Improving Analgesia in Emergency Departments: Optimising Use of Pethidine

Project implementation
The Approach

Use **drug use evaluation** to improve practice

- Audit prescribing of pethidine in a range of Emergency Departments
- Compare prescribing with recognised evidence-based guidelines
- Identify and implement interventions to close the gap between evidence and practice

**Collaborate** and **share** experience to help spread practice improvement
The DUE Cycle

Experimental method / RCT?
Evaluating interventions?
Implementing best practice?
Project plan

September 2002 - August 2003:
Pharmacy data collected and submitted monthly

January 2003:
Audit 1 (ED prescribing) commences:

**Week of**
- Monday 20 January: Data collection: ED prescribing
- Monday 27 January: Submit data to TAG
- Monday 3 February: Feedback reports available
- Mon 10 - Sun 23 Feb: Feedback and education sessions
- Monday 24 February: Report back

**DUESG meetings:**
Last Tuesday of each month
Data Collection

1. Pharmacy stock reports
   - Monthly throughout project
   - Gross usage data about a range of analgesics
   - Ongoing evaluation

2. Audit of pethidine prescribing in ED
   - Audit 1: January (beginning of junior staff roster)
   - Audit 2: March (approx)
   - Audit 3: May (approx)
   - Information about indications for pethidine use:
     - comparison with guidelines
     - targeted interventions to encourage concordance
ED Data Collection

- Designed to be quick and easy (drug registers)
- Requires assistance from ED staff (nursing / medical)
- All shifts involved

Data required:
- Indication for use: sufficient for evaluation
- Designation of prescriber (Intern, RMO, VMO, etc)
- Team grouping
- Patient code number and prescriber code number
  - uncoded information for local use only
    - may allow more specific feedback and action
    - but staff privacy issues important
### Data collection forms

**Pharmacy stock**

### Improving Analgesia in Hospital Emergency Departments: Optimising Use of Pethidine

#### Pharmacy Department Data Collection Form

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of parenteral units(^1) issued to Emergency Department</th>
<th>Number of parenteral units issued to whole hospital (including Emergency Department)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pethidine (A)</td>
<td>Morphine (C)</td>
</tr>
<tr>
<td>Sep  2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct  2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov  2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec  2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan  2003</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Data collection forms

### ED prescribing

**Improving Analgesia in Hospital Emergency Departments: Optimising Use of Pethidine**

**Emergency Department Data Collection Form**

<table>
<thead>
<tr>
<th>Date</th>
<th>Patient¹</th>
<th>Indication for pethidine (e.g. fracture of tibia not pain)</th>
<th>Prescribed by</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Name²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Designation³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medical Team⁴</td>
<td></td>
</tr>
</tbody>
</table>

Hospital Code: ______
Feedback reports

- Prescribing by indication
- Prescribing by designation
- Prescribing by team grouping
- Comparison with peer group
- Comparison with guidelines
- Overall hospital trends (stock issues)

TAG will coordinate data management, but local data entry and reporting will be encouraged.
### EXAMPLE OF FEEDBACK TO ED STAFF

<table>
<thead>
<tr>
<th>Designation</th>
<th>Indication A</th>
<th>Indication B</th>
<th>Indication C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>RMO1</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>RMO2</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Reg</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Staff speci</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Pethidine prescribing by designation

- **Number patients prescribed pethidine**
- **Designation**

- **Indication A**
- **Indication B**
- **Indication C**

**Plus commentary**
Actions (Interventions)

- Should be targeted - on the basis of findings
- Should suit local requirements / constraints
- Should be agreed by hospital teams
- Should be multi-faceted (includes feedback reports)
- Should involve local opinion leaders

**May include (examples):**
- Education / group discussion sessions (all shifts)
- Notice boards: posters, progress graphs, etc
- Reminders at point of prescribing
- One-to-one discussions (‘academic detailing’)
Actions (Interventions)

- Share successes (and failures)
  - With your teams
  - With other participating hospitals via TAG
- Feedback, feedback, feedback
- Dynamic process
- Iterative process
  - Aim for 3 cycles
Support from NSW TAG

- Telephone advice (Susie, Karen, Sharon)
- Email group discussion
- DUE Support Group meetings
- NSW TAG web site: www.nswtag.org.au
- NICS ED Collaborative web site
- Resource material (slides, posters, etc)
- Data management / tools / advice
- Other support as required
Support from NSW TAG (cont)
Discussion

- Questions?
- Comments?
- Feedback?

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