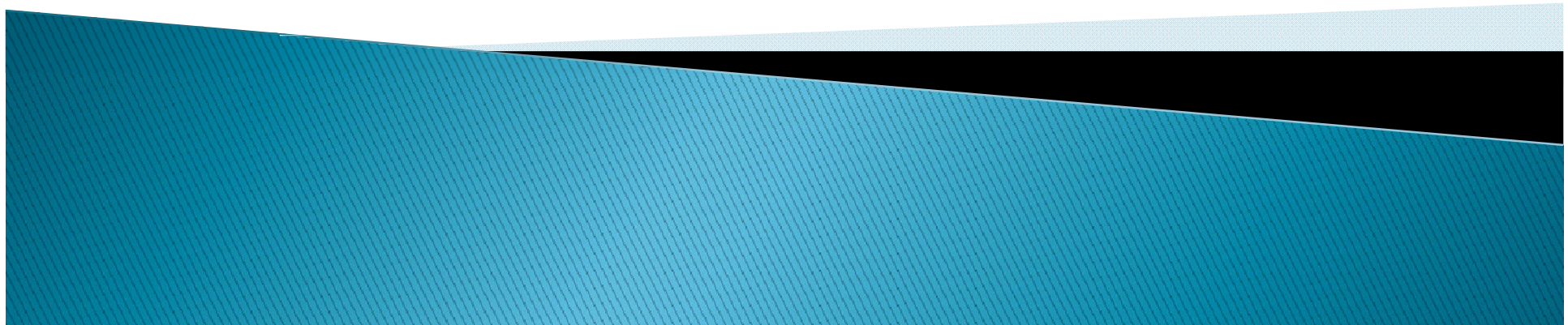


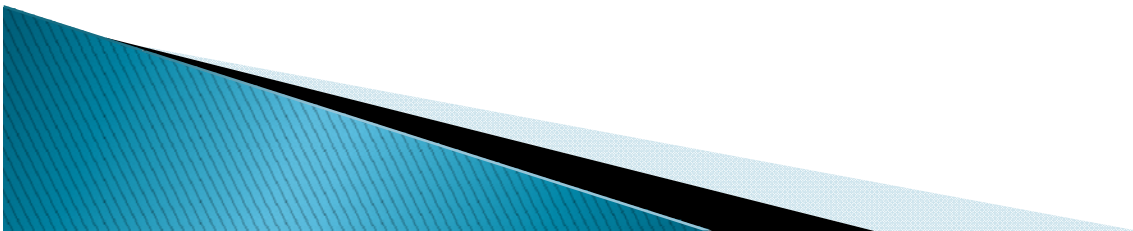
PATIENT SAFETY – HEALTHCARE ERRORS

ROAD MAP TO IMPROVEMENT

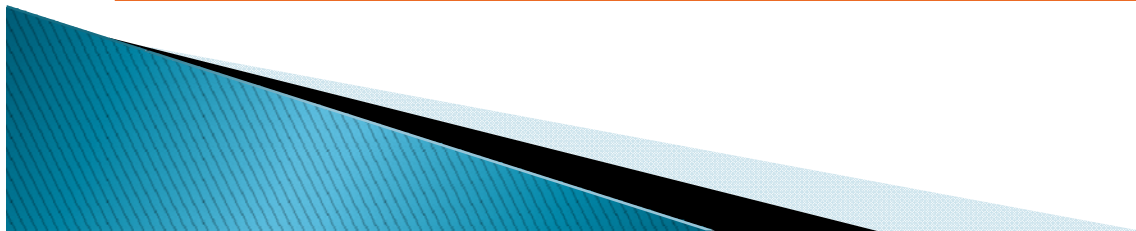


Patient safety

- ▶ may be defined as "the avoidance, prevention, and amelioration of adverse outcomes or injuries stemming from the process of health care.
- ▶ a relatively new discipline



- ▶ Health care interventions are a complex combination of processes, technologies and human interactions that can bring significant benefits.
- ▶ However, it also involves an inevitable risk of adverse events which can – and too often do – happen

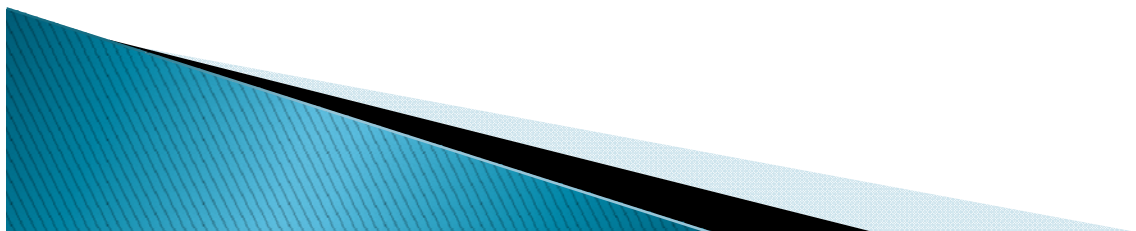


PREVALENCE

- ▶ the majority of hospitals in most countries have an adverse event rate of about 10%.
 - Of these, about 50% are judged as avoidable
 - 60% *may* have no important consequences to the patient
- ▶ 40–80 adverse events occur every 100 000 consultations (Australia)
 - 75% are preventable
 - *25% have the potential to cause severe harm.*
 - Adverse events may occur following discharge from hospital in as many as one fifth of patients

Effect Of Adverse Events

- ▶ A substantial number of patients suffer increased pain, Disability, death, psychological harm trust in clinicians can be reduced
- ▶ Financial burden on healthcare services in terms of increased costs, extended stays in hospital, further readmissions, and increased litigation
- ▶ Personal cost to individual practitioners – they can suffer shame, guilt, and depression, the risk of damage to their reputation and, possibly, dismissal and legal sanction.



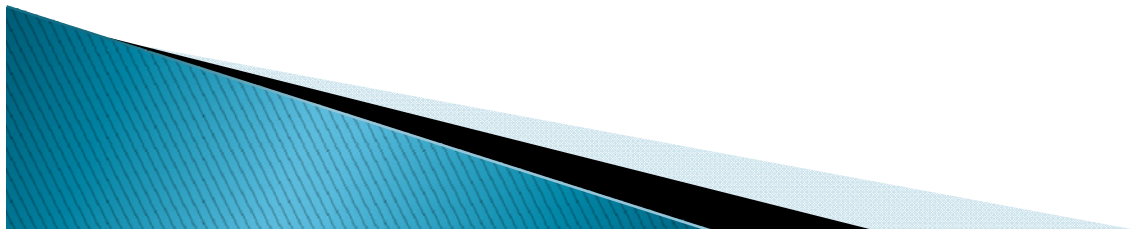
Definition

- ▶ Healthcare workers are at the “sharp end” – professional expertise is applied, the effects are immediately noticed and it is where any threats to patient safety are seen.
- ▶ At the sharp end, “active failures” occur. Decisions, actions and inactions contribute to unsafe patient care.
- ▶ These “failures” are more likely if the healthcare professional is dealing with complex events, high levels of uncertainty, time pressures and fatigue.

ERRORS

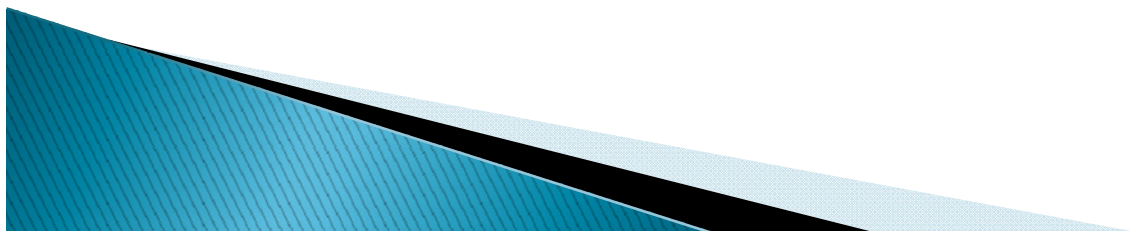
- ▶ Latent failures are errors waiting to occur and are associated with the healthcare system. The root cause of most active failures.

*ERROR = Latent Failure
+
Active Failure*



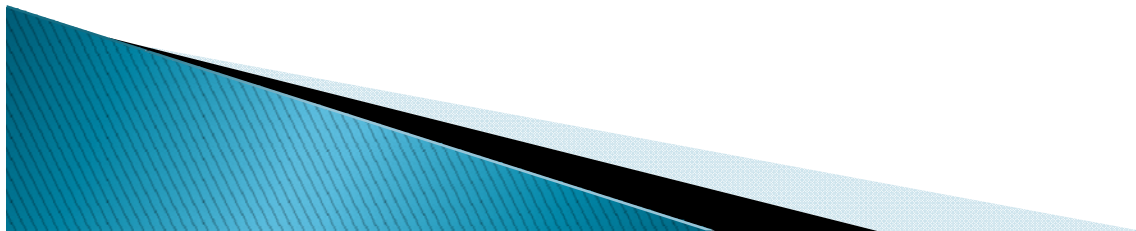
Types Of Error Due To Human Factors

- ▶ **Slips:** unintentional failure to execute a routine task correctly: for example, failure to transfer information about a drug allergy from the patient's medical record to the prescription chart
- ▶ **Lapses:** unintentional failure to follow a guideline, rule, or protocol: for example, failing to prescribe aspirin for a patient who has had a myocardial infarction would be a lapse, an act of omission



Types Of Error Due To Human Factors

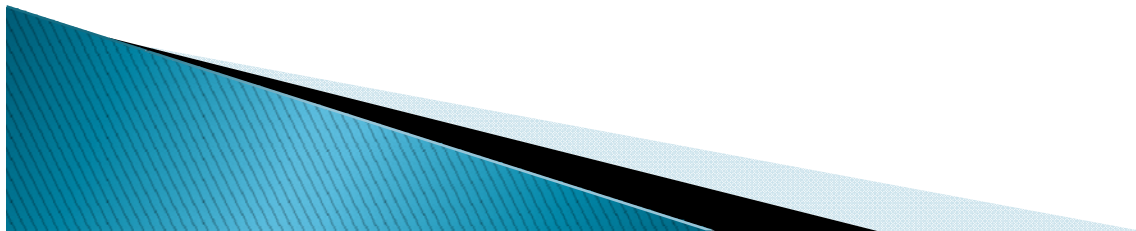
- ▶ **Mistakes:** a failure of judgment due to insufficient knowledge about the problem, diagnosis, or treatment, or application of the wrong rule or guideline to a problem (rule based mistakes): e.g, prescribing the wrong antibiotic to a patient with an allergy because of a lack of familiarity with the drug concerned



Types Of Error Due To Human Factors

- ▶ **Violation:** a deliberate action or a decision not to follow accepted rules or steps.

e.g a clinician who does not label blood sample bottles while with the patient but chooses, against the written protocol, to collect samples from two or more patients before sitting down at a desk to complete the labeling and form filling in the mistaken belief that this will save time.

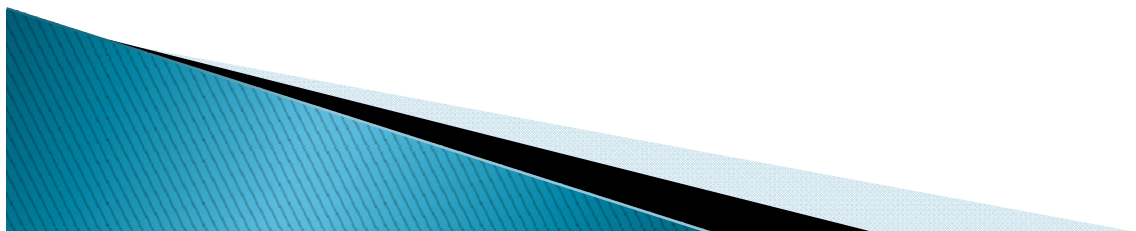


Common Errors

- ▶ Adverse drug reactions 2% of hospital in-patients: 20% are life-threatening.
- ▶ Preventable infections that are acquired in hospital
- ▶ Surgical errors
 - Inappropriate surgery
 - Wrong-site surgery
- ▶ Diagnostic errors
 - Wrong diagnosis
 - Delayed or missed diagnosis
- ▶ Use of medical equipment

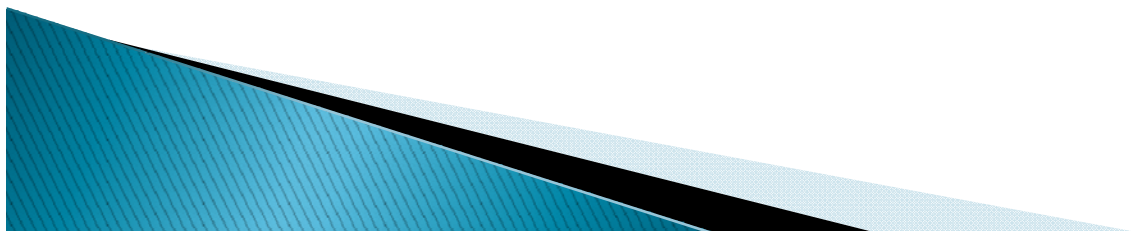
Why do errors happen?

- ▶ All humans make errors: indeed, “the ability to make mistakes” allows human beings to function
- ▶ Most of medicine is complex and uncertain
- ▶ Most errors result from “the system” -- inadequate training, long hours, ampoules that look the same, lack of checks, etc
- ▶ Healthcare has not tried to make itself safe



How to think of error?

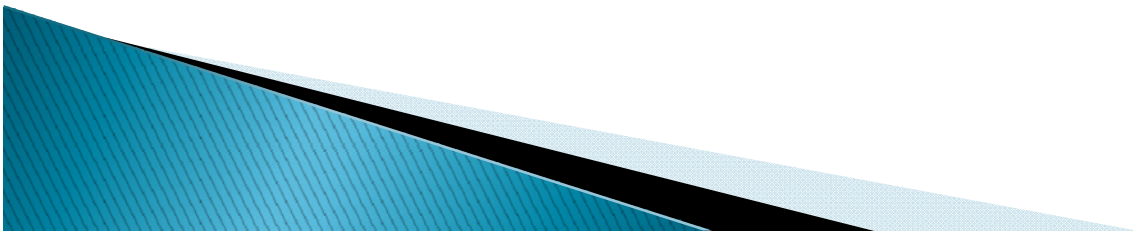
- ▶ **An individual failing**
 - Only the minority of cases amount from negligence or misconduct; so it's the “wrong” diagnosis
 - It will not solve the problem--it will probably in fact make it worse because it fails to address the problem
 - Doctors will hide errors
 - May destroy many doctors inadvertently (the second victim)



How to think of error?

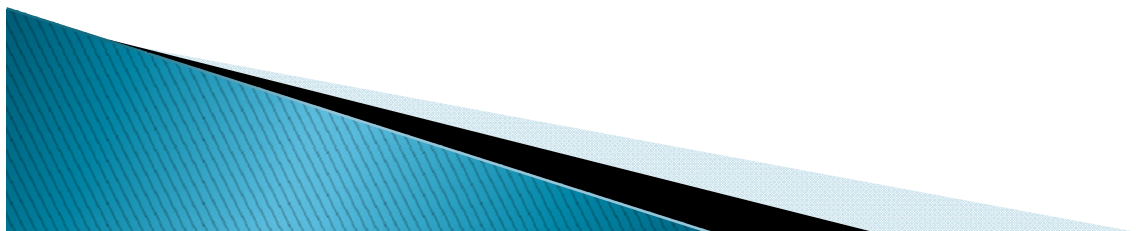
- ▶ **A systems failure**

- This is the starting point for redesigning the system and reducing error



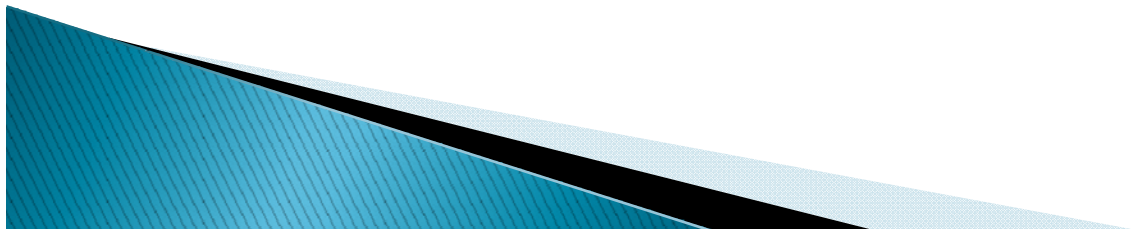
How to respond? Tactics

- ▶ Reduce complexity
- ▶ Optimise information processing
 - checklists, reminders, protocols ,guidelines
- ▶ Automate wisely
- ▶ Use constraints
 - for instance, with needle connections
- ▶ Mitigate the unwanted side effects of change
 - with training, for example.



Building a safe healthcare system (from James Reason)

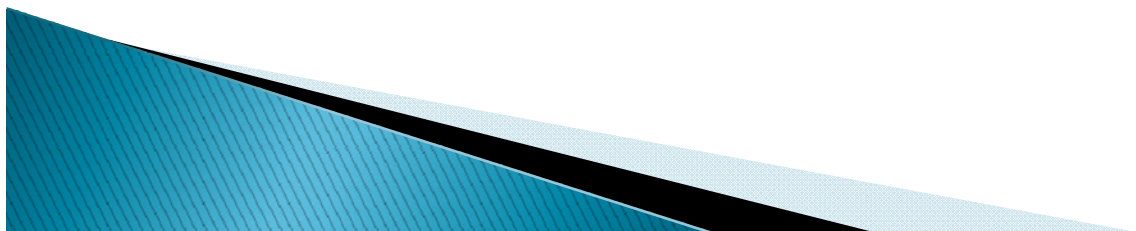
- ▶ Principles
- ▶ Policies
- ▶ Procedures
- ▶ Practices



Building a safe healthcare system (from James Reason)

▶ Principles

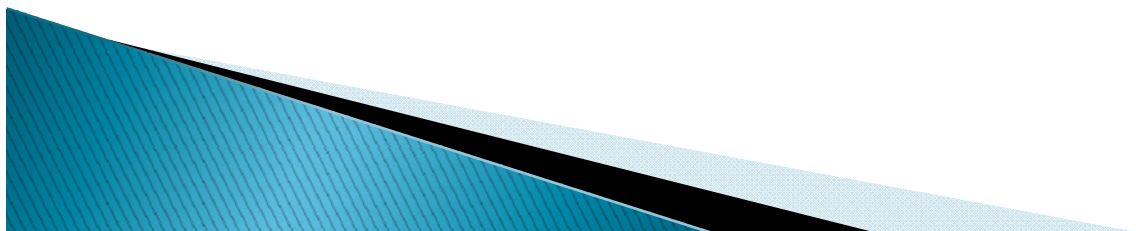
- Safety is everybody's business
- Top management accepts setbacks and anticipates errors
- safety issues are considered regularly at the highest level
- Past events are reviewed and changes implemented



Building a safe healthcare system (from James Reason)

▶ Principles

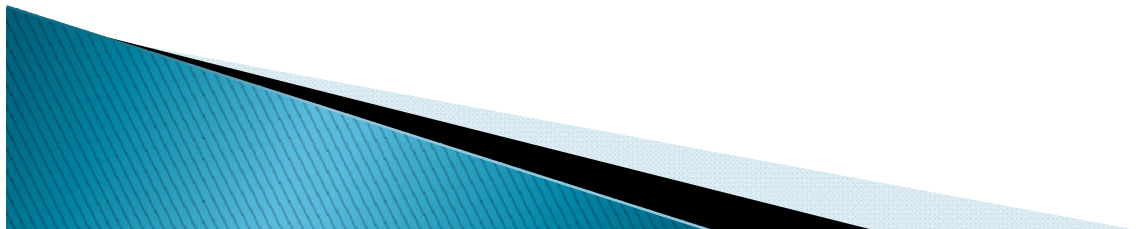
- After a mishap management concentrates on fixing the system not blaming the individual
- Understand that effective risk management depends on the collection, analysis, and dissemination of data
- Top management is proactive in improving safety--seeks out error traps, eliminates error producing factors, brainstorms new scenarios of failure



Building a safe healthcare system (from James Reason)

▶ Policies

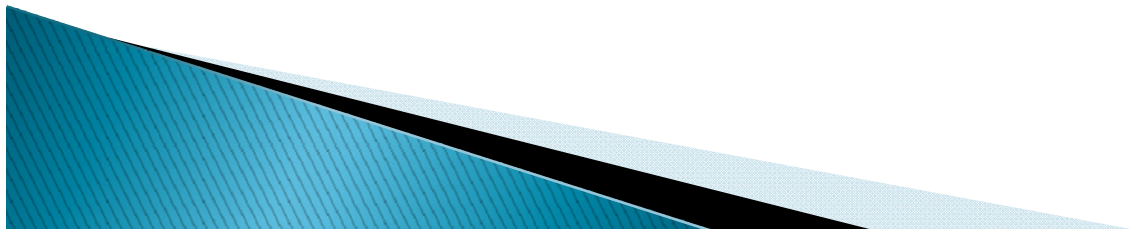
- Safety related information has direct access to the top
- Meetings on safety are attended by staff from many levels and departments
- Messengers are rewarded not shot
- Top managers create a reporting culture and a just culture



Building a safe healthcare system (from James Reason)

▶ Policies

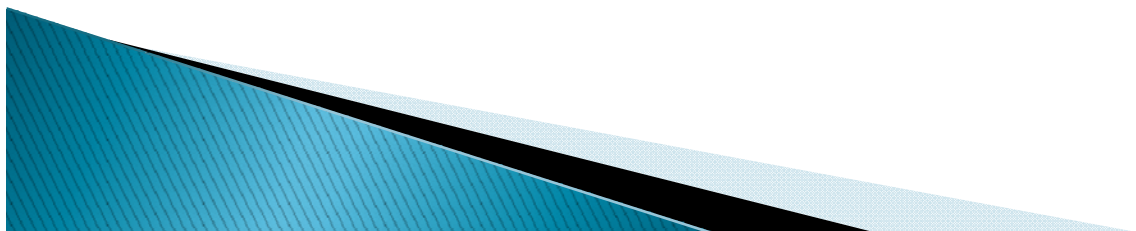
- Reporting includes qualified indemnity and confidentiality
- Disciplinary systems agree the difference between acceptable and unacceptable behaviour and involve peers



Building a safe healthcare system (from James Reason)

▶ Procedures

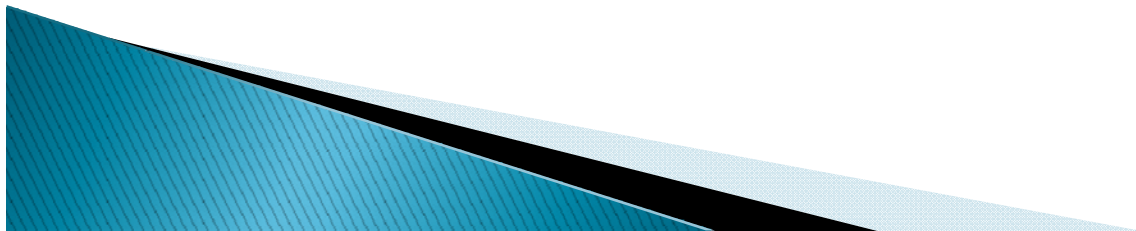
- –Training in the recognition and recovery of errors
- Feedback on recurrent error patterns
- An awareness that procedures cannot cover all circumstances; on the spot training
- Protocols written with those doing the job
- Procedures must be intelligible, workable, available



Building a safe healthcare system (from James Reason)

▶ Procedures

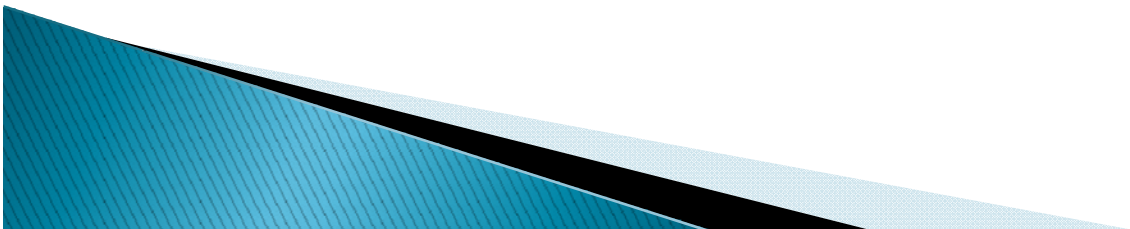
- Clinical supervisors train their charges in the mental as well as the technical skills necessary for safe and effective performance



Building a safe healthcare system (from James Reason)

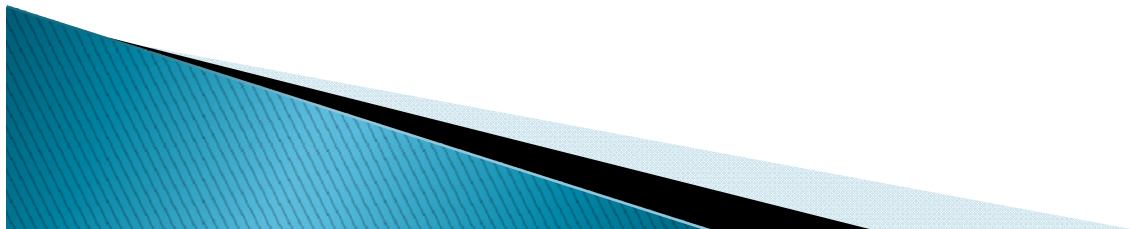
▶ Practices

- Rapid, useful, and intelligible feedback on lessons learnt and actions needed
- Bottom up information listened to and acted on
- *And when mishaps occur*
 - *Acknowledge responsibility*
 - *Apologise*
 - *Convince patients and victims that lessons learned will reduce chance of recurrence*



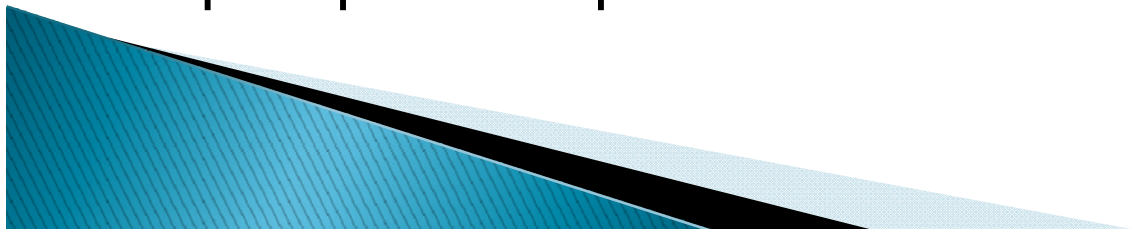
WORLD HEALTH ORGANISATION – PATIENT SAFETY SOLUTIONS

- ▶ **1. Look–Alike, Sound–Alike Medication Names**
Confusing drug names is one of the most common causes of medication errors and is a worldwide concern. With tens of thousands of drugs currently on the market, the potential for error created by confusing brand or generic drug names and packaging is significant.
- ▶ **2. Patient Identification**
The widespread and continuing failures to correctly identify patients often leads to medication, transfusion and testing errors; wrong person procedures; and the discharge of infants to the wrong families.



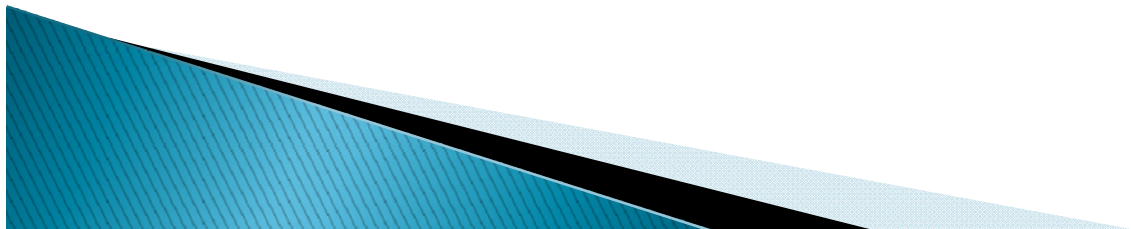
WORLD HEALTH ORGANISATION – PATIENT SAFETY SOLUTIONS

- ▶ **3. Communication During Patient Hand-Overs**
Gaps in hand-over (or hand-off) communication between patient care units, and between and among care teams, can cause serious breakdowns in the continuity of care, inappropriate treatment, and potential harm for the patient.
- ▶ **4. Performance of Correct Procedure at Correct Body Site**
Considered totally preventable, cases of wrong procedure or wrong site surgery are largely the result of miscommunication and unavailable, or incorrect, information. A major contributing factor to these types of errors is the lack of a standardized preoperative process.



WORLD HEALTH ORGANISATION – PATIENT SAFETY SOLUTIONS

- ▶ **5. Control of Concentrated Electrolyte Solutions**
While all drugs, biologics, vaccines and contrast media have a defined risk profile, concentrated electrolyte solutions that are used for injection are especially dangerous.
- ▶ **6. Assuring Medication Accuracy at Transitions in Care**
Medication errors occur most commonly at transitions. Medication reconciliation is a process designed to prevent medication errors at patient transition points.
- ▶ **7. Avoiding Catheter and Tubing Mis-Connections**
The design of tubing, catheters, and syringes currently in use is such that it is possible to inadvertently cause patient harm through connecting the wrong syringes and tubing and then delivering medication or fluids through an unintended wrong route.



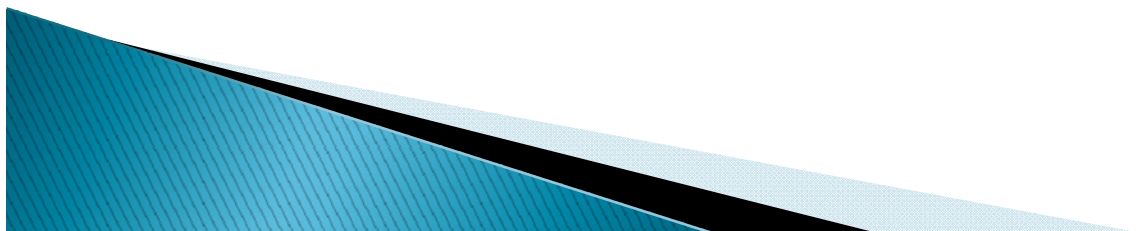
WORLD HEALTH ORGANISATION – PATIENT SAFETY SOLUTIONS

- ▶ **8. Single Use of Injection Devices**

One of the biggest global concerns is the spread of Human Immunodeficiency Virus (HIV), the Hepatitis B Virus (HBV), and the Hepatitis C Virus (HCV) because of the reuse of injection needles.

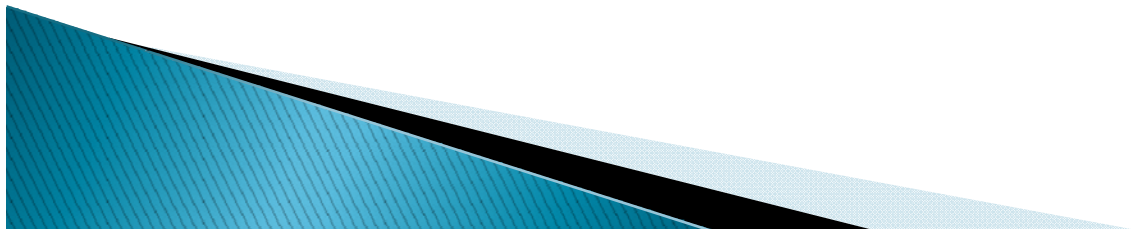
- ▶ **9. Improved Hand Hygiene to Prevent Health Care–Associated Infection I**

It is estimated that at any point in time more than 1.4 million people worldwide are suffering from infections acquired in hospitals. Effective hand hygiene is the primary preventive measure for avoiding this problem



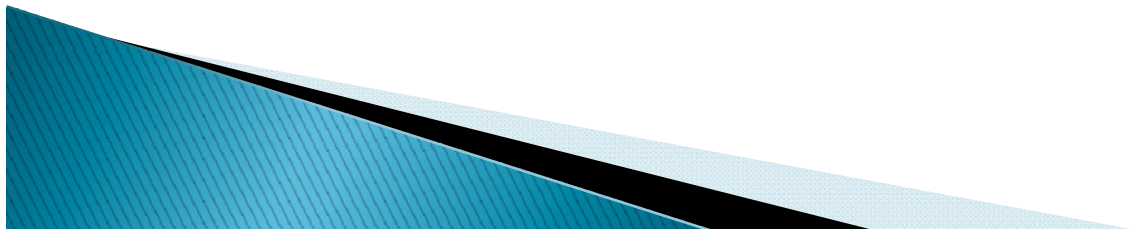
Resources

- ▶ Joint Commission www.jcaho.org
- ▶ Joint Commission International
www.jointcommissioninternational.com
- ▶ American Society Healthcare Risk Management www.ashrm.org
- ▶ WHO Collaborating Centre for Patient Safety Solutions www.ccforpatientsafety.org/



Resources

- ▶ Institute Of Medicine
www.iom.edu
- ▶ Institute for Health Improvement
www.ihl.org
- ▶ Healthgrades www.healthgrades.com
- ▶ National Patient Safety Foundation
www.npsf.org
- ▶ Institute for Safe Medication Practices
www.ismp.org



Conclusions

- ▶ Human beings will always make errors
- ▶ Errors are common in medicine, killing tens of thousands
- ▶ We begin to know something about the epidemiology of error, but we need to know much more
- ▶ Naming, blaming and shaming have no remedial value
- ▶ Take action *TODAY!!!*

