001	Vincentd et al BMJ 322: 517, 2001.

LA PORTATA DEL PROBLEMA

In Italia, secondo i dati emersi nel primo Forum sul Risk Management in Sanità, la percentuale di eventi avversi si aggirerebbe attorno al 3% rispetto alla totalità dei ricoveri, su 10.000.000 di pazienti ricoverati all'anno i colpiti sarebbero circa 300.000 e 20.000 di essi ne riporterebbero conseguenze fatali.

<http://www.cineas.it/n/un-freno-aqli-errori-medici-grazie-ai-risk-manager-344-n.htm>

LA PORTATA DEL PROBLEMA

- Di tutti i ricoveri, sperimentano un evento avverso dal 3,7% al 16% in base a differenti studi, a seconda che si includano o no gli eventi minori.
- Una stima probabilmente corretta è quella che pone la percentuale di eventi avversi a circa l'11% dei pazienti ricoverati, di cui 1/3 circa causa di invalidita' permanente.
- E' verosimile che circa la metà dei casi sia prevenibile.
- Øvretveit stima che < 10% sia dovuto alla incompetenza del singolo e > 90% all'incompetenza del sistema organizzativo.

Brennan TA et al. N Engl J Med 1991;324:370-6.
Leape LL et al. N Engl J Med 1991;324:377-84.
Wilson RM et al. Med J Aust 1995;163: 458-71.
Weingart SN et al. BMJ 2000;320:774-7.

LA PORTATA DEL PROBLEMA

Chirurgia generale	16,2%
Medicina generale	16,2%
Ortopedia	14,4%
Ostetricia	4%
- Probabilità di morte > in seguito all' evento in chirurgia e medicina	
- Ogni evento avverso = 8,5 giorni di degenza aggiuntiva in media	

Vincent C et al. BMJ 2001, 322: 517-519

Logic Chain: Step 2

How Often Are Patients Injured by Care?

40 to 50 Patient Injuries per 100 Hospital Admissions

Source: IHI "Global Trigger Tool" Guiding Record Reviews

Category "E"

Temporary Injury from Care Requiring Intervention

EXAMPLE OF AN "E"

"An elderly woman was started on antibiotics for a skin infection without taking into consideration she was on an anticoagulant. She got an injection, and that led to a large and painful bleed into her thigh muscle."



Category "F"

Temporary Injury from Care Requiring Initial or Prolonged Hospitalization

EXAMPLE OF AN "F"

"A retired farmer had a hip replacement. On the second night after the operation he got confused and fell out of the bed, and dislocated his new hip. He was taken back to the operating room for repair and he went home a few days later than originally planned."

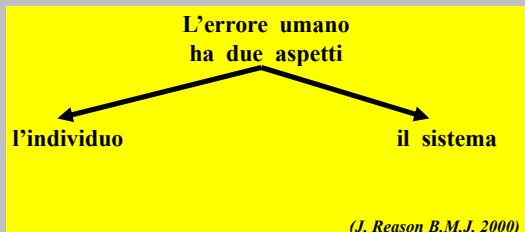


QUINDI: UN PROBLEMA **IMPORTANTE** CHE NON PUO' ESSERE IGNORATO

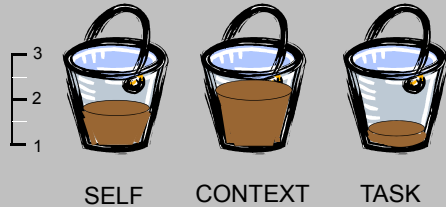
COME AFFRONTARLO?

- ⇒ CONOSCENZA
- ⇒ FORMAZIONE
- ⇒ ORGANIZZAZIONE

Approccio all' errore



The 3-bucket model for assessing risky situations (Reason, 2005)



APPROCCIO AL PROBLEMA

- Misurare gli eventi avversi e i quasi eventi
- Lavorare sui dati con sistematicita'
- Lavorare con il personale sul campo
- Controllare che i cambiamenti suggeriti dalla analisi dei dati vengano implementati nella pratica e sottoposti a valutazione, valorizzando i risultati positivi.

Øvretveit, 1998

COSA FARE SECONDO L'OMS

- **MEASURING HARM**
HOW MANY PATIENTS ARE HARMED OR KILLED,?
- **UNDERSTANDING CAUSES**
BECAUSE OF THE COMPLEX NATURE OF HEALTH CARE, THERE IS NO SINGLE REASON WHY THINGS GO WRONG.
- **DEVELOPING SOLUTIONS**
RESEARCH IS NEEDED TO DETERMINE WHICH SOLUTIONS ARE EFFECTIVE IN MAKING CARE SAFER AND REDUCING PATIENT HARM, COMPARED TO THE STANDARD OF CARE.
- **EVALUATING IMPACT**
ASSESS AND EVALUATE THE IMPACT, ACCEPTABILITY AND AFFORDABILITY OF SOLUTIONS THAT ARE IMPLEMENTED IN REALLIFE SETTINGS.

WHO/IER/PSP/2008.09
World Health Organization 2008

Metodologia per la identificazione e l'analisi dei rischi in sanità

- **Incident Reporting**
- Revisione Cartelle Cliniche
- Confronto Diagnosi Cliniche / Diagnosi Autoptiche
- Denunce URP
- Denunce Sinistrosità
- FMEA / FMECA
- **Root Cause Analysis**

MONITORAGGIO DEGLI EVENTI SENTINELLA IN ITALIA

Ministero della Salute

DIPARTIMENTO DELLA QUALITÀ
DIREZIONE GENERALE DELLA PROGRAMMAZIONE SANITARIA,
DEI LIVELLI DI ASSISTENZA E DEI PRINCIPI ETICI DI SISTEMA
UFFICIO III

**Protocollo per il
Monitoraggio degli Eventi Sentinella**

MONITORAGGIO DEGLI EVENTI SENTINELLA IN ITALIA

2. LISTA EVENTI SENTINELLA

1. Procedura in paziente sbagliato;
2. Procedura in parte del corpo sbagliata (lato, organo o parte);
3. Suicidio in paziente ricoverato;
4. Strumento o altro materiale lasciato all'interno del sito chirurgico che richieda un successivo intervento o ulteriori procedure;
5. Reazione trasfusionale conseguente ad incompatibilità ABO (codice ICD9CM: 999.6);
6. Decesso, coma o gravi alterazioni funzionali derivati da errori di terapia associati all'uso di farmaci;
7. Decesso materno o malattia grave correlata al travaglio e/o parto;
8. Abuso su paziente ricoverato;
9. Mortalità in neonato sano di peso >2500 g. entro 48 ore dalla nascita;
10. Ogni altro evento avverso che causa morte o gravi danni indicativo di malfunzionamento del sistema e che determina una perdita di fiducia dei cittadini nei confronti del Servizio Sanitario.

MONITORAGGIO DEGLI EVENTI SENTINELLA IN ITALIA



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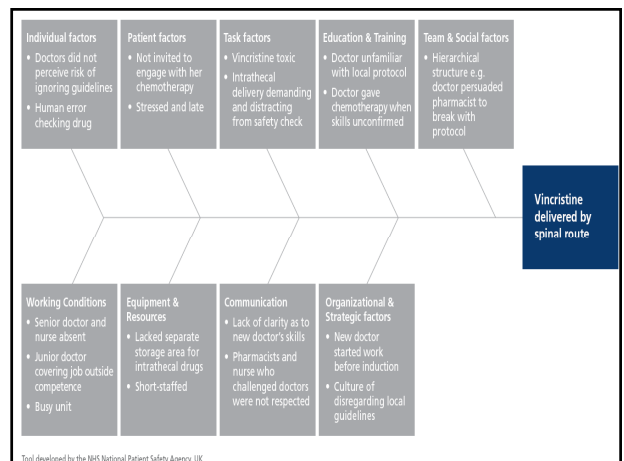
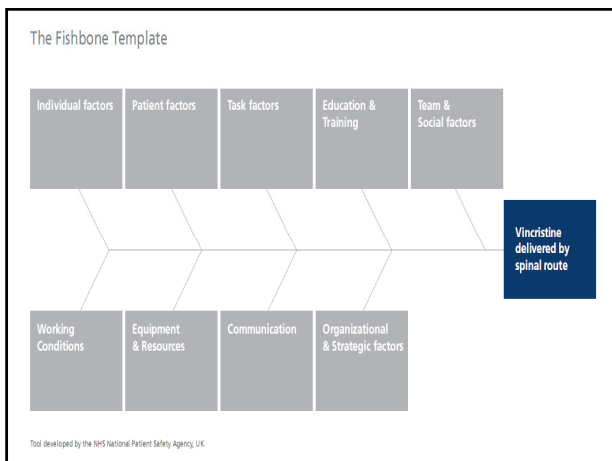
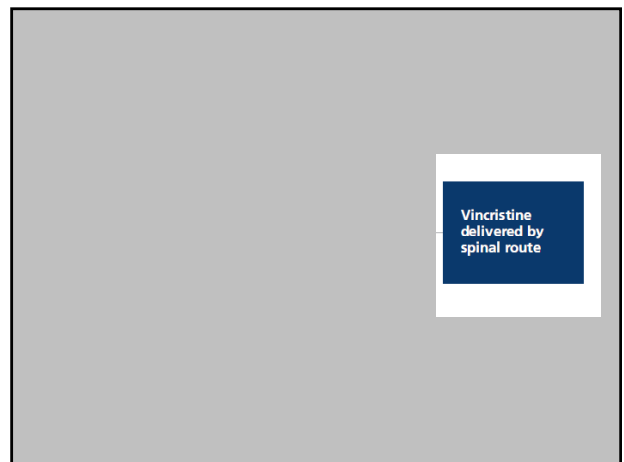
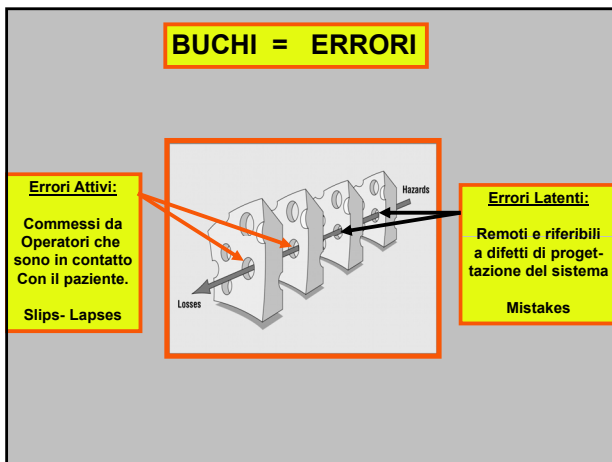
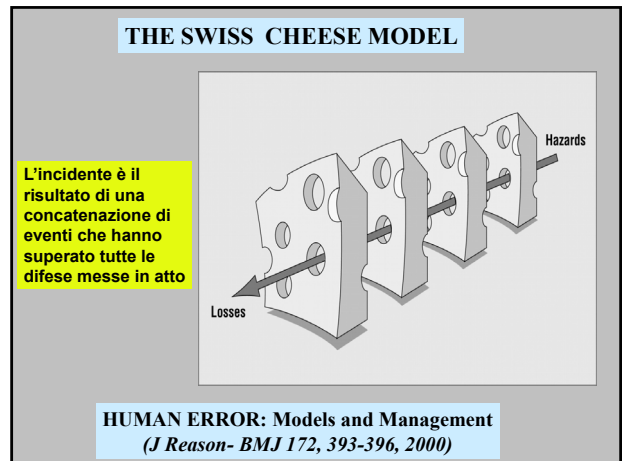
4. SCHEDA PER LA SEGNALAZIONE INIZIALE DEGLI EVENTI SENTINELLA

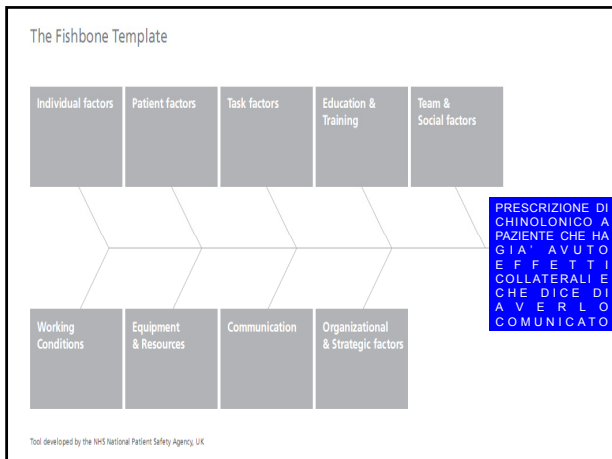
Denominazione Struttura sanitaria:.....

Indirizzo:.....

ASL / A.O. di appartenenza:.....

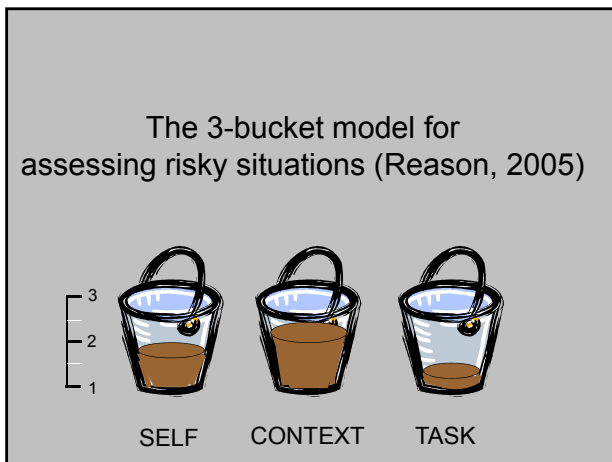
Referente Aziendale:.....Tel.





CONCLUSIONI:
LAVORARE OGNI GIORNO SUI QUASI-EVENTI, COINVOLGENDO TUTTO IL GRUPPO

GRAZIE PER LA VOSTRA ATTENZIONE

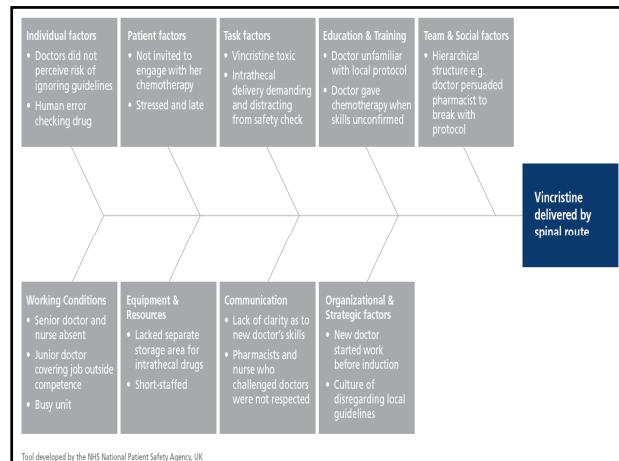
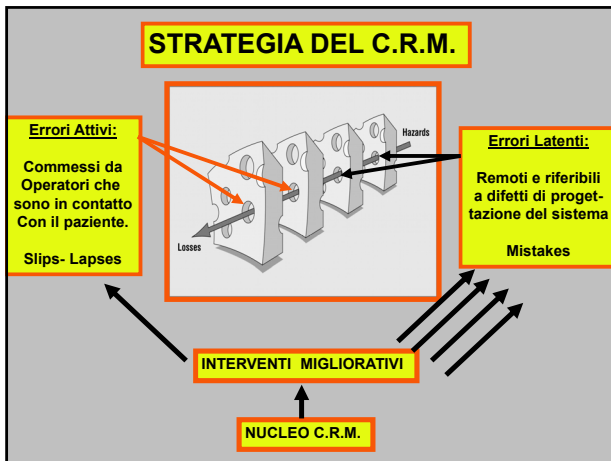


Three bucket	Learning outcome(s)
Self	<ul style="list-style-type: none"> - Current capacity to do this task safely - negative life events - stressors at work - knowledge and competence - fatigue - over-confidence / lack of confidence - involuntary automaticity
Context	<ul style="list-style-type: none"> - Distractions and interruptions - Human factors issues; e.g. design, environment - Goal conflicts - Culture (includes power distance) - Time pressure - Conflicting or missing information - Team focus (i.e. groupthink)

Three bucket	Learning outcome(s)
Task	<ul style="list-style-type: none"> - task complexity / difficulty - novel task - recently changed procedure or process - last step in a task sequence - no task procedures available - workarounds and non-compliance

Metodi per l'analisi del Rischio

<p>Analisi Reattiva</p> <p>Studio a posteriori o a valle dell'incidente. Mira alla individuazione delle cause che ne hanno permesso il loro verificarsi</p> <p>Esempio: Incident Reporting Root Causes Analysis</p>	<p>Analisi Proattiva</p> <p>Studio a priori o a monte dell'incidente. Mira alla individuazione ed eliminazione delle criticità prima che l'incidente si verifichi. Si basa sull'analisi dei processi ricercandone i punti di debolezza allo scopo di riformularne di più sicuri</p> <p>Esempio: FMEA - FMECA</p>
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- ### WHO curriculum on patient safety⁵
- What is patient safety?
 - What is human factors and why is it important for patient safety?
 - Understanding systems and the impact of complexity on patient care
 - Being an effective team player
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CONTROLLO DEL RISCHIO COME PARTE DELLA QUALITA'

Il controllo del rischio clinico **deve far parte integrante del sistema per la qualità** della UO e poggiare su tre punti fermi:

- la raccolta e l'analisi dei dati
- il lavoro di gruppo
- leadership

LAVORARE SUI QUASI-EVENTI

- E' piu' semplice perché vi sono minori sensi di colpa
- Perché vi sono minori timori di sanzioni
- Perché è piu' semplice analizzare la catena rischio-errore-effetto.

How Often Are Patients Injured by Care? Review by Brent James

	Sample Size	Injury Rate	% Judged Preventable	% Life Threatening or Fatal
HMPS (1984 data)	~34,000	3.7%	58%	13.6%
Utah-Colorado (1992 data)	15,000	2.9%	53%	6.6%
Australian AE (1993 data)	2,353	16.6%	69.8%	22.3%
Australian AE in 1998		10.2% (?)		
Canada AE (2000 data)	3,745	7.5%	36.9%	20.8% (fatal)