ChIP in South Africa

Making Change Happen!

Presented at Child PIP National Workshop at Kopanong
14 November 2006
by CR Stephen & ME Patrick
The ChIP Process

- Vision

- Structure
  - Mortality Review Process
  - Data management

- Practical
Vision
“No notes in child’s folder for three days prior to death; last note: ‘doing well’”

6 week old Ayanda with unknown cause of death
“Not seen on ward at all after admission; sats recorded as 66%; no oxygen given; sats never rechecked”

13 month old Thando with ARI
“LP considered, but not done. Diagnosis of meningitis delayed by 15 hours; antibiotic never started”

16 month old Sanele with meningitis
A vision

• We care, therefore we reflect
• When we reflect we ask:

“Is this the best I can do?”
A ChIP vision

- ChIP provides structure...
  - To reflect on what we do
  - For answering: “Is this the best we can do?”
  - For making change happen
The ChIP ethos

“The paediatric mortality review process seeks to improve the quality of care that children receive in the South African health system”
The ChIP purpose

• The purpose is NOT...
  - The audit itself
  - The numbers
  - The reports
  - The software and hardware

• The purpose IS...
  - The improvement in quality of care
Structure
What ChIP needs

• A team of carers who are:
  - Committed
  - Enthusiastic

• An efficient audit system:
  - ChIP practically
The ChIP audit system

1. The mortality review process
2. Data management
Pause...
ChIP mortality review process

1. 24 hour review
2. Preparatory Meeting
3. Mortality Meeting
4. Reporting
1. ChIP 24 hour review

• **When**
  - Every death summarised within 24 hours

• **Who**
  - On duty intern/MO/registrar

• **Why**
  - All necessary information obtained
2. **ChIP preparatory meeting**

- **When**
  - Before Mortality Review Meeting

- **Who**
  - Doctor and nurse in charge of ward

- **Why**
  - Detailed analysis of all deaths
  - Case selection
  - Monthly stats
3. **ChIP mortality review meeting**

- **When**
  - Weekly to monthly

- **Who**
  - The whole paediatric team including PHC clinic staff

- **Why**
  - Presentation of stats and cases
  - Task identification, assigning and review
4. ChIP epidemiology & analysis

- **When**
  - Quarterly, six-monthly, annually

- **Who**
  - Managers and clinical personnel

- **Why**
  - Broader problem identification
ChIP meeting format/agenda

1. Introductions and minute taker
2. Review of progress with tasks assigned at previous meeting
3. Summary of last month’s stats
4. Summary of this month’s stats
5. Case presentations
6. Tasks
7. Closure and DONM
ChIP case discussions

1. Presenters
   • Case summary

2. Group
   • Cause of death
     • Main
     • Other diagnoses
     • Underlying conditions
   • Avoidable factors
     • Home
     • Clinic
     • A&E
     • Ward
Making change happen

• Recommendations for intervention
  - Must arise out of ChIP data

• Implementation of interventions
  - Policy
  - Administration
  - Clinical practice
  - Education

Who is responsible?
By conducting reviews in this systematic way, we will both save lives, and improve quality of care, through death auditing...
ChIP readiness: **Principles**

1. Paediatric quality of care audit is needed
2. ChIP framework is wanted
3. Review process framework is needed
4. Mortality meeting format is needed
5. Data on PC is needed
6. Data to SA is needed
7. PC on Site is present
ChIP readiness: Responsibilities

- **Review Process**
  - 24 hour review
    - Deaths
    - DOA’s
  - Preparatory meeting
    - Deaths (case) selection
  - Mortality Meeting
    - Chair and agenda
    - Minutes
  - Report writing

- **Data management**
  - Tracking
    - Ward
    - OPD
    - Mortuary
  - Paper
    - Monthly tallies
    - Deaths
  - Software
    - Data entry
    - Data export
Practical
ChIP paper overview

1. Data sources:
   - Ward Register
   - Patient clinical records

2. Data capture sheets
   - Monthly Tally
   - Death data sheets

ChIP v2.0
# Ward Register

**Paediatric Ward Admissions and Discharge Register**

<table>
<thead>
<tr>
<th>No.</th>
<th>Current Name</th>
<th>Father Name</th>
<th>Mother Name</th>
<th>Date of Birth</th>
<th>Age</th>
<th>Book TOB</th>
<th>From</th>
<th>Weight</th>
<th>Diagnosis</th>
<th>Book TOB</th>
<th>To?</th>
<th>One Time?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **DOB**: Date of Birth
- **Age**: Age in years
- **Book TOB**: Book number of admission
- **From**: From where patient was referred
- **Weight**: Weight of patient
- **Diagnosis**: Main diagnosis

*Notes:*
- **One Time?**: Indicates if the admission is a one-time event.
### Monthly Tally

**Total admissions and deaths**

---

**Monthly Tally Sheet**

**Admissions**

<table>
<thead>
<tr>
<th>Age</th>
<th>Admissions</th>
<th>Deaths</th>
<th>Case fatality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1 month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 1 month - 1 yr</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 1 yr - 5 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 5 yrs - 15 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 15 yrs - 18 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Complete information table for children > 5 years only**

**Weight**

| Above 5 yrs          |            |        |                    |
| Total                |            |        |                    |

**Diagnosis**

- Acute lower respiratory infection
- Diarrhoea/diabetes
- Other

**Remarks**

1. Include all children admitted to your institution’s paediatric ward who require inpatient care.
2. Include 4th month of admission (applies weekly to 90/CC/Carlyle).
3. Syndrome definition includes Malaria, Malaria meningitis and Malaria.
4. Case fatality rate should be calculated for each quarter and each month (i.e., computer does this automatically).
5. The formula is: CFPR = (Total x 100) / admissions.

**Complete by:**

**Date:**

**Print Name:**

**Firm/Number:**
## Monthly Deaths Register

### Death Data Capture

### Death Data Sheets

### Monthly Deaths Register

**Hospital:**

**Month:**

<table>
<thead>
<tr>
<th>Registration No.</th>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Date of Death</th>
<th>Cause of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Death Data Capture

**Hospital:**

**Month:**

<table>
<thead>
<tr>
<th>Registration No.</th>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Date of Death</th>
<th>Cause of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Death Data Capture

**Hospital:**

**Month:**

<table>
<thead>
<tr>
<th>Registration No.</th>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Date of Death</th>
<th>Cause of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comments and questions...
ChIP software overview

1. Installing
2. Setup
3. Interface
4. Data entry
5. Data analysis
6. Data export (& import)
7. Database backup
8. Tools and documents
9. Helpdesk and Website

http://www.pchelpdesk.co.za
http://www.chip.org.za