NSW TAG
Pethidine in ED Project

Interim Aggregate Results

Supported by the National Institute of Clinical Studies Australia’s national agency for closing the gaps between evidence and practice in health care.

Project Workshop
August 2003
How did we do?

Goal:
50% reduction in pethidine use with each audit cycle

Remember:
• Audit Cycle 1 began Jan 03
• Audit Cycle 2 began Apr 03
• Audit Cycle 3 began July 03
Pethidine issues to ED

All hospitals

<table>
<thead>
<tr>
<th>Number of units</th>
<th>Total All</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>400</td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
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<tr>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1200</td>
<td></td>
</tr>
<tr>
<td>1400</td>
<td></td>
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<tr>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>1800</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
</tr>
</tbody>
</table>

Pethidine issues to ED
All hospitals

Number of units

0 200 400 600 800 1000 1200 1400 1600 1800 2000

Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03

Total All
Pethidine issues to ED

A = Principal referral
B = Major non-teaching
C = District
D = Community

Pethidine issues to ED
by Peer Grouping

Number of Units

A = Principal referral
B = Major non-teaching
C = District
D = Community
Pethidine issues to hospital (excluding ED)
Pethidine issues to hospital (excluding ED)

Pethidine Issues by Peer Grouping

Number of issues

Sep-02  Oct-02  Nov-02  Dec-02  Jan-03  Feb-03  Mar-03  Apr-03  May-03  Jun-03

ED (A)  Rest (A)  ED (B)  Rest (B)  ED (CD)  Rest (CD)
Morphine issues to ED

Morphine issues to ED

All hospitals

Number of units

<table>
<thead>
<tr>
<th>Month</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep-02</td>
<td>5000</td>
</tr>
<tr>
<td>Oct-02</td>
<td>4500</td>
</tr>
<tr>
<td>Nov-02</td>
<td>5000</td>
</tr>
<tr>
<td>Dec-02</td>
<td>5200</td>
</tr>
<tr>
<td>Jan-03</td>
<td>5500</td>
</tr>
<tr>
<td>Feb-03</td>
<td>5800</td>
</tr>
<tr>
<td>Mar-03</td>
<td>6000</td>
</tr>
<tr>
<td>Apr-03</td>
<td>6500</td>
</tr>
<tr>
<td>May-03</td>
<td>6200</td>
</tr>
<tr>
<td>Jun-03</td>
<td>6000</td>
</tr>
</tbody>
</table>

Graph shows the number of morphine units issued to the ED from September 2002 to June 2003 for all hospitals.
Morphine issues to ED

Morphine issues to ED by Peer Grouping

Number of units

Total A
Total B
Total CD

Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03
Tramadol issues to ED

Graph showing the number of tramadol issues to ED from September 2002 to June 2003. The graph is for all hospitals and includes data points for each month.
Tramadol issues to ED

Tramadol issues to ED
by Peer Grouping

Number of units

Total A
Total B
Total CD

Sep-02  Oct-02  Nov-02  Dec-02  Jan-03  Feb-03  Mar-03  Apr-03  May-03  Jun-03
Ketorolac issues to ED

Ketorolac issues to ED
All hospitals

Number of units

0 200 400 600 800 1000

Sep-02 Oct-02 Nov-02 Dec-02 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jun-03

Total All
Ketorolac issues to ED by Peer Grouping
Fentanyl issues to ED

All hospitals

Number of units

Fentanyl issues to ED

All hospitals

Total All
Fentanyl issues to ED

Fentanyl issues to ED by Peer Grouping

Number of units

September 2002 to June 2003

- Total A
- Total B
- Total CD

The graph shows the trend of fentanyl issues to the ED by peer grouping from September 2002 to June 2003.
Pethidine as a proportion of all parenteral analgesia in ED
Pethidine as a proportion of all parenteral analgesia in ED

A Group Hospitals

Number of units

A - All analgesics
A - Pethidine

[Bar chart with data for months from Sep-02 to Jun-03]
Pethidine as a proportion of all parenteral analgesia in ED
Pethidine as a proportion of all parenteral analgesia in ED
**Reduction in pethidine use: Did we achieve our goal?**

Pethidine units issued to ED – All hospitals

<table>
<thead>
<tr>
<th>Oct / Nov / Dec</th>
<th>Jan / Feb / Mar</th>
<th>Change in pethidine use</th>
</tr>
</thead>
<tbody>
<tr>
<td>5225</td>
<td>3207</td>
<td>- 39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jan / Feb / Mar</th>
<th>Apr / May / Jun</th>
<th>Change in pethidine use</th>
</tr>
</thead>
<tbody>
<tr>
<td>3207</td>
<td>2723</td>
<td>- 15%</td>
</tr>
</tbody>
</table>

Overall (to date): - 47%
Indications for pethidine use

Use of pethidine in EDs: Indications identified to date

Number of episodes

Audit 1
Audit 2
Audit 3

Abdo pain
Back pain
Burns
Biliary pain
Chest pain
Migraine / Headache
Pancreatitis
Renal colic
Trauma / fracture
Morphine allergy
Unknown
Other
Which teams are prescribing?

Proportion of ED Prescribing Attributed to Medical / Surgical Teams

<table>
<thead>
<tr>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Surg/Ortho</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Audit 1 | Audit 2 | Audit 3
Which prescribers?

Proportion of ED prescribing Attributed to Prescribers

- RMO
- Reg
- Spec
- Nurse
- GP/CMO

Audit 1
Audit 2
Audit 3