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NABH

WELCOME

A SUPER SPECIALTY HOSPITAL & CANCER CENTRE

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MEDICAL ERRORS
&
RISK MANAGEMENT

By-

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Asian Institute of Medical Sciences, Fbd

I am sure we all don't want this

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Dealing with the third leading cause of DEATH

Medical errors kill more than a quarter million people every year and injure millions

Is it better to die in an Airplane crash?

The Detroit News
detnews.com

Airlines expect 1-2 jets to crash daily

Over 1000 deaths expected weekly

52 weeks, thus 52000 deaths annually

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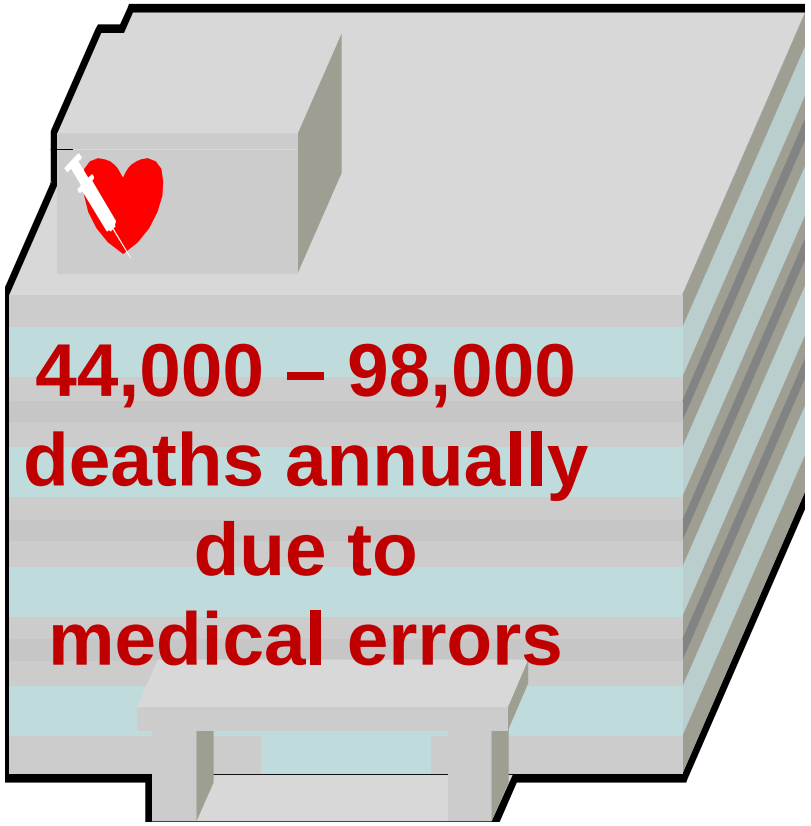
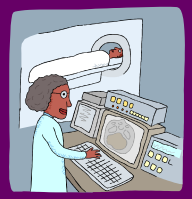


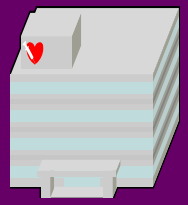
How medical errors rank as cause of mortality?

Heart
616,067

Accidents
123,706



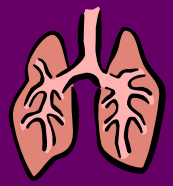
Cancer
562,875



Medical Errors ~100,000

Stroke
135,952

Alzheimer's
74,632



Lung
127,924

Diabetes
71,382

www.cdc.gov/nchs/fastats. Accessed Jan 2012. Based on 2007 data.

CAUSES OF MEDICAL ERRORS

- *Human Factors*
- *Medical complexity*
- *System Failures*

Human Factors

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1. Variations in healthcare provider training & experience
2. Fatigue & sleep deprivation
3. Depression
4. Failure to acknowledge the prevalence and seriousness of medical errors
6. Poor communication (in cases of medical tourists, another language)
7. Improper documentation
8. Illegible handwriting
9. Time pressures
10. Unfamiliar settings

Medical complexity

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1. Inadequate nurse-to-patient ratios
2. Similarly named medications
3. Powerful drugs
4. Complicated technologies
5. Intensive care
6. Prolonged hospital stay

System Failures

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1. Unclear lines of authority of physicians, nurses, and other care providers
2. Disconnected reporting systems within a hospital
3. The impression that action is being taken by other groups within the institution
4. Inadequate systems to share information about errors and analysis of contributory causes & improvement strategies
5. Cost-cutting measures by hospitals which rendered patient care inappropriate.
6. Equipment, transportation, construction and design

What is the answer for Medical Errors?

- Informed consent
- Voluntary reporting of errors
- Root cause analysis
- Reminders to improve patient medication adherence
- Hospital accreditation
- Review by experienced or specialist practitioners

ROLE OF NURSING IN MANAGING MEDICAL ERRORS

It's required that Nurses should have:-

1. Adequate knowledge of the medication - its therapeutic purpose, dose, frequency and route of administration, specific precautions, contra indications, side effects & its storage.
2. Adhere to required checking policies and procedures developed by agencies.
3. Proper understanding about the relevant legislation relating to medicine administration

NURSING QUALITY

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What is Quality Assurance?

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- A process for improvement.
- To prevent and correct identified problems.
- A multidisciplinary team working together to provide the highest quality health care by meeting or exceeding the expectations of the customers we serve.
- To assure that procedures, methods, and systems have an effective impact and are cost effective.

Quality assurance cycle

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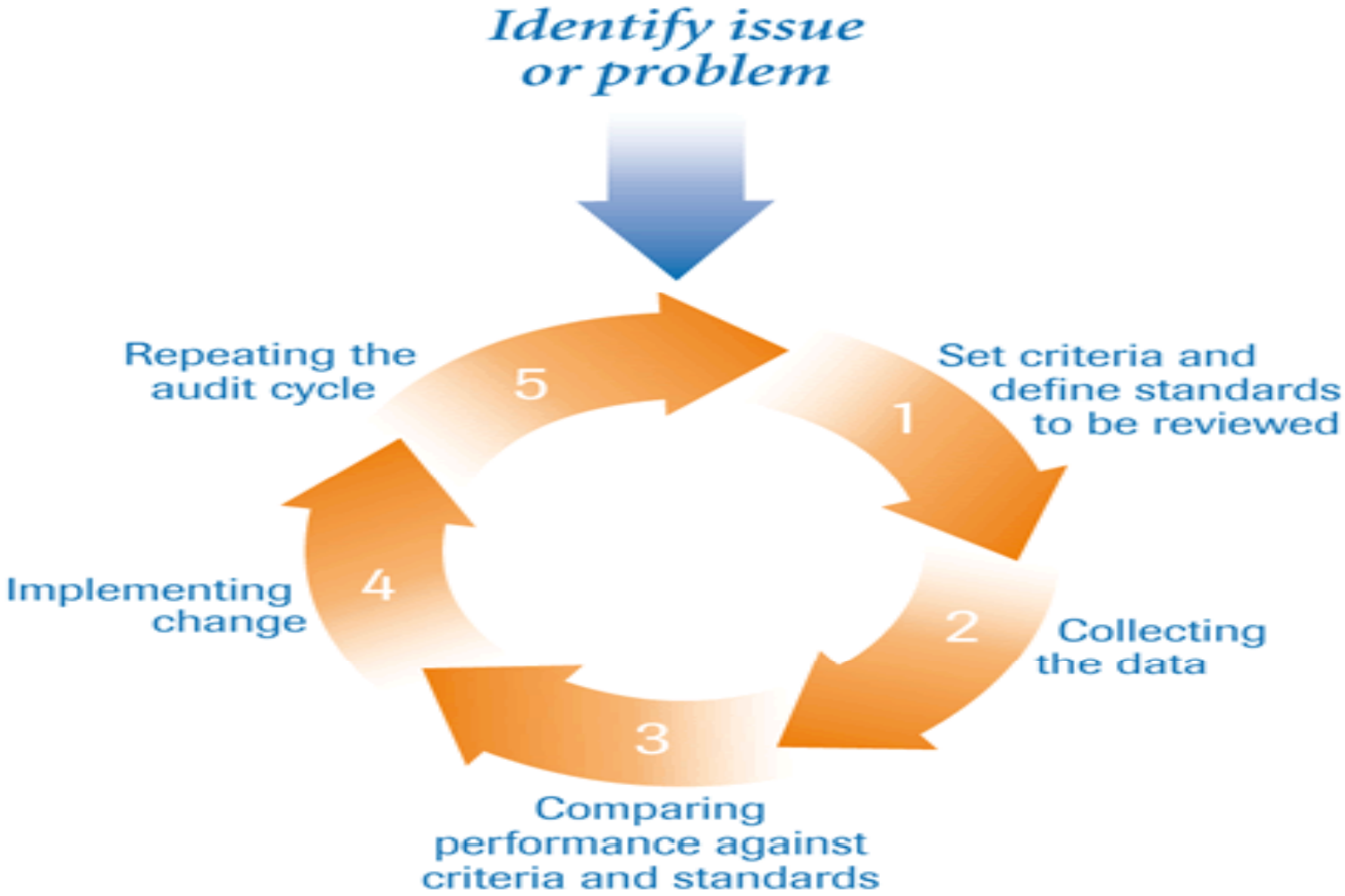

NURSING QUALITY INDICATORS

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Medication Errors
Sampling Errors
Bed sores (Inside)
Accidental removal of tubes & catheters
Sentinel events Adverse Events Near Miss
IV Infiltrations
Patient Falls

NURSING QUALITY INDICATORS

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INFECTION CONTROL RELATED ERRORS

CENTRAL LINE ASSOCIATED BLOOD STREAM INFECTION (CLABSI)
CATHETER ASSOCIATED URINARY TRACT INFECTION (CAUTI)
SURGICAL SITE INFECTION (SSI)
VENTILATOR ASSOSIATED PNEUMONIA (VAP)
NEEDLE STICK INJURY (NSI)
INCIDENCE OF BLOOD/BODY FLUID EXPOSURE

MEDICATION ERROR

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NURSING QUALITY INDICATORS

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Medication Errors

PRESCRIPTION ERRORS

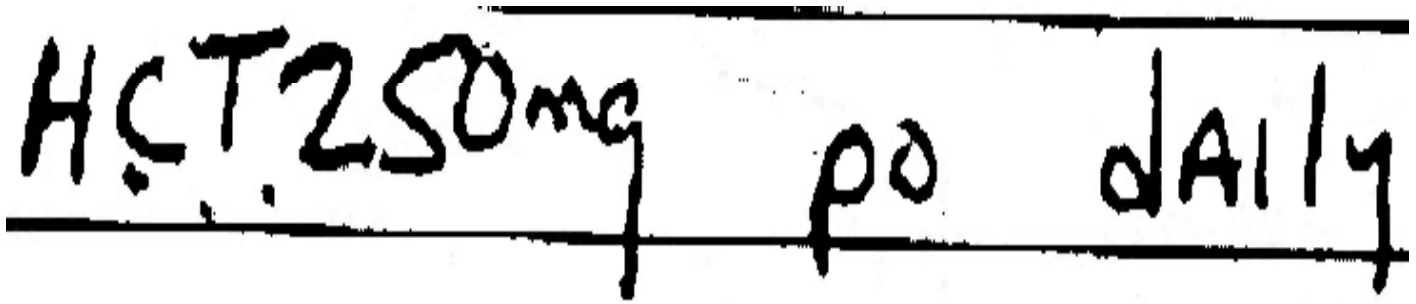
TRANSCRIPTION ERRORS

DISPENSE ERRORS

ADMINISTRATION ERROR

DOCUMENTATION ERRORS

An Example…..



Resist the temptation to abbreviate drug names. In this prescription above, the common abbreviation for “hydrochlorothiazide 50 mg’ was misread as “hydrocortisone 250 mg.”

Medication Errors

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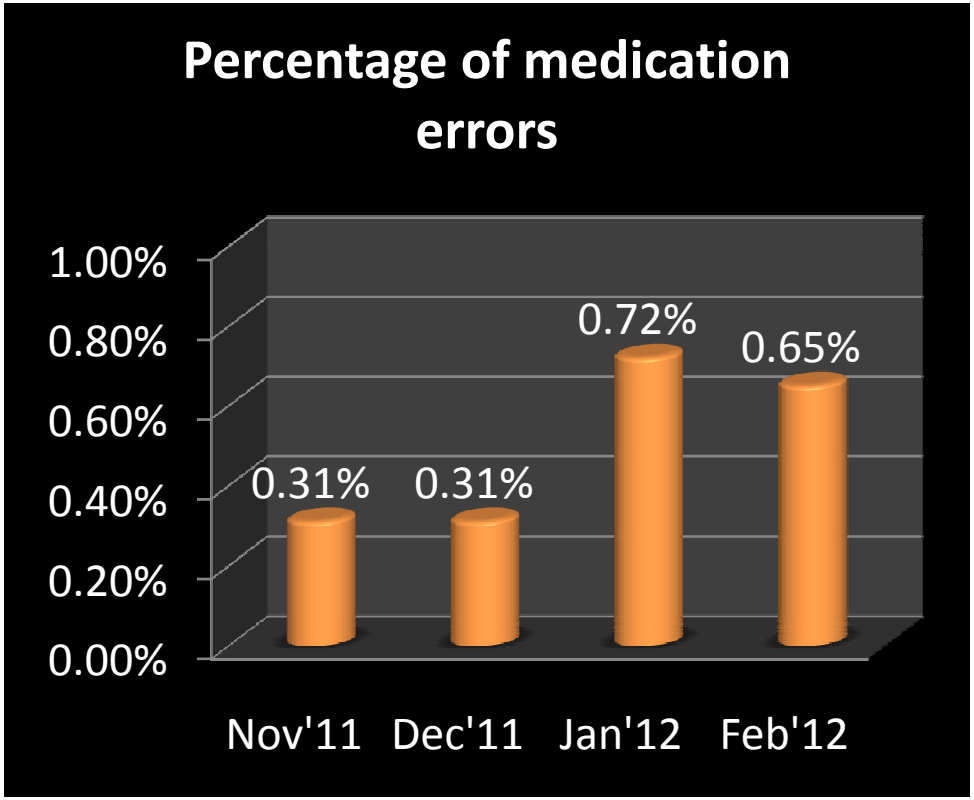
Nov'11	0.31%	(6/1906)
Dec'11	0.31%	(6/1897)
Jan'12	0.72%	(13/1811)
Feb'12	0.65%	(13/1979)

No. of medication error reported X 100
No of In Patients



- Prescription Error
- Transcription Error
- Dispense Error
- Administration Error like Wrong Patient Wrong Route, Wrong Drug, Wrong Dose, Wrong Time, Wrong Documentation

SAMPLING ERRORS

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- SAMPLES WITH WRONG LABEL
- SAMPLES WITH LESS QUANTITY
- SAMPLES WITHOUT LABEL
- HEMOLYSED SAMPLES
- CLOTTED SAMPLES
- SAMPLES WITH WRONG VIALS

ACCIDENTAL REMOVAL OF TUBES & CATHETERS

The importance of accidental catheter removal (ACR) lies in the complications caused by the removal itself and by catheter reinsertion.

ADVERSE EVENT

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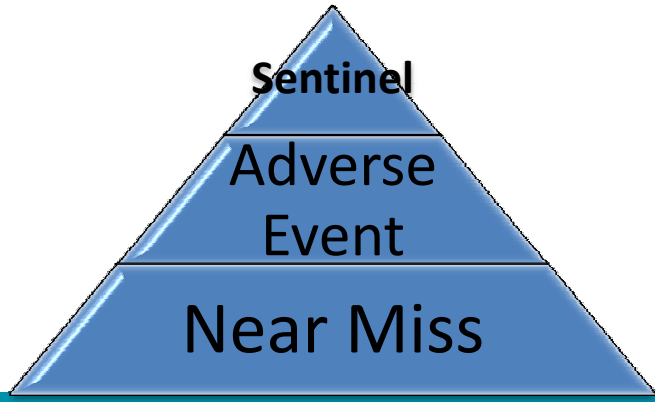
Adverse Event

An unexpected event that results in unintended harm to the patient by an act of commission or omission by healthcare workers (not caused by underlying disease or the condition of patient) resulting in physical, physiological or psychological injury to the patient.

Key Formats : Adverse Event Form



Clinical Adverse events

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Sampling errors – wrong - sample **with wrong vial, wrong label, without label , with less quantity , hemolysed samples , clotted samples,**

- Medication errors – wrong - dose / drug /infusion rate ,extra dose ,over dose, missed dose , IV infiltrations wrong patient, prescription errors
- Radiological errors - wrong report / test / Overdose

Non Clinical Adverse events

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- Chemical Spillage
- Needle Stick Injuries
- Slip / trip / fall

SENTINEL EVENT

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An Unintended, Severe, Irreversible & Preventable Loss of Life, Limb or Function due to errors with a Healthcare System which leads to gross changes in Clinical & Administrative policies & procedures.

Examples of Sentinel Events

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- Surgery on Wrong Patient or Wrong part
- Hemolytic Blood Transfusion reaction leading to death of patient
- Adverse Drug Event causing irreversible injury to patient
- Retained instrument or other material after Surgery

NEAR MISSES

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A Near miss is defined as an act of commission or act of omission that could have harmed the patient but did not do so as result only by the virtue of good luck, skillful management and/or prompt evasive action.

Sentinel event and near miss reporting promotes a culture of patient safety

The key to improving safety lies not in changing the human condition, but in changing the conditions under which humans work.

Reason J. Human Error. Cambridge, UK: Cambridge University Press; 1990

PATIENT FALLS

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A fall is a sudden and unexpected change in position, usually resulting in landing on the floor

Finding a patient on the floor or lowering or assisting a person to the floor is considered a fall and needs to be documented as such.

Facts About Falling…

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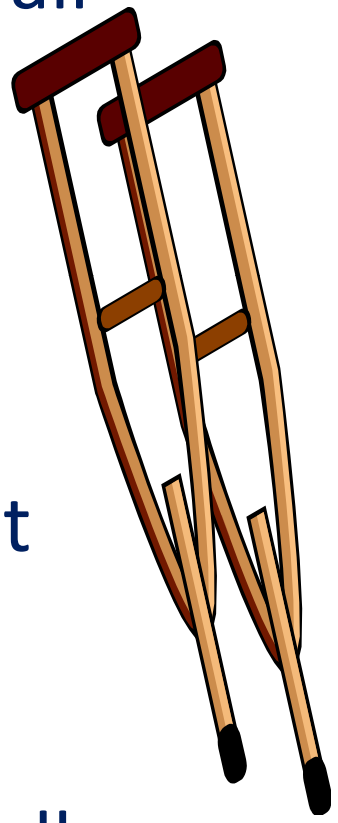
- 1/3 of community dwelling older adults fall annually: 50-100% in nursing homes.
- 95% of hip fractures result from a fall.
- Of those who fall, 25% suffer injuries that reduce mobility and independence.
- 50% of those who sustain injury from a fall can no longer live independently.



Falls in the Hospital: Client Risk Factors

- Postural hypo-tension.
- Lowest weight percentile.
- Medications: 4+ or sedatives.
- Previous fall.
- Impaired arm strength or range of motion.
- Uneven gait.
- Unable to move from bed to bath without assistance.

AM	1	2	3	4	5	6	7	8	9	10	11	12	PM	13	14	15	16	17	18	19	20	21	22	23	24

DATE 1.12 — IVF: Sterile H2O @ 75 cc/hr (Sterile Water)

TIME 1900

PROCESSED BY: [redacted]

VERBAL ☐ TELEPHONE ☐ — Print Name/Title of Person Giving Order — Signature/Title of Person Taking Order

DATE 1/22/03 — TIME 1900 — DR. SIGNATURE [redacted] — DR. # [redacted]

A TRUE COMEDY OF ERRORS

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- Attending MD tells the resident to give the patient “free water” (meaning let her drink water”)
- Resident assumes he meant an IV and writes for water to be given IV
- New RN can’t find IV water and calls pharmacy asking where they get IVs; pharmacy asks no questions and tells the RN they get them from C.S.
- RN obtains IV from C.S. never questioning RN why she by-passed pharmacy; water bag says “water for irrigation”

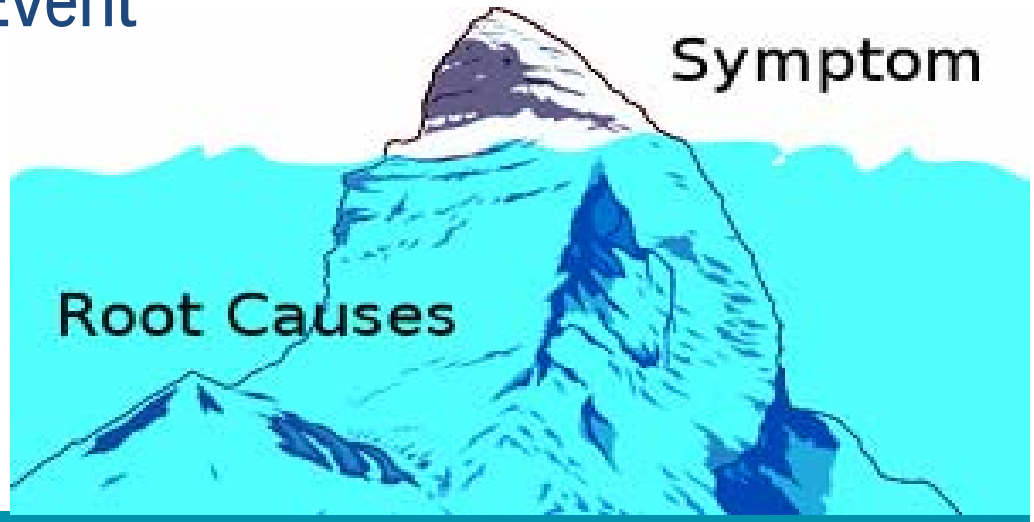
(continued)

- **RN attaches the bag to regular IV tubing; RN infuses 600 mL of “free water”**
- **At change of shift, more experienced RN notes patient is lethargic**

Free water has no electrolytes and would likely have caused burst red blood cells and death if the second RN hadn’t interceded

Root Cause Analysis (RCA)

A "Root Cause Analysis" is a process for identifying the basic or causal factor(s) that underlie variation in performance including the occurrence or possible occurrence of a Sentinel Event



How to do Root Cause Analysis ?

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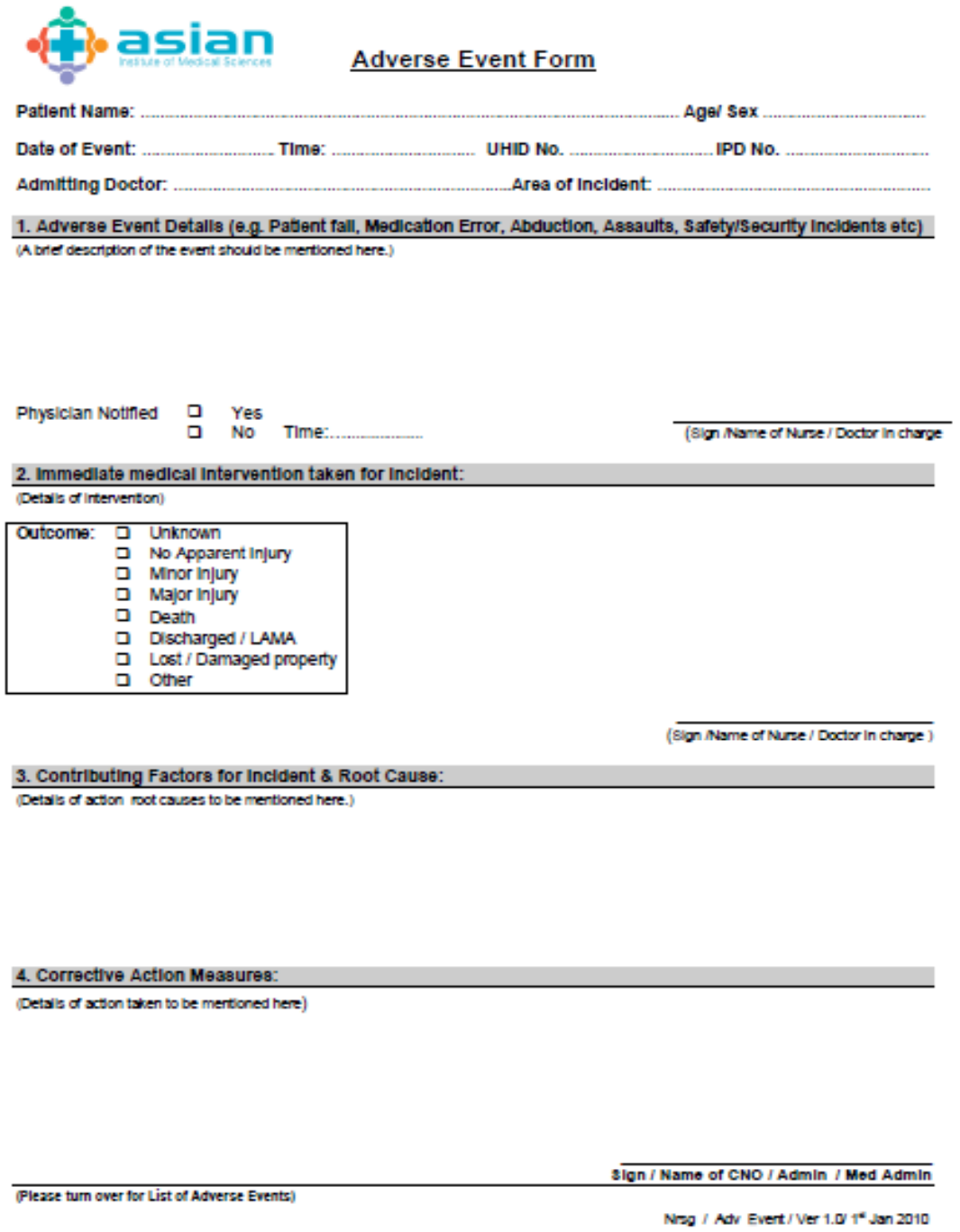
Adverse events will be reported as and when the adverse events occur in there area of work or department using Adverse Event Form giving all the details of incidence.

Adverse Event Form

To be filled immediately,
by Immediate Senior of any dept & forwarded to:
N.S. (if Nursing) or Director Quality within 24 hours

Copy to be retained for future reference

Corrective Action taken &
Preventive Action taken
must be documented
&
the changes notified to all concerned –
so as to prevent Recurrence



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Adverse Event Form

Patient Name: ..... Age/ Sex .....

Date of Event: ..... Time: ..... UHID No. ..... IPD No. .....

Admitting Doctor: ..... Area of Incident: .....

1. Adverse Event Details (e.g. Patient fall, Medication Error, Abduction, Assaults, Safety/Security Incidents etc)

(A brief description of the event should be mentioned here.)

Physician Notified ❑ Yes ❑ No Time:.....

(Sign /Name of Nurse / Doctor in charge

2. Immediate medical intervention taken for Incident:

(Details of intervention)

Outcome:
- ❑ Unknown
- ❑ No Apparent Injury
- ❑ Minor Injury
- ❑ Major Injury
- ❑ Death
- ❑ Discharged / LAMA
- ❑ Lost / Damaged property
- ❑ Other

(Sign /Name of Nurse / Doctor in charge)

3. Contributing Factors for Incident & Root Cause:

(Details of action root causes to be mentioned here.)

4. Corrective Action Measures:

(Details of action taken to be mentioned here)

Sign / Name of CNO / Admin / Med Admin

(Please turn over for List of Adverse Events)

Nrsg / Adv Event / Ver 1.0/ 1st Jan 2010

Reporting Adverse Events :

- Improves a department's credibility
- It shows that the Department is implementing a Quality Improvement program

LIST OF ADVERSE EVENTS

Adverse Events – Examples - Clinical

1. Laboratory Errors – wrong - report / test /sample
2. Medication / Administration / Prescription errors – wrong-dose / drug /infusion rate ,extra dose, over dose, missed dose, IV infiltrations, wrong patient
3. Radiological errors - wrong report / test / Overdose

Adverse Events – Examples - Non Clinical:

1. Chemical Spillage
2. Fire
3. Security incident – Theft / Loss / Abduction etc
4. Sharps incident
5. Needle Stick Injuries
6. Slip / Trip / Fall
7. Electrical Shock
8. Major Equipment failure (in OT , ICU , Lab or in Inpatient area) – Safety / Injury related

Sentinel Events - Examples

1. Surgery on Wrong Patient or Wrong body part.
2. Hemolytic Blood Transfusion Reaction leading to Death of Patient
3. Adverse Drug Event causing irreversible injury to patient.
4. Retained Instrument or other material after Surgery.
5. Patient Death immediately Post-Op
6. Maternal death or Severe Disability associated with Labour or Delivery
7. Sexual Assault of Patient / Staff
8. Suicide by Patient
9. Discharge of Baby / Infant to Wrong Patient
10. Baby Swapping / Baby Abduction
11. Impersonation of Medical / Nursing Staff
12. Anaesthesia Deaths

Near Misses

All or Any of the above - which "**almost happened**" - but prevented by any HCWs alertness or by chance !

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THANK YOU