Emergency Department
Pain Management
Quality Improvement Initiative
Aim of this session

- To outline how as part of a quality initiative in ED an interdisciplinary team are addressing the issue of suboptimal pain management in the department.
Patient Values

EVIDENCE BASED PRACTICE

Clinical Expertise

Research Evidence
Pain is the one of the main reason for presentation to the ED

(Land & Medideth 2011)
A patient survey by the Healthcare Commission in 2008 and reported in the Daily Telegraph by Rebecca Smith, Medical Editor on the 13 Jan 2009 revealed:

Action is urgently needed to improve pain control in ED’s the UK survey of 50,000 patients revealed.

- One in eight patients who asked for pain relief had to wait for more than half an hour before it was given and 9% said they never received any.

These standards are consensus based

- Patients in severe pain (pain score 7 to 10) or moderate pain (pain score 4 to 6) receive appropriate analgesia, according to local guidelines or CEM pain guidelines,
- 75% within 30min of arrival
- 100% within 60min of arrival
- PGDs in place for nurse prescribing on arrival
- Patients with severe pain or moderate pain – 90% should have documented evidence of re-evaluation and action within 120 minutes of the first dose of analgesic
- If analgesia is not prescribed and the patient has moderate or severe pain the reason should be documented in the notes.

Now adopted by the Irish Association of Emergency Medicine (IAEM 2013)
What did we do in C&MH?

Used the PDSA Cycle - **Plan**
- Benchmark CGH/MH against the CEM published standards
- Audit carried out
- Retrospectively reviewed 50 (random sample) ED charts in each site categorised as P2.P3.P4 (MTS).

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Data collection tool Do

1. Age of the patient
2. Gender of the patient
3. Presenting complaint
4. MTC
5. Has the patient’s pain been documented?
6. Allergy status identified
7. Past Medical Surgical History identified
8. Was analgesia administered to the patient for pain?
9. Was analgesia prescribed
10. Was pain reassessed in 30 minutes post analgesia.
11. If analgesia has not been administered has rational been documented

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Defining Triage

- Triage is a process NOT an outcome
- To sort, to direct - requires clinical judgement
- To rapidly assess a patient and assign a priority based on clinical need (MTS 2006)
- ED Triage deals with undifferentiated / undiagnosed patients
- Ideal triage time per patient less than 2 min
Manchester triage

- 1 - Immediate (red) Level 1 - 0 minutes
- 2 - Very urgent (orange) Level 2 - 10 minutes
- 3 - Urgent (yellow) Level 3 - 60 minutes
- 4 - Standard (green) Level 4 - 120 minutes
- 5 - Nonurgent (blue) Level 5 - 240 minutes

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Manchester Triage Category

Monaghan

- P2 = 2/50 = 4%
- P3 = 15/50 = 30%
- P4 = 26/50 = 52%
- P0 = 7/52 = 14%
- (No Triage done)

Cavan

16% P2 (pain score 7-10),
62% P3 (pain score 4-6),
22% P4 (pain score 1-3).
Has the patient had pain assessment documented: 24%

Allergy status identified: 94%

Identified past medical/surgical history: 88%

Clear documentation of medication taken in the past 24hrs: 36%

Was analgesia administered to the patient for pain: 34%

Was the analgesia prescribed: 32%

Was pain reassessed in 30mins post analgesia: 4%

If analgesia has not been administered has rational been documented: 2%
Has the patient had *assessment* documented: 30%

Allergy *status* identified: 100%

Identified past medical / surgical history: *(PSH/PMH)* 100%

Is there clear documentation of *medication* taken in the past 24 hours: 22%

Was *analgesia* administered to the patient for pain: 24%

Was pain re-assessed in 30 mins post analgesia: 6%

If analgesia not administered, has rational been documented: 0%
Study: result /literature/staff engagement

The results of this audit presented to Clinical Governance in ED and an action plan agreed.

Engagement with clinical staff discussed benchmarking exercise and action plan

Examine the evidence including tools for pain assessment and management

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## Assessment of acute pain in the Emergency Department

<table>
<thead>
<tr>
<th>Pain Level</th>
<th>No Pain</th>
<th>Mild Pain</th>
<th>Moderate Pain</th>
<th>Severe Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain score</td>
<td>0</td>
<td>1 - 3</td>
<td>4 - 6</td>
<td>7 - 10</td>
</tr>
<tr>
<td>Suggested route &amp;</td>
<td>No action</td>
<td>Oral analgesia</td>
<td>Oral analgesia</td>
<td>IV Opiates or PR NSAID</td>
</tr>
<tr>
<td>Type of analgesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Assessment</td>
<td>Within 20 mins of arrival</td>
<td>Within 20 mins of arrival</td>
<td>Within 20 mins of arrival</td>
<td>Within 20 mins of arrival</td>
</tr>
<tr>
<td>Re-evaluation</td>
<td>Within 60 mins of initial assessment</td>
<td>Within 60 mins of analgesia</td>
<td>Within 60 mins of analgesia</td>
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</tr>
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Pain assessment tools

Assessment of acute pain in the Emergency Department

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PAIN MEASUREMENT SCALE

MILD PAIN (1-3)
- Oral Paracetamol
- Or Oral NSAID (e.g. Ibuprofen)

MODERATE PAIN (4-6)
- As for mild pain plus oral
- IV Opiate or Rectal NSAID
- Supplemented by oral REGIMEN

SEVERE PAIN (7-10)
- IV Opiate or Rectal NSAID
- Supplemented by oral REGIMEN
Royal College of Emergency Medicine standards (2013)

ASSESS PAIN SEVERITY
Use splints / Slings / Dressings etc.
Consider other causes of distress*
Consider regional blocks

MILD PAIN (1-3)
Oral Paracetamol
Or
Oral NSAID e.g. ibuprofen

MODERATE PAIN (4-6)
As for mild pain
plus oral
NSAID (if not already given)
or
Codeine Phosphate

SEVERE PAIN (7-10)
IV Opiate
Or
Rectal NSAID
Supplemented by oral analgesics

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In the ED setting, analgesia should be:

- simple to administer,
- Condition specific
- Where possible based on local-regional techniques rather than systemic techniques.
- Systems adopted to ensure adequate pain assessment, timely and appropriate analgesia, frequent monitoring and reassessment of pain and additional analgesia as required (ANZCA 2010).
Evidence based Practice

Reducing time to analgesia in the emergency department using a nurse-initiated pain protocol: A before-and-after study

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Abstract: Suboptimal management of pain in emergency departments (EDs) remains a problem, despite having been first described over two decades ago. A ‘before-and-after’ intervention study (with a historical control) was undertaken in one Western Australian tertiary hospital ED to test the effect of a ‘nurse-initiated pain protocol’ (NIPP) intervention. A total of 889 adult patients were included: 144 in the control group and 745 in the intervention group. Patients in the intervention group were: More likely to have a pain score recorded than those in the control group; have reduced median time to the first pain score; and reduced time to analgesia. The statistically significant reduction in both time to pain score and time to analgesia remained, even when adjusted by age and sex. Whilst we demonstrated the safety and efficacy of a NIPP in ED, an unacceptable proportion of patients continued to have inadequate pain relief.
Evidence based Practice

- Finn et al (2012) study demonstrated that a NIPP in the ED increased the likelihood of pain scores being recorded, reduced the time from ED presentation to the initial pain score and reduced the time to analgesia.
Contemporary Issues

The use of action learning as a strategy for improving pain management in the Emergency Department

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Dunne et al (2014)
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Next step-Act

Development of a “Nurse Initiated Pain Protocol” (NIPP) using the NMBI medication protocol Framework Template
Medication protocol

Guidance to Nurses and Midwives on Medication Management JULY 2007

Medication Protocol Framework Template
Barriers to the process were examined, to address this we planned structured evidence based education for ED clinical staff.
Perceived barriers to pain management in ED

- Inability to offer analgesia until a diagnoses is confirmed.
- Lack of time
- Additional responsibility
- An inability to monitor side effects when patients leave the ED for diagnostic procedures
- Inadequate assessment of pain and pain relief
- Lack of intravenous access
- Time needed to find the controlled drug cupboard keys
  * Doctors' reluctance to prescribe analgesia
  * Language difficulties
  * Overcrowding in the department
  * Patients' fears about addiction

Barriers to pain assessment in ED

(Molov & Khan 2009)
Next step

Development of new documentation on pain assessment and management agreed for the department ready D&T, Clinical Governance, and Quality and Safety Committee for ratification

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Education

- Planned structured evidence based education for ED clinical staff rolled out
Implementation plan

The next stage of the implementation plan involves nursing staff using the NIPP document as part of the triage process in ED. This next part of the quality improvement plan will commence in May 2016. using the HSE Operational Development (OD) Model (2008)
References

Thank you