



“Saving lives through death auditing”

It is the structured clinical audit of all children dying in hospital (including in casualty/outpatients, and those who are ‘dead on arrival’) that enables a thorough assessment of the quality of care that children receive in the health system.

For a clinical audit/mortality review to be successfully implemented there are two vital requirements:

- 1) Dedicated individuals willing to spend time and effort to make the process happen
- 2) A carefully structured system where roles and responsibilities are well-defined

Thus, the mortality review process in a paediatric/children’s ward consists of two main activities:

- 1) The data collection process
- 2) The actual mortality review process

Data collection

To conduct a mortality review, two data sources are needed:

- 1) The ward admissions, discharges and deaths register
- 2) The individual clinical records of the children who die

Keep a separate register of children who die for tracing their medical records, using the **monthly deaths register**. Admission and deaths counts should be captured on **monthly tally sheets**. Detailed information on each death should be captured on the **death data capture sheet**.

To organise and keep track of the data it is helpful to compile a lever arch file, clearly labelled Child PIP. It is helpful to order the contents in each section as follows:

- 1) Laminated copies of code lists (Cause of death and Modifiable factors), and growth charts
- 2) Monthly dividers for each month followed by a Monthly Tally Sheet for that month as well as Monthly Deaths Register and a Death Data Capture Sheet completed for each death that occurred during that month
- 3) Spare data capture forms

The review process

Follow the four components of the mortality review process in your hospital:

Component	When	Who	Purpose
1. 24 hour review	Each death should be reviewed and summarised within 24 hours	The attending doctor or nurse at the time of the death	<ul style="list-style-type: none">▪ Ensure all necessary information is captured at a time when information is available
2. Preparatory meeting	Before the Mortality Review Meeting	The doctor and nurse in charge of the ward/unit	<ul style="list-style-type: none">▪ A detailed analysis of all deaths, with case selection for presentation at the Mortality Review Meeting▪ Compilation of monthly statistics for presentation at the meeting
3. Mortality review/Child PIP meeting (see below)	Weekly to monthly depending on load	Whole paediatric department (doctors and nurses) as well as clinic staff	<ul style="list-style-type: none">▪ Presentation of statistics, case discussions and task reviews▪ Assign new tasks based on each meeting’s discussion▪ Ensure all data capture sheets have been completely completed
4. Epidemiology & Analysis	6 monthly/annually	Managers and clinical personnel	<ul style="list-style-type: none">▪ Broader problem identification with trend assessment, and with proposed solutions/recommendations

The 24 hour review

Every single death occurring in your hospital should be summarised using the Child PIP Death Data Capture sheet at the time of death. The person best placed to do this is either the on-duty doctor or by way of handover, the daytime team responsible for the long-term care of the child. The death summary should be regarded as no more burdensome, and no less important, than the discharge summary for other children leaving the ward/unit.

It is still best to have a single person in the ward/unit making sure that this process happens.

This can be a doctor or a nurse.

The preparatory meeting

This meeting is crucial. All data capture sheets must be **completely completed**, to the stage of readiness for entry onto the computer. This means that all fields must be filled in, and **codes** must be entered where required. This makes data entry onto the computer efficient and accurate, and allows for any category of employee to enter data.

Careful selection of cases for presentation will enhance learning opportunities, and facilitate problem identification, and task definition and allocation.

The preparatory meeting is the responsibility of the most senior doctor and most senior nurse in the ward/unit.

The mortality review meeting

Mortality meetings must be well organised and managed by the nurse and doctor responsible for the paediatric/children's ward.

- 1) Meetings should be held weekly to monthly depending on the number of deaths.
- 2) A suitable time and venue is needed.
- 3) All staff involved with child care should be invited (doctors, nurses, allied healthworkers and administrators). Staff must understand that mortality meetings are very important. It is especially helpful to invite staff from clinics referring to the hospital.
- 4) Case presentations should be concise and professional. Discussion is encouraged if the presenter does not provide the cause of death and modifiable factors. This is best done by the group.
- 5) The meeting should by consensus establish the main cause of death and then look carefully for modifiable factors. The meeting must never become a "witch hunt", and should be confidential. The meeting should NOT be dominated by senior doctors. The thoughts and insights of **all** participants make the meeting worthwhile.
- 6) All decisions (causes and modifiable factors) made must be recorded on the mortality sheets (death data capture sheets) for entry later onto a computer.
- 7) **Problems with the process of caring for children in the hospital, the referring clinics and in communities must be identified and prioritised, and plans should be made and documented for addressing each problem.**
- 8) Tasks arising out of discussions around cases should be assigned to team members, and minuted. Progress with the tasks should be reviewed at the start of the next meeting.

The meeting agenda

A typical mortality review agenda is as follows:

- 1) Welcome and introductions, and identification of a minute taker
- 2) Review of tasks set at last meeting
- 3) Summary of last meeting's statistics
- 4) Summary of this meeting's statistics
- 5) Case presentations
- 6) **Task identification and allocation**
- 7) Closure and date of next meeting

Epidemiology and Analysis

The power of Child PIP lies in its ability to provide instant feedback on child death and quality of care information to ward/unit staff. Simply by initiating this systematic review process, change will happen.

It is, however, important both for the identification of broader system problems and for monitoring change that 6-monthly or annual reviews are performed.

These reviews should be compiled into reports, which document both findings and recommendations arising out of the review. This is the point at which the power of Child PIP can be used for communicating problems to managers. Once the process of mortality review is established in your site, the report will also look at success of implementation of, and response to, previous recommendations.

You can use the Child PIP Report pro forma for guiding your report writing.

Making change happen

When making recommendations, it is important to link each recommendation clearly to specific information arising out of your Child PIP review process. It is then useful to clearly define its requirements for implementation at each of the following levels:

- 1) Policy
- 2) Administration
- 3) Clinical practice
- 4) Education

Finally, responsibility for implementation at each level should be assigned, so that at the next review, implementation (or lack thereof) can be accounted for (for an example of this see *Saving Children 2005*).

By conducting mortality reviews in this systematic way, we will save lives and improve quality of care, through death auditing.