



# **PATIENT SAFETY**

## **Sebuah konsep dan pendekatan sistematik mutu pelayanan kesehatan**

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## Nursing mistakes cause thousands of deaths, probe finds

**September 10, 2000**

**Web posted at: 7:43 p.m. EDT (2343 GMT)**

**In this story:**

**Errors rise as pressure increases**

**Pleas for help went unnoticed**

**RELATED STORIES, SITES**



.....selain itu juga ditemukan bahwa paling tidak terdapat 119 orang pasien yang meninggal setelah ditangani oleh perawat yang tidak berlisensi, tidak terdaftar, yang penghasilannya sekitar \$9 per jam .

**Setiap perawat wajib overtime dan bekerja 16-jam, akibatnya sangat sedikit yang berminat bekerja di the University of Illinois at Chicago Medical Center, kata registered nurse Kathy Cloninger, yang telah bekerja di tempat tersebut selama 7 tahun.**

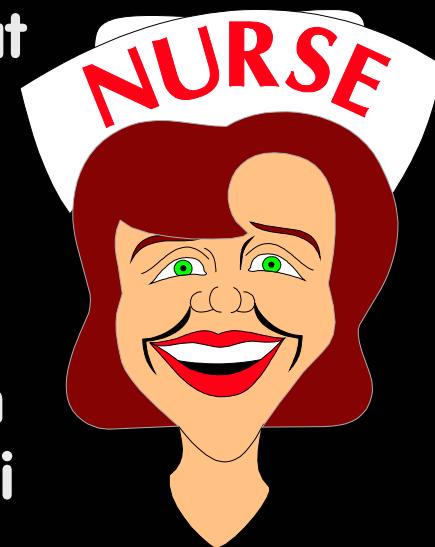
"I wake up every day and hope I don't kill someone today," Cloninger told the Tribune. "Every day I pray: God protect me. Let me make it out of there with my patients alive



# Kasus tuntutan hukum akibat nursing care

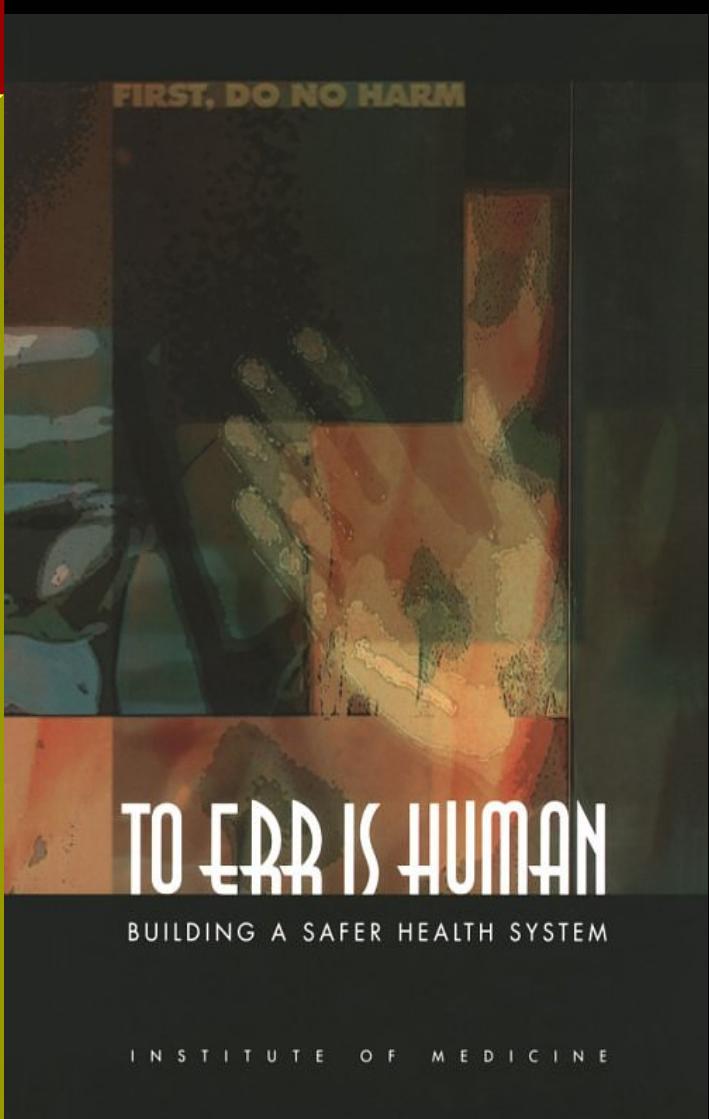
Shirley Keck, 61-tahun suatu pagi mengalami sesak nafas hebat tanpa diketahui oleh perawat di Wesley Medical Center, Wichita, Kansas.

Salah satu anaknya, Becky Hartman, mencoba menghubungi perawat di counter perawat beberapa kali tetapi tidak menemukan satupun perawat di sana. Akhirnya Mrs Keck mengalami kerusakan otak permanent setelah kejadian itu, tanpa seorangpun petugas mengetahuinya.



Atas kejadian tersebut, pengadilan menjatuhkan denda sebesar US\$ 2,7 juta (25,650 M) atas terjadinya kematian Mrs. Keck





FIRST, DO NO HARM

# TO ERR IS HUMAN

BUILDING A SAFER HEALTH SYSTEM

INSTITUTE OF MEDICINE

# TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM

Institute of Medicine  
Committee on Quality of  
Health Care in America



(Classen et al., 1997).

## Adverse drug events pada pasien rawat inap

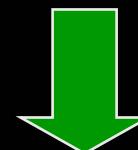
extra biaya

Memperpanjang LOS

mortalitas



\$8.4 juta/tahun  
untuk RS Pendidikan  
dengan 700-bed



1983-1993: naik 2 x  
lipat (7.391 kematian  
1993)

(Bates et al., 1997).

(Phillips, Christenfeld,  
and McGlynn, 1998)



Brennan et al., 1991

acute care  
hospitals di New  
York State



adverse events: 3.7%



27,6% akibat kelalaian

Gopher et al., 1989

intensive care unit



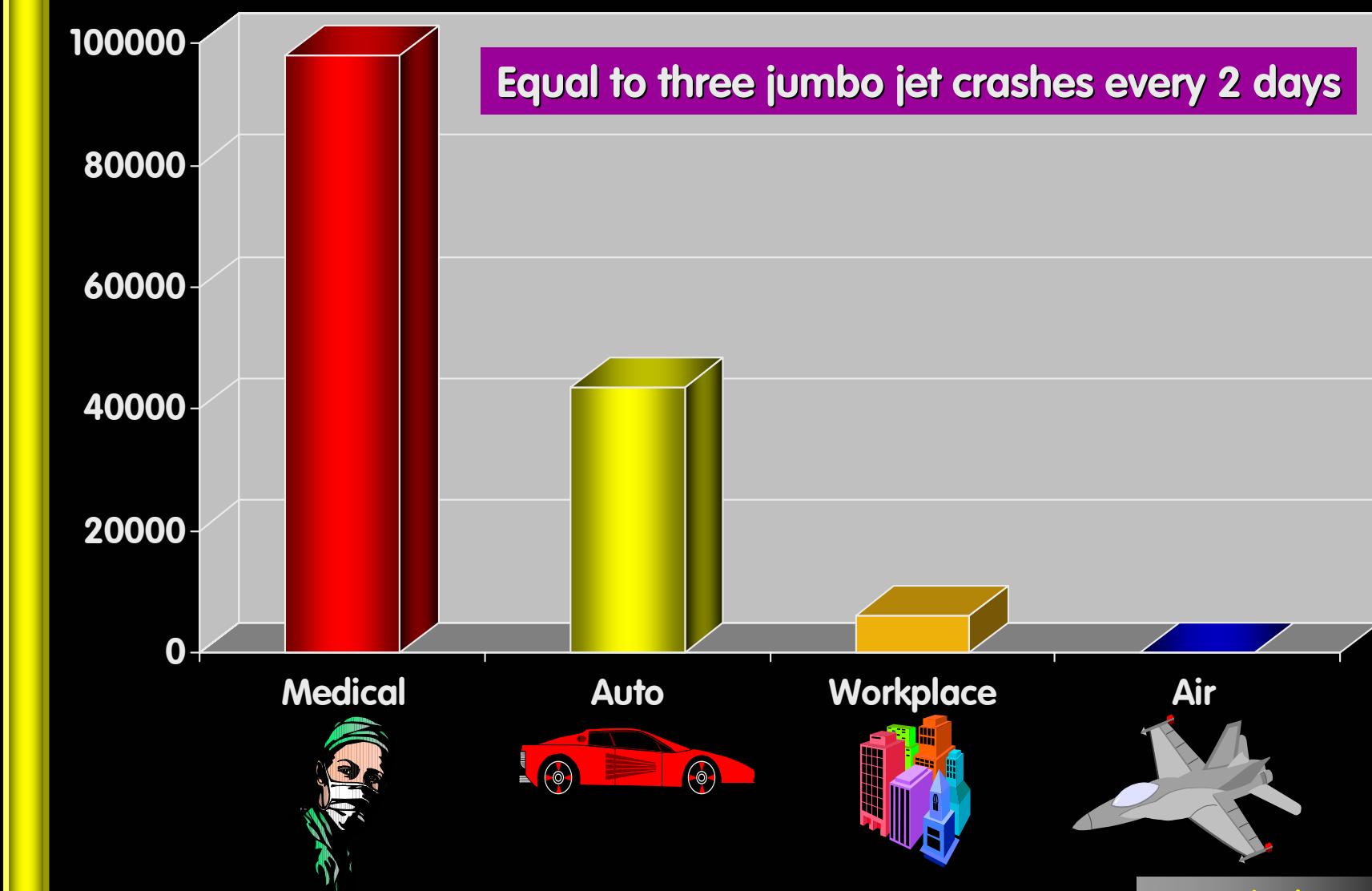
1.7 errors/hari/ pasien



29 % berpotensi untuk  
terjadinya injury yang  
serius & fatal



# Annual Accidental Deaths (IOM, 1999)



# the NHS Litigation Authority

**850 000 adverse events a year**



# MEDICAL ERROR IS AN ICEBERG PHENOMENON



## Guide to patient safety indicator

### adverse event.

**“An injury caused by medical management rather than by the underlying disease or condition of the patient.”<sup>4</sup>**  
In general, adverse events prolong the hospitalization, produce a disability at the time of discharge, or both.

### Medical error

**“The failure of a planned action to be completed as intended (i.e., error of execution) or the use of a wrong plan to achieve an aim (i.e., error of planning).”**



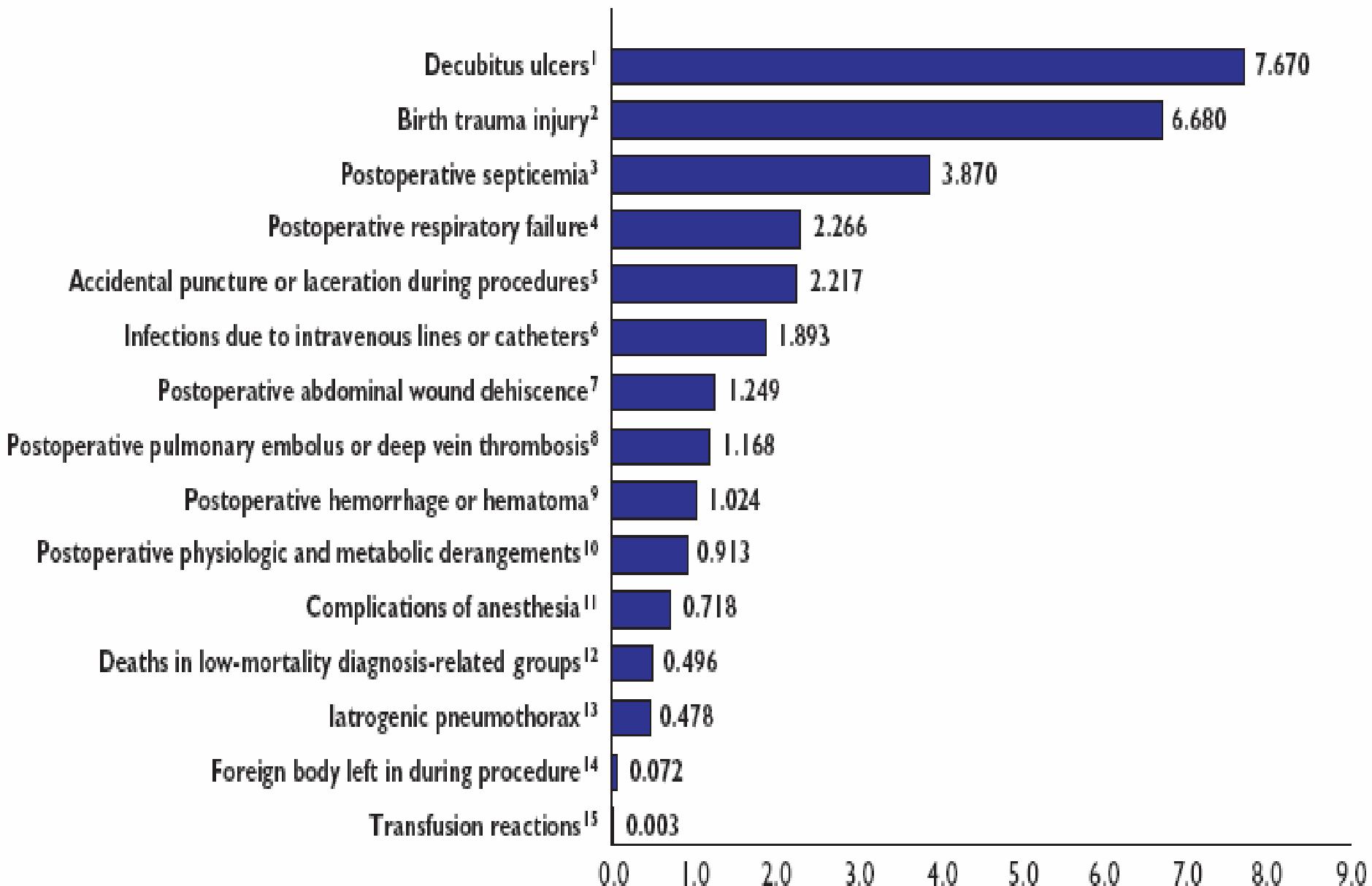


## Patient safety

### Freedom from accidental injury

avoiding injuries or harm to patients from care that is intended to help them

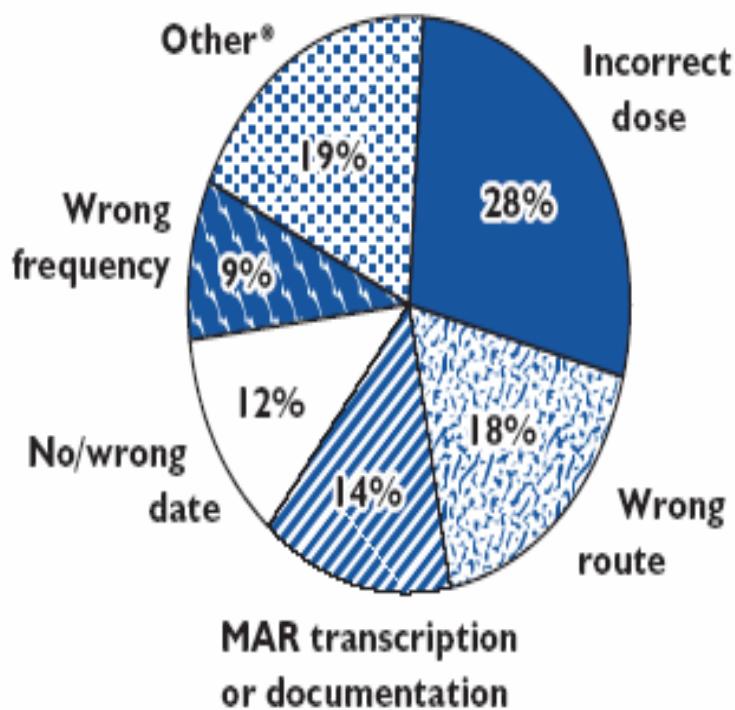




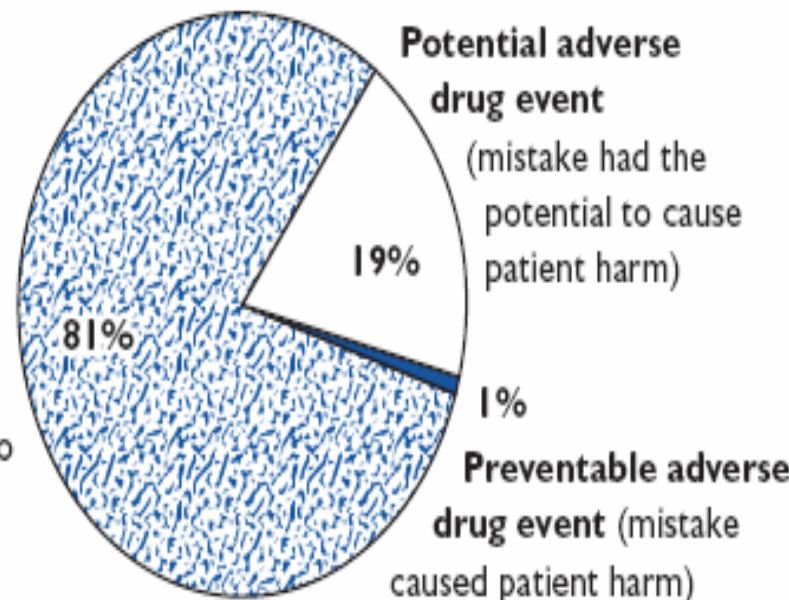
Adjusted rate of potentially preventable adverse events in 2000

## Pediatric Medication Mistakes Detected at Two Hospitals During Six Weeks in 1999

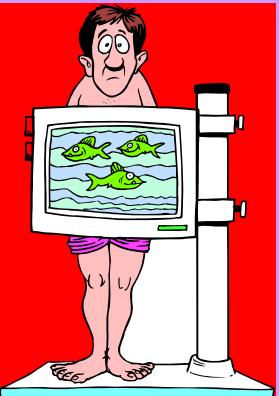
BY TYPE



BY OUTCOME



## **“near miss”**



Suatu kejadian atau situasi yang sebenarnya dapat menimbulkan kecelakaan, trauma, atau penyakit, tetapi belum terjadi karena secara kebetulan diketahui atau upaya pencegahan segera dilakukan.



# Clinical Negligence (kelalaian klinik)

care that fell below the standard expected of physicians in their community  
(a relative standard not a “gold” standard)





## Jury Awards \$38 Million To San Jose Family In Malpractice Suit

**01/01/02 - A San Jose family has won a 38 million dollar (342 Milyar) malpractice award after a jury agreed that delayed care for a newborn baby led to serious brain damage.**

The Santa Clara County Superior Court jury ruled against the San Jose Medical Group, Doctor Ilene Newman and Regional Medical Center of San Jose. Brandon Nunez is now three years old and lives at home with his parents, Carmelo and Sonia Nunez.

Sonia Nunez was two weeks overdue when she went into labor on September 27th, 1999. Her labor didn't progress normally and experts testified that an immediate Caesarean section was called for. A C-section was finally performed, but Fagel says that by that time the baby had already suffered brain damage.

# The Culture of Blame



**Denial, distancing, displacement**

**Dishonesty with patients**

**Cover-up, non-reporting**

**Unwillingness to take responsibility  
for peer misconduct**

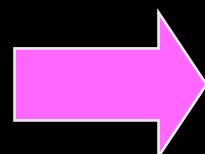


The common reaction when an error occurs is to find and blame someone. However, even apparently single events or errors are due most often to the convergence of multiple contributing factors. Blaming an individual does not change these factors and the same error is likely to recur..... The problem is not a bad people. The problem is that the system needs to be made safer.



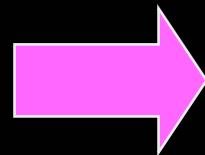
# **SLIP is observable anda LAPSE is not**

Keliru memutar knob  
pada suatu alat medik



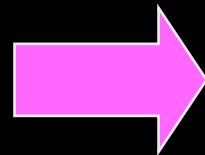
**SLIP**

Tidak ingat/lupa  
melakukan upaya medik



**LAPSE**

Tindakan sesuai dengan  
rencana, tetapi outcome tidak  
seperti yang diharapkan, karena  
prosedur yang dilakukan keliru



**MISTAKE**



## TABLE 1. Recommended Definitions\*

**Active error:** An error that occurs at the level of the frontline operator and whose effects are felt almost immediately.



## TABLE 1. Recommended Definitions\*

**Latent error:** Errors in the design organization, training, or maintenance that lead to operator errors and whose effects typically lie dormant in the system for lengthy periods of time



## TABLE 1. Recommended Definitions\*

**Accident:** An event that involves damage to a defined system that disrupts the ongoing or future output of the system



**mala praxis (malpractice),**

“Injuries . . . by the neglect or unskilful [sic] management of [a person’s] physician, surgeon, or apothecary . . . because it breaks the trust which the party had placed in his physician, and tends to the patient’s destruction.”

*Sir William Blackstone, 1768*



# MENGAPA TERJADI MEDICAL ERROR?



# Handwriting

7. Signatures of L  
Pach

2 fractocaud 120 30  
Cn  
Cps  
Fracaud  
Lunel  
Hyper  
D.G.  
Opiss

2 hours L  
Pach

1. prooced 28  
Cen 32  
Sodape 146  
Leaking 167  
Alotapac 16

3 B3/174



Dr/Drg.

2001

Basdehi  
4 ~~Homestead~~ EOL  
[ ]  
in surface orig, -  
Br

2 Hoxley 2002 -  
pre

2 Hoxley 2002 -  
Br

7.



# Drugs with similar names

**Losec**

(omeprazole)

**Coumadin**

(anticoagulant)

**Taxol**

(paclitaxel, anticancer)

**Zebeta**

(beta blocker)

**Seldane**

(terfenadine)

**Norvir**

(Ritonavir-protease inhibitor)

**Lasix**

(furosemide)

**Kemadrin**

(antiparkinson)

**Paxil**

(paroxetine, antidepressant)

**Diabeta**

(sulfonamide)

**Feldene**

(NSAIDs)

**Retrovir**

(zidovudine)



# Faktor yang potensial mencetuskan ERROR

Terlambat/terlalu cepat memberikan obat periode berikutnya

Perawat memberi obat di luar instruksi dokter

Cara pemberian keliru

Kecepatan tetesan obat infus kurang atau berlebih

Omission Error

Unauthorized Drug Error

Wrong Route Error

Wrong Rate Error



# Faktor yang potensial mencetuskan ERROR

## Interval pemberian obat keliru

- Suspensi tidak dikocok,
- sediaan slow release dijadikan puyer,
- incompatible,
- inadequate product packaging

- Injeksi tanpa metode steril,
- menggerus obat secara keliru

Obat rusak, kadaluarsa, obat tidak disimpan di lemari es

## Wrong Time Error

## Wrong Drug Preparation Error

## Wrong Administration Technique Error

## Deteriorated Drug Error



**Table 3.** Risk Factors for Retention of a Foreign Body after Surgery.\*

Characteristic	Risk Ratio (95% CI)	P Value
Operation performed on an emergency basis	8.8 (2.4–31.9)	<0.001
Unexpected change in operation	4.1 (1.4–12.4)	0.01
>1 Surgical team involved	3.4 (0.8–14.1)	0.10
Change in nursing staff during procedure	1.9 (0.7–5.4)	0.24
Body-mass index (per 1-unit increment)	1.1 (1.0–1.2)	0.01
Estimated volume of blood lost (per 100-ml increment)	1.0 (1.0–1.0)	0.19
Counts of sponges and instruments performed	0.6 (0.03–13.9)	0.76
Female sex	0.4 (0.1–1.3)	0.13

**Risk Factors for Retained Instruments and Sponges after Surgery.**  
**N Engl J Med 2003;348:229-35.**

# The 20 most frequent principal natural categories (PNCs)

## PNC

- Catheter related urinary tract infection
- Wound infection following abdominal/retroperitoneal/pelvic procedure
- No, delay, inadequate investigations ischaemic heart disease
- Pressure sore/decubitus ulcer
- Wound infection following peripheral procedure
- Incisional hernia: post-procedural
- Inadequate reduction of a fracture/poor alignment
- Ongoing pain/restricted movement following back surgery
- Pulmonary embolism postoperatively
- GI bleed secondary to NSAID
- Postoperative bowel obstruction/adhesions
- Wound infection after lower segment Caesarean section
- Recurrent incisional hernia
- Postoperative nausea and vomiting
- Injury due to fall in nursing home
- Failed/blocked/ruptured/ aneurysm, vascular grafts
- Acute pain postoperative/procedure
- Problems following radiation therapy
- Injury due to fall in hospital
- Postoperative atelectasis/nosocomial pneumonia



# MENGAPA TERJADI ERROR?

- Menggunakan prasat medik yang sudah obsolete/abandoned
- Tidak merasa/menyadari bahwa ada masalah
- Kebudayaan tradisional mengenai tanggungjawab petugas kesehatan
- Lemahnya sistem pengamanan hukum bagi konsumen
- Status sistem informasi kesehatan yang primitif
- Alokasi sumberdaya yang buruk
- Kurangnya pengetahuan petugas ttg kejadian error,

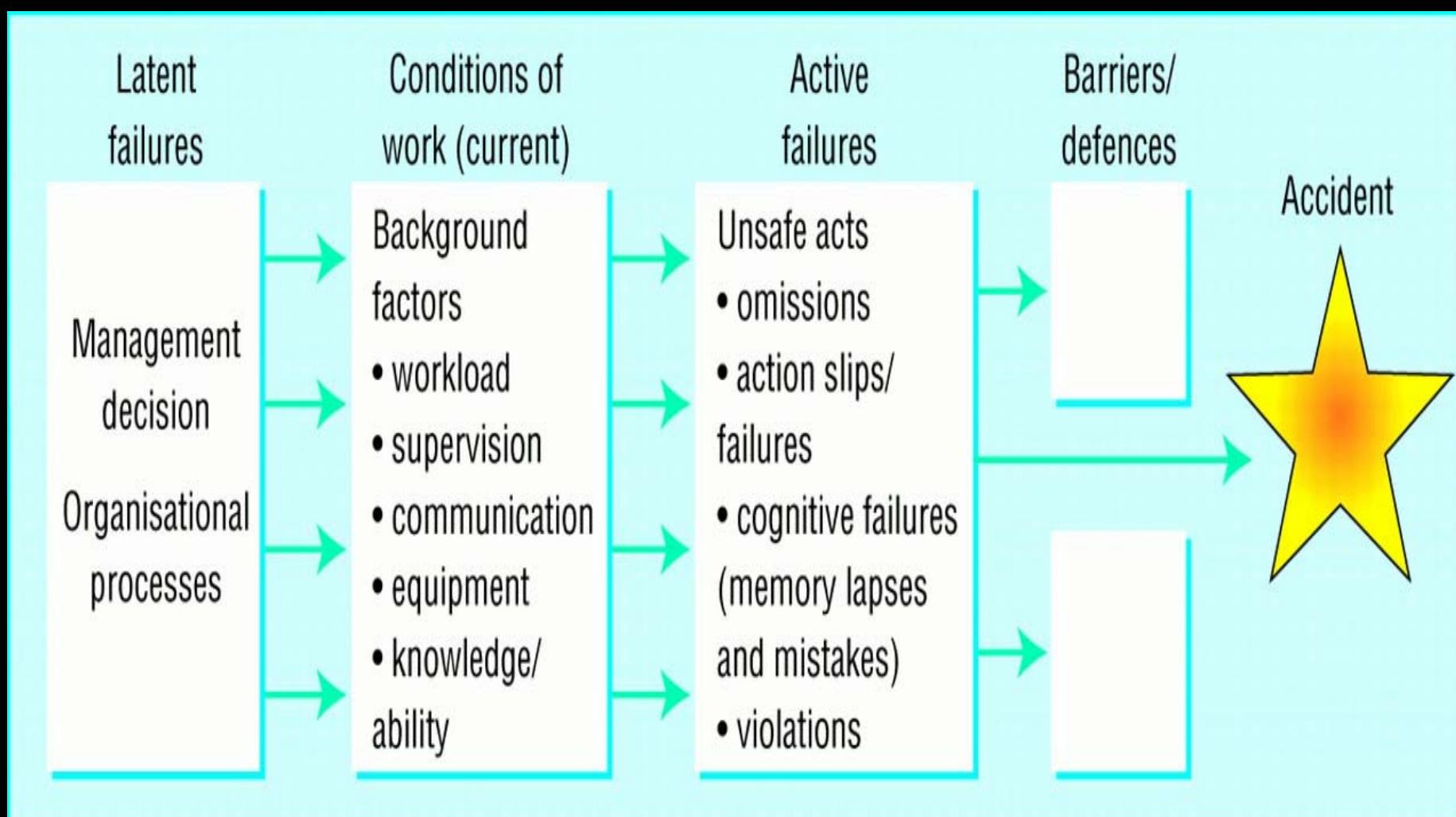


# KONDISI-KONDISI PENYEBAB TERJADINYA ERROR

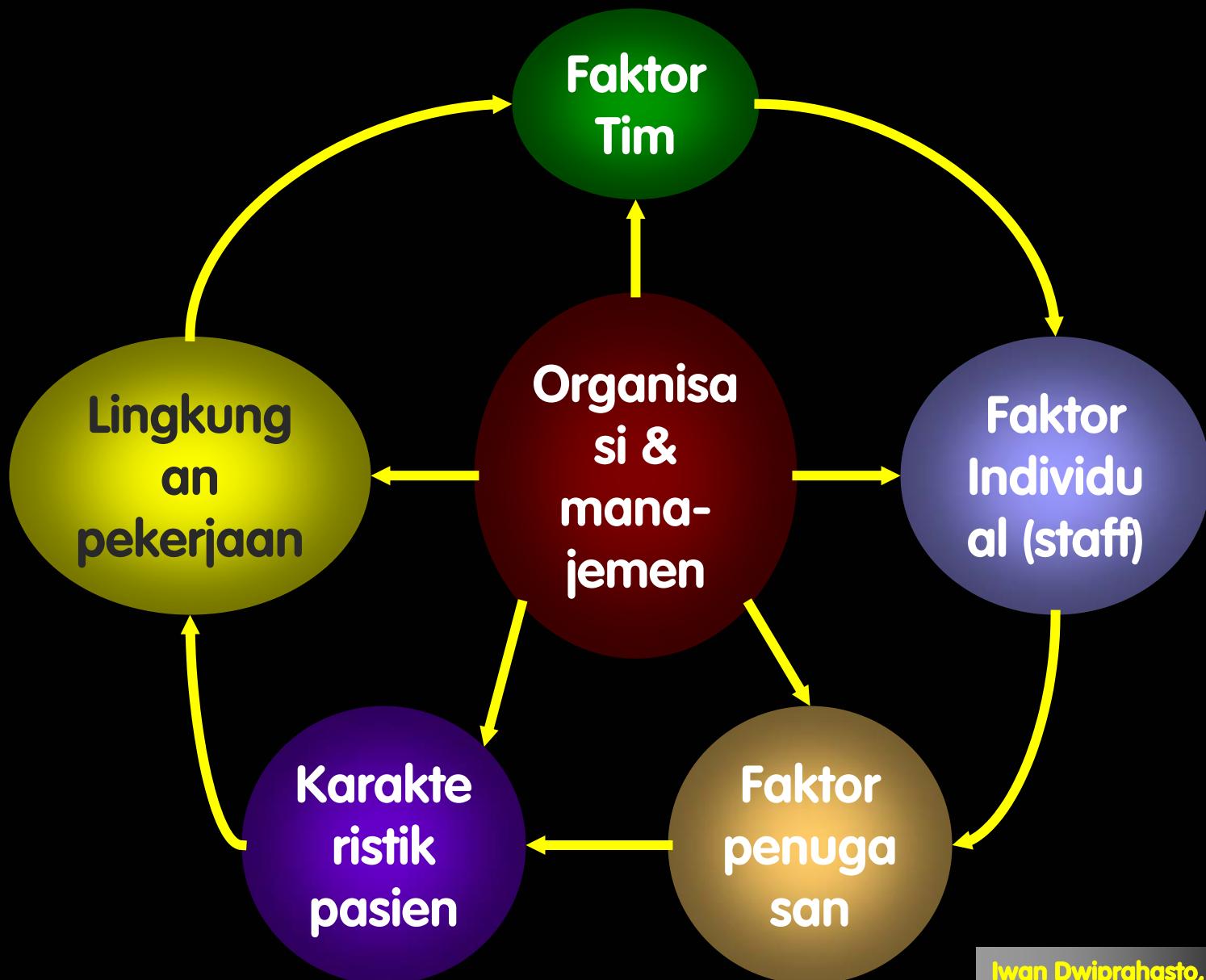
Kondisi	Faktor Risiko
Penugasan tidak jelas	x 17
Waktu terbatas	x 11
Poor signal: noise ratio	x 10
HAM yang buruk	x 8
Designer user mismatch	x 8
Irreversibility of error	x 8
Terlalu banyak informasi	x 6
Negative transfer between task	x 5
Mispersepsi thd risiko	x 4
Tidak ada feedback dari sistem	x 4
Kurang pengalaman	x 3
Prosedur/instruksi yang buruk	x 3
Checking tidak adekuat	x 3
Education mismatch of person with task	x 2
Disturbed sleep patterns	x 1.6



# Proses terjadinya Risiko

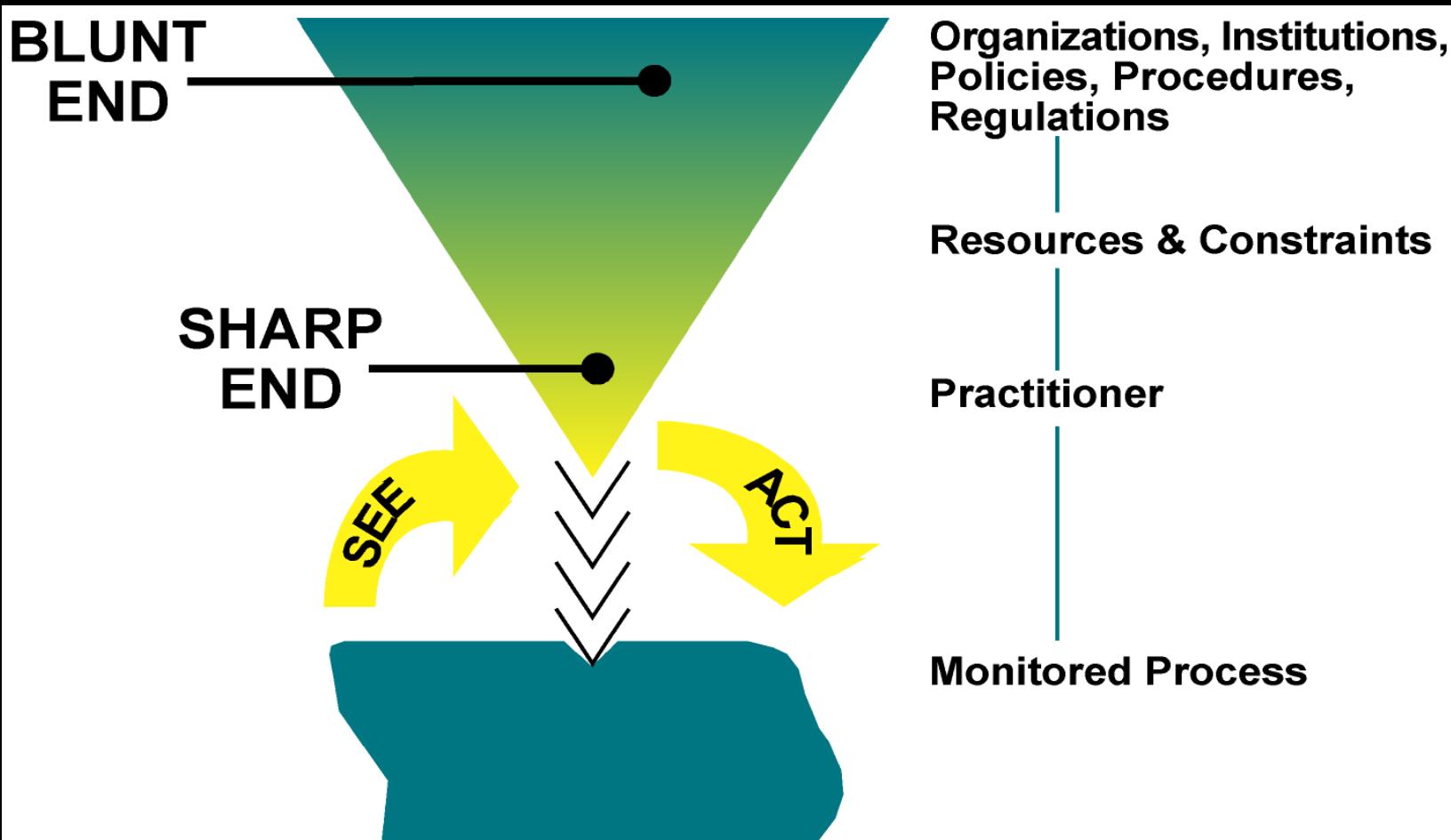


# Faktor yang berpengaruh terhadap terjadinya Risiko



# Blunt & Sharp

Modified from Woods, 1991. Cook RI 1999



# **Strategi untuk meminimalkan errors dan adverse events**

**Memperbaiki ketepatan pencatatan identitas pasien**

**Meningkatkan efektivitas komunikasi antar petugas**

**Meningkatkan safety thd high alert medications**

**Mengeliminasi kesalahan prosedur operasi, operasi pada pasien yang salah, sisi yang keliru**

**Meningkatkan safety pada penggunaan infusion pumps**

**Meningkatkan efektivitas sistem alarm klinis**



# Strategi untuk meminimalkan errors dan adverse events



Mengurangi kompleksitas

Optimalisasi proses informasi

Otomatisasi secara bijak

Menggunakan constraints yang ada

Aware terhadap adverse event untuk berubah



# Apa yang harus dilakukan?



**Menciptakan budaya Safety**

**Mengembangkan program-2  
untuk patient safety**

**Membiasakan mencatat  
setiap kejadian yang  
berpotensi untuk error**



### Root Cause Analysis

1. Analisis masalah error secara intensif
2. Meredesign sistem yang ada
3. Menguji design yang baru
4. Diseminasi ke seluruh staf
5. Follow-up



# Safety Survey

Petugas



Pekerja



Pasien



# Teknologi berfokus pada Safety

- ◆ Menilai kebutuhan
- ◆ Aksesibilitas
- ◆ Ketepatan
- ◆ Links dgn internal equipment
- ◆ Links dg. external resources



# Pelayanan berfokus pada pasien (patient centered care)



- ✓ Menilai faktor potensial risiko (mis. pasien jatuh dari bed)
- ✓ Inkorporasikan hasil penilaian dengan rencana pelayanan
- ✓ Lakukan pendidikan tentang safety pada pasien dan keluarga



# Mencegah Errors

Alokasi resources secara adekuat



- ✓ Human
- Information
- Physical
- Financial



# Jelaskan outcome yang unanticipated

- ✓ Berikan penjelasan bahwa outcome yang terjadi memang di luar yang diharapkan
- ✓ Bahwa risiko memang tidak selalu terjadi tetapi sering tidak dapat dihindari



# James Reason's bottom line



Fallibility is part of the human condition



We can't change the human condition



We can change the conditions under which people work

