NHS
National Patient Safety Agency
National Reporting and Learning Service

Root Cause Analysis Investigation Tools

Concise RCA investigation report examples

- Acute service example
- Mental health example
- Ambulance service example
- Primary care example

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Acute service example

Summary incident description and consequences

Example
A woman sustained an allergic reaction following IV administration of a drug to which she was known to be allergic.

Incident date:	07.02.00
Incident type:	Medication incident
Healthcare specialty:	Surgery
Actual effect on patient:	Allergic reaction
Actual severity level:	Low

Scope and level of investigation

Level of investigation – Concise
The investigation was planned to begin at referral for admission and to conclude at final diagnosis/incident outcome. The investigation included referring GP practice, short stay ward, pharmacy and the patient.

Involvement and support of patient and relatives

The incident was discussed with the patient and her husband, and an apology was given. The patient was involved in the investigation to help determine what went wrong, and a copy of the investigation report and recommendations will be sent to the patient by post, in line with her wishes.

Chronology of events

See template below

Detection of incident

Identified by change in patient condition (staff noticed development of a skin rash).

Care and service delivery problems

Nurses on a short stay ward routinely failed to complete the section in the patient notes designed to highlight the existence of known allergies.

Contributory factors

Over the years, numerous assessments for nutrition, pressure ulcers, falls risk etc have been added and led to a situation where short stay ward staff found it impossible to complete all documentation in the time available. The allergies record sheet was not filed in a prominent place for staff to complete. The patient was not asked if she was allergic to the drug.

Root causes

When adding or updating patient assessments and care plans, risk assessment of the wider implications of their use should be conducted and acted upon to reduce the risk of impact on patient safety.

Lessons learned

A distinction should be made between essential and desirable documentation in clinical records.

Recommendations

1. Ensure allergy records and other priority assessment sheets are routinely filed prominently for completion.
2. Introduce routine requirement to ask patients about known allergies as a double-check wherever possible.
3. Ensure essential assessment criteria are set as mandatory fields in new electronic record development.
4. Agree and highlight (e.g. in grey) the essential fields to be completed within standard assessment charts for short stay patients.

Arrangements for sharing and learning

Share findings with other departments caring for short stay patients and include them in piloting solutions.
Share findings with Patient Safety Action Team to identify opportunities for sharing outside of the organisation.

Author *A. Manager* **Date** *30.03.00*

Chronology of events

Date and time	Event
30.11.1999	**Example** - Patient referred for surgery by GP.
	(etc...)

Mental health example

Summary incident description and consequences

Example

A young man on 30 minute observations for risk of self-harming absconded from the ward. He was later found by police to be unharmed but in a distressed state.

Incident date:	15.12.04
Incident type:	Abscond
Healthcare specialty:	Acute MH
Actual effect on patient:	Psychological
Actual severity level:	Low

Scope and level of investigation

Level of investigation – Concise

The investigation was planned to begin at the point of referral to the acute psychiatric ward and to conclude when the patient was returned to the ward. The investigation included the referring GP practice.

Involvement and support of patient and relatives

The incident was discussed with the patient and his family and an apology was given to all. The patient and the family were involved in the investigation to help determine why he was able to abscond.

Chronology of events

See template below

Detection of incident

Incident identified by count/audit/query/review (staff identified patient missing and notified police).

Care and service delivery problems

The nurse failed to hand over details of patients care plan including the need for 30 minute observations.

Documentation of the care plan was made in the wrong section of the patient's notes by the admitting doctor.

Contributory factors

Handover to late shift staff had been rushed due to the need for morning staff to attend mandatory training.The SHO had verbally told the staff of the plan of care, but as he was new to the trust and not familiar with the notes, he had not written the plan in the right place.

Root causes

An adequate and appropriate induction programme is required for new doctors.

Appropriate cover is required to enable staff to attend mandatory training without impacting on staffing levels.

Lessons learned

Only root causes were identified for this incident.

Recommendations

Junior doctor induction to include familiarisation with hospital notes.

All staff attending mandatory training sessions to be rostered as supernumerary on the off duty.

Arrangements for sharing and learning

Ensure HR, Training and Post-graduate departments are aware and implement revised medical staff induction and training programmes.

Share findings with SHA Patient Safety Manager to identify opportunities for sharing outside of the organisation.

Author *A. Manager* **Date** *04.01.05*

Chronology of events	
Date and time	**Event**
12.12.04	**Example** - Patient seen by GP suffering from severe anxiety and depression. Had a history of self harming since the age of 16 and had been under the care of the mental health services. Referred by GP to CPN for assessment at home.
14.12.04	Seen by CPN, very distressed and threatening to harm himself. Assessed as being high risk of self harm and referred to GP for admission to hospital.
14.12.04	Admitted to mental health unit for inpatient care.
	(etc...)

Ambulance service example

Summary incident description and consequences

Example

A woman with dementia sustained a wrist fracture after a fall, when the Patient Transport Services (PTS) left her at the wrong address on return from a day hospital visit.

Incident date:	30.11.99
Incident type:	Patient accident
Healthcare specialty:	Ambulance
Actual effect on patient:	Wrist fracture
Actual severity level:	Moderate

Scope and level of investigation

Level of investigation – Concise

The investigation started from when the lady was collected from her home that morning and concluded when she was admitted to secondary care. The investigation included day care staff, ambulance crew and patient's carer.

Involvement and support of patient and relatives

The incident was discussed with the patient and her husband, and an apology was given. The patient was unable to be involved in the investigation due to her mental capacity, although her husband was able to help determine what went wrong, and a copy of the investigation report and recommendations will be sent to him by post.

Chronology of events

See template below

Detection of incident

Incident identified by count/audit/query/review (other patient's daughter reported wrong patient had been dropped off and had fallen).

Care and service delivery problems

The PTS crew failed to link the patient identity with the correct address.

No formal protocol for adequate identity checking of patients at handovers.

Contributory factors

- Day hospital patients did not have any formal hospital identification.
- The PTS crew failed to realise that the handbag of one patient had been swapped by another.
- There was no way to identify which patient went to which address, and who could be left unsupervised.
- The system relied on one member of the PTS crew knowing the patients.

Root causes

There is no protocol for sharing essential information, such as the patient's ID, from one service to another.

Lessons learned

Only root causes were identified for this incident.

Recommendations

- For all handovers between professionals at the day hospital, a minimum structured format should be developed and implemente, which includes checks on the patient ID and supervision needs.
- A portfolio of ID cards with all patients' photos and supervision instructions must be available for each drop off journey.

Arrangements for sharing and learning

Share findings with the Patient Safety Action Team at the SHA to identify opportunities for sharing in and outside of the organisation.

Author *A. Manager* **Date** *10.01.00*

Chronology of events

Date and time	Event
30.11.1999 - 09.30	Patient taken to Day Care Centre by morning PTS crew.
30.11.1999 -15.55	The PTS crew realised a mistake had been made when they took the second lady home and were alerted to the mistake by her husband.
30.11.1999 -16.10	The PTS crew immediately informed their Locality Ambulance Officer, who had just received the report of a fall at the previous drop-off address.
	(etc...)

Primary care example

Summary incident description and consequences

Example
A message left regarding a home visit was not promptly passed on to the GP, resulting in delayed treatment.

Incident date:	06.11.07
Incident type:	Implementation of care and ongoing monitoring
Healthcare specialty:	Primary Care – GP Practice
Actual effect on patient:	Delayed referral
Actual severity level:	Low

Scope and level of investigation

The Practice Manager was tasked to undertake a concise investigation. The investigation looked back six months, identifying reasons for delay in passing on messages and inappropriate responses to messages.

Involvement and support of patient and relatives

The outcome of the investigation and the solutions to reduce the probability of it happening again were discussed with the patient. On reflection, this involvement could have been sooner, but the patient was only involved after the Practice received a complaint.

Chronology of events

See template below

Detection of incident

Incident identified by count/audit/query/review (patient's relative called GP to ask why visit had not been made).

Care and service delivery problems

The practice did not have a system to escalate requests for urgent visits.

No additional medical cover available for urgent visits.

Contributory factors

- Lack of guidance, protocols or procedures to escalate requests from patients.
- System to pass messages to medical staff was ad hoc.
- Escalation' of requests relied on non clinical staff.
- No medical staff available to deal with emergencies.

Root causes

Lack of formal triage system to identify and trigger urgent home visits where indicated.

Lessons learned

- Administrative systems within the Practice are not regularly reviewed and risk assessed.
- Early involvement of the patient in the investigation may have reduced resentment experienced.
- Medical cover does not currently allow for urgent home visits.

Recommendations

- Medical cover (duty doctor) to be introduced for triage and urgent home visits when necessary.
- The doctor can also do any routine visits/paperwork as time permits.

Arrangements for sharing and learning

The outcome will be shared with other practices at the PCT via clinical governance meetings, and reported in the PCT Significant Event Newsletter.

Author *A. Manager* **Date** *21.12.07*

Chronology of events	
Date and time	**Event**
5/11/07 12.00	Patient with abdominal pain and vomiting was visited by GP who provisionally diagnosed Biliary Colic. Her symptoms eased following an opiate injection.
19.00	Symptoms returned and she called out of hours GP
21.00	Out of hours GP visited and repeated earlier treatment, again with benefit
6/11/07 12.00 – 8.30	Overnight her condition worsened
8.30	Patient's husband phoned GP Practice and requested a visit, stressing that the patient was very distressed
8.35	Message was recorded but did not get passed to the GP immediately
12.30	GP received message and promptly arranged to visit
13.00	GP visited and admitted patient
	Patient required and had a cholecystectomy
9/11/07	Issue raised as a significant event at Practice meeting
9/11/07	Practice manager tasked to revise their visiting system
12 – 13/11/07	Practice manager gathered information re GP visits
16/11/07	Practice manger presented findings and discussions to Practice meeting
19/11/07	New system trialled
21/11/07	A letter of complaint received from the patient
22/11/07	Patient contacted regarding the complaint and invited to come and discuss it with the Practice
11/12/07	Patient and her husband visited the Practice and the case and solution was discussed, resulting in resolution