Procedure for Investigating an Adverse Incident

Introduction
This procedure can be applied to all adverse incidents and complaints, it details how to decide the level of investigation required and the action to be taken by the investigation team or individual investigating. The process aims to identify and record the direct, contributory and root causes of the adverse incident. The information obtained can then be analysed and common causes and trends highlighted. Appropriate preventative action can then be taken to avoid a recurrence.

If an adverse incident is being investigated under the adverse incident reporting procedure and a complaint is received, the investigation will continue in its current form and the outcome of the investigation will form part of the complaint response.

For ease of reference adverse events or incidents, will all be referred to as "incidents" for the remainder of this procedure document.

1.0 Definitions

1.1 Direct cause is defined as the immediate cause which triggered the incident.

1.2 Contributory cause is defined as a cause which contributes to the incident but which by itself would not have caused the incident.

1.3 Root causes are defined as the underlying causes to which the incident can be ultimately attributed and which if corrected will prevent a recurrence.

2.0 Undertaking an investigation

2.1 The primary purpose of investigating an incident is to ascertain:
- What happened?
- How did it happen?
- Why did it happen?

So that appropriate action can be taken to prevent future occurrences.

2.2 While it is recognised that human error is frequently seen as the direct cause or a contributory cause of incidents, the root cause is often a more complex series of factors which have been lying dormant or have been tolerated and have come together to allow the event to occur.

2.3 Unless incidents are investigated to identify the underlying, tolerated or dormant factors, and these are addressed, any improvement strategy aimed solely at individual practice is unlikely to be successful in preventing a recurrence of that type of event.

2.4 All staff must feel safe to report incidents and safety issues and to this end the Trust operates an open, honest and just culture with regard to incidents in the Trust .The information they provide will be used to improve the safety and quality of health and social care services for patients/clients and the working environment for staff and visitors.

2.5 The incident investigation process must be:
- Fair and equitable
- Focused on learning and change
- Focused on identifying contributory and root causes

2.6 This should mean that:

- It will be a rare occurrence for a reported incident to lead to disciplinary action being taken
- The disciplinary process will only be used where it is clear that the actions of those involved included an intention to harm, a criminal act, serious professional misconduct or continued professional misconduct.

For deciding level of investigation see - Procedure for Grading an incident

3.0 The Investigation Team

3.1 For all high to extreme risk events (amber – red) and events with a severity of moderate to catastrophic, it is good practice for the investigation to be undertaken by more than one person. The lead facilitator should ideally have been trained in root cause analysis.

3.2 Authority to investigate an incident or to set up an investigation:

Green – Low Risk- Investigated and reviewed locally in the ward/facility in which the event occurred. The investigation lead will normally be the ward or department manager. It is likely that nothing further can be done to eliminate/reduce/control risk further. The local team should identify learning points or safety improvements and implement control measures. Any controls identified which are not within the local team's control should be communicated to more senior managers for consideration.

Yellow - Medium Risk- Investigated and managed locally, as for green adverse incidents, but reviewed by the Service Manager and the Governance and Quality Manager for that Service Group.

Amber – Major Severity or High Risk - Investigated and managed locally and may be subject to an investigation using a Root Cause Analysis (RCA) methodology led by a suitably trained person within the Service Groups in which the event occurred. The Governance and Quality Manager in conjunction with the relevant Director should decide on the appropriate person to lead the investigation. It is the responsibility of the relevant management team to ensure that all learning points and safety improvements are appropriately identified and those not within the control of the local management team are communicated to the relevant Service Group Governance and Quality Managers. It is recommended that high risks are recorded on the Service Group Risk Register.

Red– Catastrophic Severity or Extreme Risk - The Medical Director and /or relevant Service Group Directors should appoint an investigative team led by a trained RCA facilitator. All of the resulting reports and improvement strategies should be monitored by the SAI (Serious Adverse Incident) Review Board. Where the risk cannot be immediately reduced the risk must be added to the Service Group risk register and considered at the next available Risk Register Review Group for inclusion on the Corporate Risk Register via the Assurance Group.

Where the adverse incident risk grading is red because of its **potential consequences and likelihood of recurrence** it is the responsibility of

the relevant Co- Director to ensure the adverse incident is managed in line with amber adverse incidents and appropriately reviewed in line with RCA principles.

3.3 Incident investigation will normally comprise of the following processes:

- Identify the incident to be investigated
- Form the investigation team
- Preserve direct evidence from the scene
- Photographs taken when possible
- Chart the event with current knowledge
- Gather documentary and other evidence
- Revise the event chart
- Arrange and carry out interviews
- Revise the event chart
- Identify casual factors
- Analyse casual factors
- Decide on option for improvement and obtain costs
- Produce an investigation report
- Ensure implementation of improvement plans.

3.4 Good practice indicates that Incident investigation should normally be completed within the following timescales:

Catastrophic severity or Extreme risk	within 45 working days
Major severity or high risk	within 30 working days
Medium risk	within 20 working days
Low risk	within 5 working days

In exceptional circumstances the period of investigation may take longer.

4.0 Investigating the Incident

Step One: Identify the scope of the incident and collect complete Information

4.1 Information Gathering

All material facts relating to the incident must be gathered as soon as possible after the event. In determining what information to collect you must consider the lead up to, as well as the incident itself. For complex events it is only by starting at the point the incident occurred and working backwards that the "start point" for the incident can be identified. For some incidents the start point will be identified as the patient's admission to hospital (or even before).

Investigators will find it helpful to consider information from a range of sources including:

- The people involved in or witnessing the event
- The place or environment in which the event took place
- The equipment or objects involved in the event
- The paper work related to the event

- The widely held beliefs about the normal work processes, team relationships and adequacy of leadership in the workplace.

4.2 Persons involved in the event

All staff/patients/visitors/contractors involved in the event must be identified and informed an incident investigation is taking place. They must be informed that their assistance in investigating the incident would be appreciated and that the purpose of the investigation is to identify areas where systems failed rather than to focus on human error. All witnesses to the event should be interviewed if possible along with the "affected" person (if circumstances allow).

All staff involved in tragic or catastrophic incidents must be advised of the availability of confidential support and counselling during what will be a stressful period, and told they can have a friend or staff side representative with them during interviews. Staff involved in, or witness to the event must be asked to provide a statement (including events leading up to and following the incident) as soon as possible after the event. See 'Guidelines for writing a statement'.

4.3 The Place (environment) in which the event occurred

Investigators should visit the environment where the incident took place preferably before any changes are made and note the layout. A sketch of the area and its layout may be useful particularly if annotated with the location of persons involved in the incident, and other witnesses to the incident. Photographic evidence of the environment can be invaluable.

4.4 The Equipment or objects involved in the event

Any piece of equipment involved in the incident should be removed and preserved as evidence. See Management of Medical Devices policy for further information

4.5 Paper or electronic evidence

For example:

- Guidelines, policies and procedures
- Clinical records
- Incident reports
- Risk assessments
- Maintenance records
- Clinical audits

4.6 Working Practices

It is important to elicit custom and practice in the workplace in which the incident occurred. The information obtained can help you shape the context in which factors which leave an area vulnerable to incidents have come to pass.

5.0 Investigating the Incident

Step Two: Sort and Map the Data

The chronology of events is of utmost importance in your investigation and must be mapped out to allow identification of problem areas and areas of good practice in the sequence of events. Two common methods of doing this are shown below.

5.1 Timeline

This consists of a timed record of events as they took place in chronological order. Dates and times should be recorded on the left of the page with a narrative stating what happened.

5.2 Diagrammatic Timeline

This provides a much greater degree of clarity about the key stages of the event and allows the recording of supporting information. It also allows mapping of the interface between involved agencies on a single document. The timeline will assist investigators to identify the primary issues or concerns which require a causal analysis.

When mapping the event timeline you can start at the point from which the chain of events leading to the incident occurred or work backwards from the incident until you reach what you believe to be the start point.

Each happening, plus the date and time of its occurrence are placed in a rectangular or square box in chronological order. Arrows indicating the flow of time connect the boxes. Supporting information that assists in building up the picture can be attached at relevant points on the time line.

6.0 Investigating the Incident

Step Three: Problem Identification and Prioritisation

As you map the chronology of events you will generate questions to which you will need answers. Some of these will be issues relating to the chain of events and issues of clarification, others will be "Why" questions as you try to understand how the event happened.

The fact based questions can be answered with relative ease by going back to the people involved in the incident. The "Why" questions are harder to answer and may require the involved parties to get together with the support of the investigation team to explore the unanswered questions.

Having gathered all relevant information about the incident you are now ready to perform a root cause analysis if required.

6.1 Option 1 : Investigation Team Analysis

Using the information collected during the investigation the investigation team can independently undertake the causal analysis using brain storming techniques.

6.2 Option 2 : Critical Incident Meeting

Call a critical incident meeting and invite all relevant staff. The purpose of such a meeting is to:

- Present a full chronology of events
- Involve them in identifying and prioritising the critical issues that need to be explored further

- Explore the critical issues for contributory / influencing factors and root causes
- Generate a series of recommendations
- Acknowledge and commend identified good practice and action taken in mitigating the seriousness of the incident

7.0 Investigating the Incident
Steps Four and Five: Problem Exploration and Identification of Quality Improvements

The problem should be explored using Root Cause Analysis tools. Some easy to use root cause analysis tools have been detailed below.

Brainstorming
This is a familiar technique that can be used to assist the group to identify the issues that need further exploration. There are no right or wrong answers and the trick is not to allow any in-depth exploration during the brainstorm. The facilitator must record the ideas as they are spoken.

The Five Why's
This is used to delve deeper into a problem asking "why?" for each primary cause identified, then asking "why" again in response to each answer until there are no more causes forthcoming. It is best suited for exploring simple non-complex problems. As a brief rule of thumb it usually takes about five rounds of asking "why?" to identify the root cause of a problem, but you may need to ask why more or less than five times. You can only investigate one cause at a time using this method and it is better to follow each identified cause to its end before investigating another.

Fishbone Diagrams
Draw a long horizontal arrow on a sheet of paper. At the head of the arrow write the problem to be explored. Spines are then added to the arrow and each spine is given a classification label representing the main areas under which you want to explore the contributory factors to the identified problem. It is suggested that the following classifications be used to explore the problem.

- Patient factors
- Individual (staff member)
- Team and social factors
- Equipment Work conditions
- Task / process
- Communications
- Education and training
- Strategic management

You should then consider each classification in turn and consider if there were any issues of influence that map under it. Not all influencing factors are negative. You

could also identify positive factors that reduced the impact the identified problem had on the incident. This is particularly true of 'near miss' incidents. These should be recorded as well as they can make a valuable contribution to safety improvement strategies.

8.0 Investigating the Incident
Step six – Generating the Incident Investigation Report, Recommendations and an Action Plan

The investigation report must be easy to follow and clearly present the salient points. It is recommended that the report should follow the structure outline (Health and Social Care Regional Guidance for Incident Investigation / Review Report, DHSSPSNI, September 2007). See link below for further guidance: http://www.dhsspsni.gov.uk/hsc_sqsd__34-07_guidance.pdf

There should be no more than five main recommendations if possible and these must be focused on addressing the root causes or fundamental issues associated with the incident i.e. those things that once addressed will prevent the problem from recurring. Recommendations should identify where the responsibility lies for considering and acting on the recommendations. Do not name individuals but identify the department / service area / specialty responsible for each recommendation. Recommendations can include supervisory and training issues. Recommendations should also include some indication of the risk of doing nothing.

Key points for formulating action plans:

- All action planned must be within the control of the person / team making the plan
- The person / team developing the action plan must agree and own the content of the plan
- The person responsible for implementing each point of the action plan must be identified and instructed
- Time scales for the delivery of completed action points must be agreed
- Monitoring and review processes must be agreed at Service Group level.

9.0 Memorandum of Understanding Investigating patient or client safety incidents (Unexpected death or serious untoward harm) DHSSPS, PSNI, Coroners Service and HSENI, February 2006

In circumstances of unexpected death or serious untoward harm requiring investigation by the police, coroners or HSENI separately or jointly, the Memorandum of Understanding may be applied. This may be the case when an incident has arisen from or involved criminal intent, recklessness and/or gross negligence, or in the context of health and safety, a work-related death.
The memorandum of understanding is supported by other operational guidelines produced by the respective organisations. The memorandum focuses on

investigation by DHSSPSNI, HPSS, PSNI, HSENI and Coroners in HPSS organisations. It sets out the general principles for the HPSS, police, coroners and HSENI to observe when liaising with one another. It will apply to people receiving care and treatment from the HPSS in Northern Ireland. Follow link below for further guidance:
http://www.dhsspsni.gov.uk/mou_investigating_patient_or_client_safety_incidents.pdf