Alexandria Patient Safety Alliance

For Safer Hospitals and Practice

Introductory Booklet

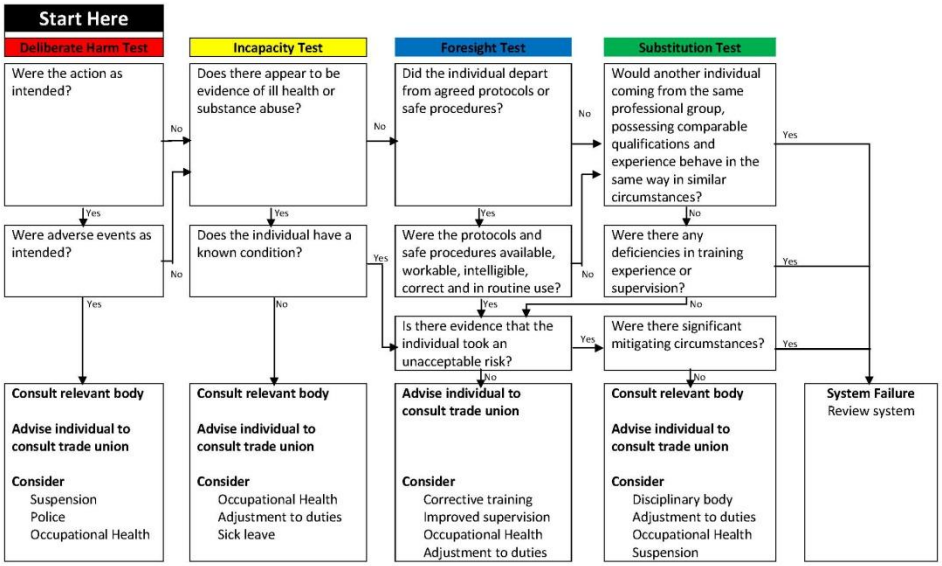
Incident Decision Tree

2012

APSA

The Incident Decision Tree

The Incident Decision Tree (National Patient Safety Agency, UK) is designed to help managers decide initial action to take with staff involved in patient safety incidents. The tool is based on a flowchart which guides the use through a series of structured questions about the individual's action, motives and behviour at the time of the incident. The responses to these questions lead to suggestions for appropriate management action. The Incident Decision Tree has been simplified and translated into Arabic by APSA for educational and local adaptation purposes.



When to use the Incident Decision Tree

Ideally, it should be used as soon as possible after the patient safety incident, while facts are still fresh in people's minds.

Golden rules

- Work through the Incident Decision Tree separately for each individual involved and work through it afresh if new information comes to light.
- Pause to gather information where you need to.
- Never make assumptions about the incident, the individual's behavior or motivation, the individual's ability to deal effectively with the situation.
- Never make assumptions about protocols and safe procedures in place at the time.
- Check the facts thoroughly for yourself
- Always record the facts you have gathered and the reasons you have arrived at your decision.

The Deliberate Harm Test

The Deliberate Harm Test asks questions to help identify or eliminate this possibility at the earliest possible stage.

SYSTEM ERROR

Were the actions as intended?

This question asks whether the actions were as intended, not whether the outcome was as intended. Applies equally to acts of omission and acts of commission. Consider whether on the one hand the individual forget or was prevented from taking the action and whether on the other hand they decided not take or refused to carry out the action.

Examples

Intended actions

- Not administrating medication
- Leaving a shift without completing duties

Non-intended actions

- Forgetting to administer medication
- Being diverted by an emergency

Acts of omission

- Not writing case reports
- Failing to call for help

Acts of commission

- Administrating the wrong medication
- Taking a blood sample when not required

Were adverse consequences intended?

This question tries to identify the individual's motives for taking the action they did. If the evidence suggests deliberate harm was intended, immediate suspension is likely to be inescapable.

Example

Harm not intended

- Dispensing generic medication instead of branded medication
- Giving new medication that interacts with current medication

Harm intended

- Deliberately leaving a patient in their excreta
- Deliberately withholding vital medication

Assisting self harm

- Providing emetics to anorexic patients
- Helping suicidal patients escape from hospitals

Notes on suspension

Consider when:

- Individual's presence presents danger to others
- Individual's presence may hamper investigation

Poor reasons:

- Please an angry patient or relative
- Media interest in incident
- Saving face of management
- Ease of decision

Alternatives

- Stopping individual from drug administration
- Stopping individual from performing surgery
- Stopping individual from working with patients
- Moving individual to another work area
- Placing individual under close supervision

Influencing factors

- Previous behavior
- Attitude towards incident
- Commonality of error

The Incapacity Test

If intend to harm has been discounted, The Incapacity Test helps to identity whether ill health or substance abuse cause or contributed to the patient safety incident.

SYSTEM ERROR

Does there appear to be evidence of ill health or substance abuse?

When considering this question, focus on the situation of the individual at the time of the incidence bearing in mind that an individual after a serious patient safety incident is likely to be stressed and traumatized.

Ill health

The magnitude of ill health should be verified followed by its impact on the individual's actions. Sever stress can lead to errors and should be considered a form of ill health.

Indirect manifestations of ill health

- Mentioning ill health to colleagues
- Waiting medical appointment
- Return from sick leave
- Incomplete recovery from previous illness
- Desire to have sick leave
- On medication
- Suffering from serious life events

Substance abuse

Substance abuse includes intoxication through alcohol or recreational drugs, solvent abuse, inhaling anesthetic gases and inappropriate self-medication (self injection with opiates)

Does the individual have a known medical condition?

This question considers whether the individual was suffering from a medical condition when the incident occurred. The individual may or may not have been aware of their medical condition at the time.

Medical condition

A 'known medical condition' is any chronic health problem with the potential to affect the individual's ability to carry out their work. Examples include: diabetes, hypertension, epilepsy, migraine, asthma, dermatitis, arthritis, multiple sclerosis, hepatitis B, sever visual impairment, clinical depression, alcoholism, cognitive problems due to dementia or head injury.

Is there evidence that the individual took an unacceptable risk?

The question considers whether the individual with a known medical condition took an unacceptable risk in exposing patients to it.

Factors to consider

- Awareness of condition
- Awareness of implications
- Use of proper safeguards

Where there significant mitigating circumstances?

This question considers the presence of any mitigating factors for those who have taken the unacceptable risk.

Mitigating factors

Work pressure

- Tiredness
- Short-staffing
- Bullying

External pressure

- Family issues
- Financial difficulties

Environmental pressure

- Distraction
- Difficult working conditions
- Shortage of supplies

The Foresight Test

If intent to harm and incapacity have been discounted, apply the Foresight Test to determine whether protocols and safe working practices were properly adhered to. The test does not try to remove an individual's responsibility for their actions.

SYSTEM ERROR

Did the individual depart from agreed protocols or safe procedures?

The question examines whether the practice-related safety incident requires a protocol in place and whether one exists. If so, did the individual depart from its content?

Where the protocols and safe procedures available, workable, intelligible, correct and in routine use?

Available

- Accessible during work hours

Workable, intelligible and correct

- Clear
- Current
- Not complex
- Not in conflict with others
- Promotes correct and sensible actions

Routine use

- Individual has been introduced to the protocol
- Individual has been trained on how to use protocol

Is there evidence the individual took an unacceptable risk?

This question asks whether the individual took a risk that would normally be considered unreasonable in the service concerned.

Factors to consider

- Habit of cutting corners
- Someone else's benefit
- Self benefit
- Arrogance
- Lack of self-discipline
- No explicable reason

The Substitution Test

If protocols were not in place or proved ineffective, apply the Substitution Test to assess how peer would have been likely to deal with the situation. The test also highlights relative deficiencies in training, experience and supervision.

SYSTEM ERROR

Would another individual coming from the same professional group, possessing comparable qualifications and experience behave in the same way in similar circumstances?

To answer this question you may need to obtain advice about acceptable practice from internal sources, such as a senior clinician, chief nurse or clinical governance lead, or from external sources such as professional bodies or relevant societies. It is important not to deduce the norm from blanket judgments and discrimination.

Where there any deficiencies in training, experience or supervision?

Consider whether the individual was properly equipped to deal with the situation. Problems may be immediately apparent, or may emerge only on discussion with the individual or their manager.

Factors to consider

Training

- Comprehensive
- Well-designed
- Effectively delivered

Experience

- Just starting
- Given responsibility too early

Supervision

- Adequate
- Active
- Supportive

Exercises

Exercise 1

A staff nurse working on a care of the elderly ward reported to the sister that she had telephoned the senior house officer for diamorphine for a terminally-ill patient in severe pain. She reported that the senior house officer had asked the nursing staff to administer the drug, saying that he would call in as soon as possible to write up a prescription retrospectively. The sister handed the drugs cabinet keys to the staff nurse without question and the patient was given the medication. The following day it transpired that the staff nurse had not telephoned the doctor. Initially she lied about this, but subsequently admitted she had not even tried to call because: “You can never get hold of them.” The staff nurse said she did not regret her actions and had administered drugs without prescription before. She was fully aware that she was breaching protocols. By contrast, the sister was shocked by the incident and mortified that she had accepted the staff nurse’s explanation. She, too, realised she had breached protocols and volunteered to move to another ward whilst the investigation took place.

Exercise 2

A diabetic consultant pediatrician slapped a three year-old child across the face during an out patient consultation. There was no dispute that this action constituted an unacceptable behavior. The consultant pleaded mitigating circumstances, citing fear that the child was going to bite him; tiredness and stress covering a colleague’s out patient list as well as his own; and anxiety about his son’s imminent examination results.

Exercise 3

An occupational health nurse picked up an ampoule of hepatitis B vaccine instead of an ampoule of tetanus vaccine and gave the wrong injection. She only realised the error when discarding the packaging. The nurse could not offer any explanation for her action. Her track record was unblemished.

Exercise 4

A newly-qualified nurse was asked by the ward sister to ‘draw up a syringe of erythromycin’ and give it to a sick child. The new recruit assumed this meant an intravenous syringe and duly injected the child with the drug. The child died as a consequence. The drug was in syrup form and the sister had meant a paediatric oral medicine syringe.

Systems Failures

System failure caused incident

If the Incident Decision Tree indicates that a system failure led to the patient safety incident, focus needs to shift onto tackling the underlying problems highlighted. The aim should be to improve practice and minimise the likelihood of recurrences. Research into patient safety shows that the majority of staff try to create a safe environment and prevent things from going wrong. Despite some high-profile cases, the overwhelming majority of incidents are not caused by malicious intent or even by lack of competence on the part of the individual delivering the care. The best people can make the worst mistakes.

System failure contributed to incident

Even in situations where the individual was clearly responsible, or where no one could have prevented the incident, systems failures might still be identified. These should be investigated in parallel to any other action.

Support for individual

Whatever the underlying cause of the incident, the individual and their colleagues might still need support, coaching and assistance in coming to terms with the events.

Causal factors

Patient safety incidents usually have four basic components, or causal factors:

1. active failures
2. barrier / defense failure
3. latent failures (system wide)
4. contributory factors (local)

Each of these components should be considered in the systems approach to safety. There may be more than one causal factor in any incident.

Active failures

These are actions or omissions by frontline staff that are sometimes called ‘unsafe acts’. They include slips, lapses, mistakes or violations of a procedure, guideline or policy. Usually short-lived and often unpredictable, active failures are influenced by latent system conditions and contributory factors such as stress, inadequate training and assessment, poor supervision or high workload.

Barrier / defense failure

Organizations will have control measures in places to prevent accidents happening. These control measures may take the form of barriers and defenses. When these barriers and defenses fail, an accident is possible. There are four types of barriers:

Physical

- Insulation of hot pies.
- Lead shield or apron for radiographer.

Natural (Time Distance Placement – TDP)

- Procedures for diagnosing brain stem dead patients, independent review by two doctors, which is then repeated after 12 hours (time process).
- Isolation rooms for MRSA patients (placement).

Human Action

- Checking the temperature of a bath before immersing an elderly patient.
- Control and restraint procedures.

Administrative

- Protocols and procedures, e.g. implementation of drug administration policy.
- Supervision and training.

Latent failures

These are the underlying, rather than immediate, factors that can lead to patient safety incidents. They relate to aspects of the system in which people work. They are usually actions or decisions taken at the higher levels of an organisation, which seem well thought out and appropriate at the time but can create potential problems within the system. These factors can lie dormant and unrecognised for some time. Alternatively, they may be recognised but changing them is not a priority. The latent conditions combined with local conditions (active failures and contributory factors) create the potential for incidents to happen.

Examples of latent system factors include decisions on:

Planning

Fixed staffing levels may be adequate until extreme conditions occur, such as higher than average sickness absence or more than the usual number of critically ill patients.

Designing

Designing a new clinic, practice, ward or diagnostic centre without considering vulnerable groups, such as children or mental health patients, and leaving dangerous equipment within their reach.

Policy-making

Having a strict take-home policy for drugs, which doesn't take into account difficult times to get to a pharmacy or rare drugs that may not be local stock items.

Communicating

Having only a limited reporting structure for patient safety incidents, meaning that vital lessons are not learned across the organisation.

Contributory factors

These are local factors that can contribute to an incident in relation to:

Patients

These are unique to the patient(s) involved in the incident, such as their age, language or the complexity of their condition.

Individuals

These are unique to the individual(s) involved in the incident. They include psychological factors, home factors, and work relationships.

Tasks

These include aids that support the delivery of patient care, such as policies, guidelines and procedural documents. They need to be up to date, available, understandable, useable, relevant and correct.

Communication

These include communication in all forms: written, verbal and non-verbal. Communication can contribute to an incident if it is inadequate, ineffective, confusing, or too late. These factors are relevant between individuals, within and between teams, and within and between organisations.

Team and social factors

These can adversely affect the cohesiveness of a team. They involve communication within a team, management style, traditional hierarchical structures, lack of respect for less senior members of the team and perception of roles.

Education and training

The availability and quality of training programmes for staff can directly affect their ability to perform their job or to respond to difficult or emergency circumstances. The effectiveness of training as a method of safety improvement is influenced by content, delivery style, understanding and assessment of skill acquisition, monitoring and updates.

Equipment and resources

Equipment factors include whether the equipment is fit for purpose, whether staff know how to use the equipment, where it is stored and how often it is maintained. Resource factors include the capacity to deliver the care required, budget allocation, staffing allocation and skill mix.

Working conditions and environmental factors

These affect ability to function at optimum levels in the workplace, and include distractions, interruptions, uncomfortable heat, poor lighting, noise and lack of or inappropriate use of space.

Examples of system failures

- Inadequate procedures for obtaining and checking references.
- Failure to react to employees' concern regarding a colleague's alleged substance abuse.
- Protocol that works only in very restricted situations.
- Lax arrangements for accessing controlled drugs.
- Failure to offer hepatitis B vaccinations to 'at risk' staff.
- Lack of flexibility and support for staff experiencing personal problems.
- Failure to monitor individual with known alcohol addiction.
- Poor labelling of drug supplies.
- Unacceptable delay in obtaining occupational health appointments.
- Failure to address sudden deterioration in an individual's performance.
- Malfunctioning fire-alarms causing distraction.
- Inadequate lighting in a theatre suite.