Original Article

Indian Journal of Legal Medicine
Volume 5 Number 1 / January - June 2024

Hospital Death Audit in Practice

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How to cite this article:

Vivekanshu Verma, Shri Gopal Kabra. Hospital Death Audit in Practice. Indian Journal of Legal Medicine. 2024;5(1):47–54.

Abstract

Mortality audit, also known as death review, is a systemic process that documents the causes of death and factors that contributed to it. Conducted by a medical audit committee and recommended by Quality Council of India, this review aligns with standards set by NABH and JCI. It scrutinizes deaths occurring in Operation Theatres, addressing issues on criminal negligence under the Consumer Protection Act. The audit investigates therapeutic misadventures, surgical errors, and deficiencies in surgery, involving Healthcare Providers (HCPs). It also examines anesthetic toxicity, overdoses, anaphylaxis, and other critical factors. Through verbal autopsies and postmortem analyses of the critical facts, the process aims to identify lapses and improve future medical practices, ensuring higher quality care and patient safety.

Keywords: Medical Audit; Committee; Quality Council; NABH; JCI; Death in Operation theatre; CP Act; Therapeutic misadventure; Surgical errors; Deficiencies in surgery; HCPs; Anesthetic toxicity; Overdose; Anaphylaxis; Autopsy; Postmortem.

INTRODUCTION

Medical Audit, i.e. expert scrutiny and review of all hospital deaths is a basic quality control method of hospital management. It is one of the standards of the National Accreditation Board for Hospitals and Health Care Providers (NABH), a constituent board of Quality Council of India. The best method for it is autopsy. However, since autopsy can be done only with relatives' consent, it is not possible because of their religious beliefs and social perceptions. The next best is **death audit** which is retrospective peer review of the death file.

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Received on: 09.07.2024 **Accepted on:** 17.08.2024

Standard Operating Procedures (SOPs) for Death Audit in Hospitals

- Purpose
- Objectives
- Scope
- Definitions
- Responsibilities
- General Procedures
  a. Notification and Identification
  b. Immediate Care of the Deceased
  c. Preliminary Documentation
- Detailed Audit Procedure
  a. Medical Records Review
  b. Clinical Review
  c. Mortality Review Meetings
- Forensic Examination and Autopsy
  a. Indications for Forensic Examination
  b. Procedure for Requesting an Autopsy

- Legal Documentation
  a. Death Certificate
  b. Medicolegal Report
- Communication with Relatives
  a. Informing the Family
  b. Providing Support and Information
- Reporting and Record Keeping
  a. Internal Reporting
  b. External Reporting
  c. Record Maintenance
- Confidentiality and Security
- Training and Competency
- Review and Audit
- Guidelines by Medical Councils & Hospital Administration

Purpose

The documentation and audit of hospital mortality, particularly in medicolegal cases, are crucial for maintaining transparency, accountability, and quality of care in a tertiary centre. This SOP outlines the comprehensive process for conducting a dead patient's medical audit, ensuring all legal and clinical requirements are met.

Objectives

- To ensure accurate and thorough documentation of hospital mortality.
- To identify and review factors contributing to patient deaths.
- To comply with legal and regulatory requirements in medicolegal cases.
- To improve patient care through systematic mortality audits.

Scope

This SOP applies to all healthcare professionals, administrative staff, and relevant stakeholders involved in managing and documenting hospital mortality in a tertiary centre.

Definitions

- **Medical Audit:** A systematic review of medical records and clinical practices to ensure quality and compliance.
- **Medicolegal Case:** Any case involving legal implications related to a patient's death, including suspected foul play, negligence, or unexplained causes.
- **Tertiary Centre:** A hospital providing specialized medical care, typically involving advanced and complex treatments.

Responsibilities

- **Hospital Administration**
  - Ensure resources and support for conducting mortality audits.
  - Enforce policies and procedures related to documenting hospital mortality.
- **Medical Staff**
  - Conduct thorough and accurate documentation of patient care.
  - Participate in mortality review meetings and audits.
- **Mortality Review Committee**
  - Oversee the audit process.
  - Review and analyze findings from mortality audits.
  - Recommend improvements based on audit outcomes.
- **Legal and Forensic Team**
  - Ensure compliance with legal requirements.
  - Assist in the preparation of medicolegal reports.

General Procedures

- **Notification and Identification**
  - **Immediate Notification:** Upon a patient's death, notify the attending physician, nursing staff, and hospital administration immediately.
  - **Identification Verification:** Verify the deceased patient's identity using hospital records and identification tags.
- **Immediate Care of the Deceased**
  - **Body Handling:** Handle the body with respect and care, following standard infection control protocols.
  - **Securing Belongings:** Secure the deceased's personal belongings and document them accurately.

- **Preliminary Documentation**
  - **Death Note:** The attending physician should write a preliminary death note, including the time, date, and suspected cause of death.
  - **Initial Report:** The nursing staff should document the circumstances surrounding the death in the patient's medical records.

Detailed Audit Procedure

- **Medical Records Review**
  - **Comprehensive Review:** Review the deceased patient's entire medical record, including admission notes, progress notes, medication charts, and diagnostic reports.
  - **Identify Gaps:** Identify any gaps or inconsistencies in the medical records and address them promptly.
- **Clinical Review**
  - **Clinical Pathway Analysis:** Analyze the clinical pathway and treatment decisions made during the patient's stay.
  - **Contributing Factors:** Identify any factors that may have contributed to the patient's death, including clinical decisions, procedural issues, and system failures.
- **Mortality Review Meetings**
  - **Interdisciplinary Meetings:** Conduct regular mortality review meetings involving an interdisciplinary team, including physicians, nurses, and administrative staff.
  - **Case Presentation:** Present each case in detail, discussing the clinical course, contributing factors, and potential areas for improvement.
  - **Actionable Insights:** Develop actionable insights and recommendations based on the review findings.

Forensic Examination and Autopsy

- **Indications for Forensic Examination**
  - **Unnatural Deaths:** Suspected foul play, suicide, or accidents.
  - **Unexplained Deaths:** Deaths with unclear or unknown causes.
  - **Legal Requirements:** Deaths requiring a forensic examination by law.
- **Procedure for Requesting an Autopsy**
  - **Authorization:** Obtain appropriate authorization from the legal authorities or the deceased's next of kin, as required.
  - **Forensic Pathologist:** Coordinate with a forensic pathologist to conduct the autopsy.
  - **Documentation:** Ensure all autopsy findings are thoroughly documented and included in the medical records.

Legal Documentation

- **Death Certificate**
  - **Accurate Completion:** Complete the death certificate accurately, including all required information such as the cause of death, manner of death, and any contributing factors.
  - **Timely Submission:** Submit the death certificate to the relevant authorities promptly, following local regulations.
- **Medicolegal Report**
  - **Detailed Report:** Prepare a detailed medicolegal report, including a summary of the medical history, clinical course, and autopsy findings.
  - **Legal Compliance:** Ensure the report complies with all legal requirements and standards.

Communication with Relatives

- **Informing the Family**
  - **Timely Notification:** Inform the family of the patient's death as soon as possible, using a compassionate and empathetic approach.
  - **Clear Information:** Provide clear and concise information about the circumstances of the death and any next steps.
- **Providing Support and Information**
  - **Support Services:** Offer support services, including counseling and bereavement support.

- **Legal Guidance:** Provide information about legal processes, including the issuance of the death certificate and any required legal investigations.

Reporting and Record Keeping

- **Internal Reporting**
  - **Incident Report:** Complete an internal incident report detailing the circumstances of the death and any immediate actions taken.
  - **Audit Report:** Prepare a comprehensive audit report summarizing the findings of the mortality audit and any recommendations for improvement.
- **External Reporting**
  - **Regulatory Authorities:** Report the death to relevant regulatory authorities as required by law.
  - **Insurance Providers:** Notify insurance providers and complete any necessary documentation for claims processing.
- **Record Maintenance**
  - **Secure Storage:** Store all records related to the deceased patient securely, ensuring they are accessible only to authorized personnel.
  - **Retention Period:** Maintain records for the legally required duration, ensuring they are complete and accurately reflect all aspects of care and the audit process.

Confidentiality and Security

- **Patient Privacy:** Maintain the confidentiality of all patient information, including medical records and audit findings.
- **Data Security:** Ensure that all records and reports are stored securely, with access restricted to authorized personnel only.

Training and Competency

- **Staff Training**
  - **Regular Training:** Provide regular training sessions for staff on the procedures for documenting hospital mortality and conducting medical audits.
  - **Scenario-based Learning:** Utilize scenario-based learning to enhance practical skills and preparedness.
- **Competency Assessment**
  - **Periodic Assessments:** Conduct periodic competency assessments to ensure staff are proficient in managing medicolegal cases and documenting hospital mortality.
  - **Continuous Improvement:** Encourage continuous improvement through feedback, learning from past cases, and staying updated with legal and medical advancements.

Review and Audit

- **Regular Review**
  - **Procedure Review:** Conduct regular reviews of the procedures for documenting hospital mortality and conducting medical audits.
  - **Stakeholder Involvement:** Involve relevant stakeholders, including medical staff, administration, and legal advisors, in the review process.
- **Audits**
  - **Internal Audits:** Perform regular internal audits of mortality documentation and medical audit processes to ensure compliance and identify areas for improvement.
  - **External Audits:** Cooperate with external auditors and regulatory bodies during scheduled audits.

Guidelines

- Local and national regulations on death documentation and medicolegal reporting.
- Hospital policies and procedures on mortality audits.
- Guidelines from professional medical and forensic associations.

The systematic documentation and audit of hospital mortality, particularly in medicolegal cases, are essential for maintaining transparency, accountability, and high standards of patient care. By following these SOPs, the tertiary centre can ensure compliance with legal requirements, enhance the quality of care, and provide

support to bereaved families. Through regular training, comprehensive reviews, and effective communication, healthcare professionals can manage medicolegal cases with competence and compassion, upholding the integrity of the healthcare institution

Process and Procedures

The following is the method of Death Audit, just following the Audit Cycle (Fig. 1) that the first author had established himself in a multi-disciplinary private hospital in Jaipur while working as their Director Legal and Medical audit.

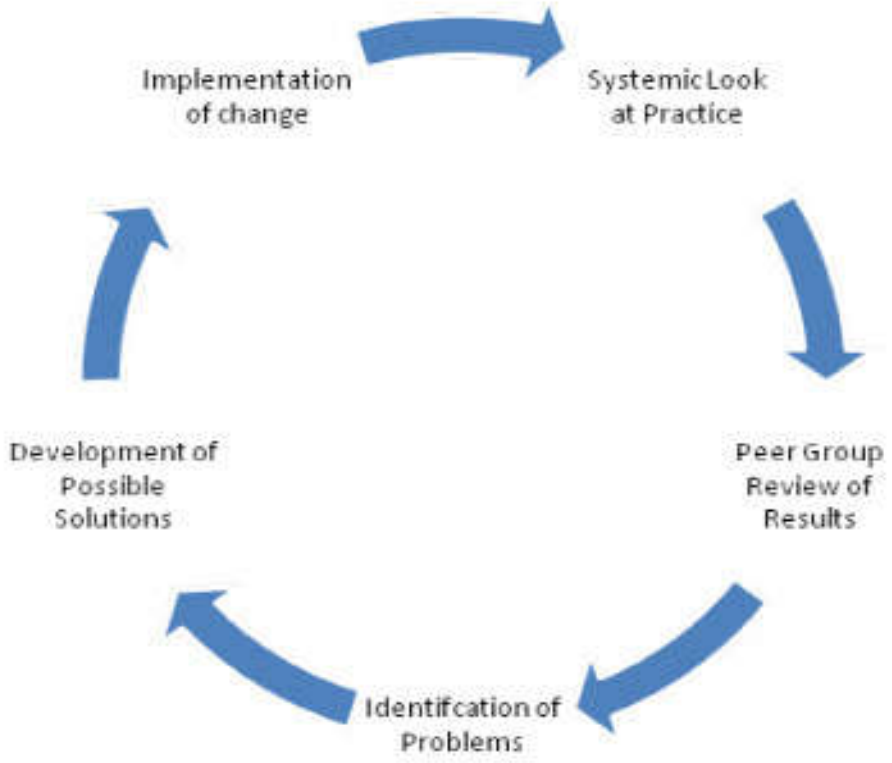

Fig. 1: The Audit Cycle (Citation: Prakash, Anjan. Medical audit. Jaypee Publishers. 2011. Audit Cycle, p20.)

DISCUSSION

Death summary: It was made compulsory that every death file must have a death summary. This was in place of discharge summary. Death summary is a concise summary of chronological events recorded in the case file. Medical Records Department (MRD) will not accept any death file that did not have death summary. The death summary is typed and transmitted on line to the Audit Cell. At the end of the month the Audit Cell would take printout of all the death summaries. They are sorted for each specialty and endorsed to the specialty heads for conducting a death review and send their written compliance. The MRD too is provided with a copy to make the respective death file available to the department.

Mortality Audit: It is compulsory for all the medical staff, including house surgeons and DNB candidates of the specialty, to attend the meeting. The primary physician in-charge of the case presents the case details, usually as a power point presentation. The cause of death certificate showing the underlying cause, the intermediate cause and immediate cause of death is the last slide.The case is critiqued and discussed. All questions raised by the members have to be answered by the case in-charge. Any deficiency noted in investigations, interpretation or treatment is discussed. The case discussion is most educative for all, especially the DNB candidates. However, the discussion is not recorded for fear of litigation. On the death summary, an endorsement is made that the case was discussed, and lessons learnt were shared. The Head of the Department returns all the death summaries discussed along with the participants list to the Audit Cell.

Cause of death certificate: It's a vital legal document. Unfortunately the law enforcement authorities, being unaware, do not insist for it –

they just want a death certificate. A cause of death certificate in the WHO approved format, detailing in sequence, the underlying cause of death, the events that is intermediate cause of death and the final event that is immediate cause of death, executed on the basis of sequence of events in death summary, is virtually a death summary in few words. The underlying disease is the cause of death and not the final event that is reported. The ICD coded causes of death, provide a readily retrievable real time mortality statistics. Unless underlying cause of death extracted for the cause of death certificate is mandatorily reported to a central agency, no reliable mortality statistics will be available at the state or the national level. The death certificate is executed by the House Surgeon on duty at that time. They are, therefore, to be trained, else they would write Cardio Respiratory Arrest as cause of death. Gross Mortality, Net Mortality, Mortality Pattern (percentage occurrence) and Case Fatality Ratio, Maternal Mortality, Infant Mortality are the essential statistics for quality control. Annual mortality statistics were presented at a hospital meeting with the Medical Auditor during these periodic Hospital Mortality Meet.

Notes from Medical Auditors' Desk

In the halls where healing thrives,
A new task arrives, the audit jives.
Clipboards in hand, with keen eyes keen,
They review the charts, the pages unseen.

Through sterile halls, they silently tread,
Ensuring compliance, by the book they're led.
Policies and procedures, they scrutinize,
No detail too small, no corner hides.

Patients rest in beds so white,
While auditors work late into the night.
Metrics and measures, each box checked,
Standards upheld, no room for neglect.

The sterile beeps of monitors blend,
With the whispers of audit pens.
Safety, care, and protocols grand,
All under the auditor's watchful hand.

They sift through data, thick and dense,
Making sense of every pretense.
Ensuring every rule's adhered,
So the hospital's mission is clear.

With the dawn, their task concludes,
A report compiled, with insights imbued.
Improvements noted, praise where it's due,
The audit's done, the hospital anew.

Healing continues, as it should,
With each audit, ensuring the good.
In the quiet halls where hope resides,
The audit secures, and care abides.

ICD coded data base: Universally followed and WHO mandated International Classification of Disease Code (ICD 10) is followed for maintaining the disease coded patient data base. One of the parameters recorded is Outcome. Under it, Discharge, Expired and LAMA is entered for each patient. Shuffling for 'Expired' collects all the mortality cases together. It is then possible to correlate with and collect disease specific, sex specific, and age specific mortality data.

Operative and anesthetic deaths: Death of a patient within 24 to 48 hours after anesthesia and operation is considered anesthetic death and, death of a person in the hospital within 30 days of operation, an operative death. In these cases the death summary received is immediately endorsed to the Heads (Anesthesia and Surgery) for an immediate joint review. Since on a per-operative set back, after immediate resuscitative measures the patient is shifted to ICU where final death is declared, 'on table death' is not technically appropriate label for these deaths. Audit of these deaths is a crucial procedure for identifying anesthetic or surgical mishaps.

Verbal Autopsy: This is a retrospective review of a death record by a Forensic expert in collaboration with the subject experts. This is usually done in criminal complaints (FIR). As has been mandated in Jacob Mathew judgment, the police officer is required to approach the principal of a medical college to constitute a Board for conducting the review. The physician complaint against provides the entire case record (preferably transcribed) to the police to be provided to the Board. The Board issues summons to the Primary Physician to appear before the Board and present his case and be subjected to cross examination. The Board then issues a detailed report, that includes examination of the primary physician. This has the same legal value as a postmortem report.

Mini Autopsy: In selected cases relatives of the deceased are persuaded to give written permission to take biopsies of the diseased organ without in any way mutilating the body. Histopathology report of the tissue could be used to substantiate the clinical diagnosis.

Virtual Autopsy: Autopsy done by Radiological imaging by CT scan with contrast of the whole body, to ascertain the cause of death in the patients, who died as inpatient during hospital stay. It may identify the hidden focus of infection, a forgotten gauze piece after surgical closure, acting as direct evidence as a res ipsa loquitor, the thing speaks for itself, for the proving the surgical negligence by the OT Doctor / Nurse. This is undergoing as a clinical trial to establish standard

practice of care in the premier institutes e.g., PGI Chandigarh.

Hospital Mortality Meet: Annual mortality statistics are presented and discussed. Selected cases of hospital deaths are scheduled for the meet. The entire medical faculty attends. This is to detect system failures and to develop protocols for prevention of the same.

Peer Review: In cases of FIR or criminal complaint under IPC 304 A, a peer review is undertaken. All the treating doctors, the respective department head, chief pathologist, chief radiologist, Medical Superintendent (MS) and legal cell chief are required to attend. The case is discussed in detail. The case file is examined in detail to ensure its completeness. It is duly indexed. The concerned doctors are briefed about what statement they are to make in Hindi before the police. The entire case file is photocopied and attested for handing over to the police. Concerned doctors are asked to be ready for appearance before the Medical Board of the Medical College.

Hospital Death Audit: Riddle in Rhymes

In the halls of healing, lives entwined,
Where hope and healthcare are reassigned,
A somber task, the medical audit starts,
To analyze why the patient's life departs.

A committee forms, with solemn grace,
From the NABH, their watchful place,
With JCI Commission, the standards set,
To trace critical steps where fate was met.

Within Operation theater, stark and bright,
Where death and life in that silence fight,
The Country's Quality Council takes its stand,
To understand what their ill fate had planned.

Therapeutic adventures, brave and bold,
In Operation theaters, success tales are told.
But surgical errors shadow, dark and grim,
Sterile Gauzes, if left inside, brings foe at brim
If not brought in light, chance of survival, slim.

Deficiencies in Patient's surgery, laid bare,
A health care provider's cross to bear.
Anesthetic toxicity, the hidden foe,
An Overdose and pain's overflow.

Intoxication, or the anaphylaxis's grip,
In moments where the heart may slip.
The audit seeks to find the truth,
In every lapse, in every proof.

The autopsy and postmortem speak,
Of silent battles, harsh and bleak.
In the Hospital MRD Records, stories lie,
Of when, where how and sometimes why?

To prevent the echoes of despair,
The Medical auditor's role is to repair.
To learn, to change, to better strive,
So more may heal, and more survive.

CONCLUSION

In a dynamic and highly complex discipline like practice of medicine, deficiency, mistakes, mishaps, accidents are a routine occurrence. Mortality Audit is to timely detect these deficiencies to initiate measure to prevent its recurrence. Mortality audit is never to penalize a physician. The fear of litigation, especially after CP Act, has totally ruined the hospital functioning. Development of clinical acumen and surgical skill is a lifelong learning experience from one's own mistakes and the mistakes committed by colleagues, labelled medicolegally as therapeutic misadventure. Statutory protection under Exemption Clauses, that exempt a physician from any civil or criminal liability, if strictly implemented, will go a long way to take care of the situation. Good Faith doctrine has be accorded due credence. Medical negligence decisions should also be subjected to Medical Audit by professional bodies, Medical Councils and ICMR.

Conflict of Interest: Nil

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