Quality Improvement Project
Management of pain in adult patients in minor Emergency Department

- introduction of PGD for Co-dydramol (10/500mg)

Dr Abdul Qadeer Khan
MBBS, FCPS, MRCS, MRCEM, MD

Supervisor
Dr Claire Willis
Consultant ED Southend University Hospital

Submitted as a requirement for FRCEM examination
Abstract

There are significant delays in provision of timely analgesia to patients who present to minor emergency departments (ED). The average median time to analgesia for our patients who presented to ED with extremity injuries was 48 minutes. Via a flow diagram of patients in minor ED, we identified that prescription and administration of analgesia at the time of triage could significantly reduce the time to analgesia. After discussion with the department doctors and nurses, we decided to develop a patient group direction (PGD) for co-dydramol for band 6 and above nurses, including enhanced nurse practitioners (ENP). They could use this to prescribe and administer analgesia in triage. After the introduction of PGD, the data was collected during three PDSA cycles from September 2017 to December 2017. Our results show a reduction in average median time to analgesia from 48 minutes to 30 minutes. Overall 29% patients received analgesia within 20 minutes pre PGD, which improved to 34% after PGD introduction. A larger difference was observed for 60 minutes analgesia time. This improved from overall 55% pre-PGD to 73% post-PGD. We conclude that introduction of PGD for co-dydramol has improved our time to analgesia for patients presenting to minor ED with extremity injuries.
Presentations/Prize

Oral presentation.1
The pre-PGD audit was presented to the departmental monthly audit and educational meeting. 13 January 2017 (Appendix 1)

Oral presentation.2
This quality improvement project was selected for oral presentation at the trust yearly Audit/Research/QIP open day. 12 December 2017 (Appendix 1)

Prize
The QIP presentation was awarded runner up prize on the trust yearly Audit/Research/QIP day. 12 December 2017 (Appendix 1)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED</td>
<td>Emergency department</td>
</tr>
<tr>
<td>ENP</td>
<td>Enhanced nurse practitioner</td>
</tr>
<tr>
<td>KPI</td>
<td>Key performance indicator</td>
</tr>
<tr>
<td>NICE</td>
<td>National Institute for Health and Care Excellence</td>
</tr>
<tr>
<td>PGD</td>
<td>Patient group direction</td>
</tr>
<tr>
<td>QIP</td>
<td>Quality improvement project</td>
</tr>
<tr>
<td>RCEM</td>
<td>Royal College of Emergency Medicine</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Flow diagram showing the journey of patients through minor ED</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>Flow chart taken from the hospital intranet explaining the process of developing a PGD</td>
<td>5</td>
</tr>
<tr>
<td>2.3</td>
<td>The PGD can be obtained by searching co-dydrampol in search bar of hospital intranet</td>
<td>6</td>
</tr>
<tr>
<td>2.4</td>
<td>Drug card showing the prescription and administration of co-dydrampol through PGD</td>
<td>7</td>
</tr>
<tr>
<td>3.1</td>
<td>Median time to analgesia</td>
<td>9</td>
</tr>
<tr>
<td>3.2</td>
<td>Percentage of patients receiving analgesia within 60 minutes of arrival to ED</td>
<td>10</td>
</tr>
<tr>
<td>3.3</td>
<td>Percentage of patients receiving analgesia within 20 minutes of arrival to ED</td>
<td>10</td>
</tr>
</tbody>
</table>
# Contents

<table>
<thead>
<tr>
<th>Title page</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Presentations/Prize</td>
<td>iv</td>
</tr>
<tr>
<td>List of abbreviations</td>
<td>v</td>
</tr>
<tr>
<td>List of figures</td>
<td>vi</td>
</tr>
<tr>
<td>Contents</td>
<td>vii</td>
</tr>
</tbody>
</table>

## 1 Introduction

1.1 Problem

1.2 Background

1.3 Settings

1.4 Aim

## 2 Methods

2.1 Design/Intervention

2.2 Key performance indicators

2.3 PDSA Cycles

2.3.1 First PDSA cycle

2.3.2 Second PDSA cycle

2.3.3 Third PDSA cycle

## 3 Results

## 4 Discussion

## 5 Limitations

## 6 Conclusion

## 7 Funding
Appendices

Appendix 1 ........................................................................................................14
Appendix 2 ......................................................................................................17
Appendix 3 ......................................................................................................20
Appendix 4 ......................................................................................................21

References ......................................................................................................27
1. Introduction

1.1 Problem

Acute pain is one of the most commonly cited reasons for emergency department (ED) attendance (1). Providing appropriate and adequate analgesia in timely fashion for patients presenting to emergency department is a challenge (2). This becomes an even bigger challenge in the current environment of long waiting times in most EDs in England. The Royal College of Emergency Medicine (RCEM) national audit for fracture neck of femur published in 2012/13 shows that only 43% patients received analgesia within 60 minutes in 2004. The 2012 audit shows even worse figures with only 40 patients received analgesia within 60 minutes (3). This illustrates a need for quality improvement projects rather than mere audits.

During my stay in ED at Southend University Hospital as an ST3 from August 2015 to August 2016, I noticed a number of complaints about the adequacy and timing in the administration of analgesia which was also evident from internal observations and audits. The same feeling was shared by other clinicians and nursing staff (Appendix 2, Email 1). I felt a need for an intervention to improve the patients’ experience who presents with pain to ED.

1.2 Background

The Royal College of Emergency Medicine has published its guidelines in November 2014 regarding the assessment and management of pain in adults (4). As per guidelines the patients
with mild and moderate pain should be assessed and have analgesia administered within 20 minutes of arrival to ED. The college recommends paracetamol with either NSAIDs or a weak opioid. RCEM clinical standards for emergency departments published in 2014 states that 75% of patients with severe or moderate pain should receive analgesia within 30 minutes of arrival and all patients should receive analgesia with 60 minutes of arrival (5).

1.3 Settings

Southend University Hospital is a District General Hospital with a status of a trauma unit. The emergency department manages over 100,000 patients per year. The department has a separate minor and major area and a paediatric area. All walk-in patients are triaged in a designated triage room. Initially, triage was done by a GP which has changed during this QIP and now, it is done by ED consultant till 8PM. After 8PM, triage is done by a senior ED nurse.

While working in the minor area, I noticed that patients with severe pain were recognised and escalated quite quickly in triage. They either received analgesia in triage or were shifted to the major area, based on their injuries/conditions. I observed that the patients with mild and moderate pain were often waiting longer to see a clinician (doctor or ENP) and received analgesia after the consultation.

1.4 Aim

The aim of this quality improvement project was to improve the time to analgesia for patients presenting to minor ED with mild to moderate pain.
2. Methods

2.1 Design/Intervention

To identify the delays in prescription and administration of analgesia a flow diagram was created (Figure 2.1) and presented to doctors’ weekly teaching program. It was also presented separately in the sisters’ monthly meeting. It was identified that if analgesia was not given at the time of triage, there would be significant delays in the prescription and then possibly further delays in the administration of analgesia. It was recognized that if the triage is run by doctors, who are normally accompanied by a staff nurse, then analgesia could be prescribed and administered at the same time but it was not always the case when triage was run by senior nurses out of hours or occasionally, during the day time.

Nurses suggested in their meeting that a PGD for co-dydramol would be an excellent idea as that would cover moderate pain. It was identified that the department had PGD for paracetamol and ibuprofen but not for co-dydramol. It was decided to develop a PGD for co-dydramol which would help nurses give analgesia at the time of triage and avoid the rest of the delays. Codeine phosphate was considered as an option for PGD but it was recognised that being a control drug in our department it would delay the administration of the drug and would not serve the purpose of prompt administration of analgesia. RCEM clinical standards for ED (5) also recommend a PGD on arrival for nurses to give analgesia at the time of triage.
The idea of PGD was then discussed with the ED matron and ED lead consultant who approved the idea and agreed that it would be an excellent and effective way to reduce time to analgesia. The idea was conveyed to other nurses in the monthly sisters’ meeting and received a positive response (Appendix 3). It was then discussed with the hospital pharmacy in charge of PGDs who also agreed to work with ED team to develop the PGD for co-dydramol.

Patient group direction (PGD) is a document with the indication, contra indications, side effects, dosage etc. of a particular medicine. Once it is in place PGD can be signed and nurses become prescriber of the particular medicine. PGD is widely used for various medications. NICE has published guidelines about how to develop PGDs (6). Our hospital intranet has got a flow diagram explaining the process of developing a PGD (Figure 2.2).
Like other hospitals, our hospital has a proforma for PGD approval which needs to be completed and agreed by all concerned parties. The original proforma was completed and then reviewed by ED consultant and ED matron. The proforma was then submitted to PGD lead pharmacist. The proforma was reviewed and sent back to me for suggested corrections/amendments. After the amendments and agreement by the consultant and Matron it was resubmitted to the PGD lead pharmacist. After four drafts a final version was agreed by all parties. The final version was then sent to the hospital associate director of nursing for approval. Finally, it was submitted to hospital medicine optimisation committee and was approved in July 2017 (Appendix 2, Email 2) PGD is available on the hospital intranet (Figure 2.3) (Appendix 4). A copy of the PGD is kept with ED matron for nurses to read and sign. All nurses are required to successfully complete the PGD eLearning before using the PGD.
Figure 2.3: PGD can be obtained by searching co-dyramol in search bar of hospital intranet

### 2.2 Key performance indicators

Three key performance indicators (KPI) were measured before and after the intervention. The first KPI was the percentage of patients receiving analgesia within 20 minutes of arrival and secondly, the percentage of patients receiving analgesia within 60 minutes of arrival to ED was calculated. Lastly, median time to analgesia was measured as the third key performance indicator.

Since our intervention involved changes in practice of triage nurses and ENPs who see most of the injuries, it was thus decided to collect data for musculoskeletal injuries. These patients are
often in mild to moderate pain and would be the ideal candidate to measure the change. There is a wide day to day variation in daily ED attendances which could affect triage time and ultimately time to analgesia, so we decided to collect data each Monday and Tuesday, every week. We collected data for adult patients presenting to ED triage room with musculoskeletal injuries on Mondays and Tuesdays. Children and patients who received morphine or entonox were also excluded from the study. Patients were identified through the Medway system. The drug cards were reviewed from the windup system (a system to keep copies of ED patients’ medical notes). For each data point, 11 patients were reviewed. Their time of booking and time of analgesia were recorded. It was also recorded if they had analgesia through PGD (Figure 2.4)

![Southend University Hospital Drug Prescription Chart & Administration Record](image)

Figure 2.4: Drug card showing the prescription and administration of co-dydrmol through PGD.

Baseline audit was performed in December 2016 to establish the time to analgesia in patients with mild to moderate pain who presented to ED minor area with musculoskeletal injuries. Results showed that only 29% of patients received analgesia within 20 minutes of arrival and 55% patients received analgesia within 60 minutes of arrival. The average median time to
analgesia was 50 minutes. The pre-PGD audit was presented in ED monthly audit and educational meeting (Appendix 1) and QIP was explained and everybody was requested to support the project with the project.

2.3 PDSA Cycles

2.3.1 First PDSA Cycle

After the approval of PGD, emails were sent to all the band 6 nurses and ENPs and they were requested to sign for PGD and start using it in their daily practice (Appendix 2, Email 3). It was also verbally communicated to all the concerned nurses in the department. A written copy was kept in ED matron office for nurses to sign the PGD.

2.3.2 Second PDSA Cycle

At the end of September it was identified that only 16 out of 32 band 6 nurses had signed for PGD. Band 6 and above were contacted again and in the departmental meeting they were encouraged to sign for PGD and use that especially during triage time. I emailed the preliminary results showing some improvement which were very encouraging for nurses.

2.3.3 Third PDSA Cycle

The results were communicated through lead ED consultant to all the nurses which were encouraging (Appendix 2, Email 4). It was further stressed to use PGD as much as possible. Personal communication with many nurses showed that they were very pleased to see that they
were making a difference in the patients’ care. At the start of third cycle 24 out of 32 nurses had signed and were using PGD.

3. Results

The Pre PGD average median time to analgesia was 48 minutes. Post PGD shows an obvious trend towards a decrease in median time to analgesia. Apart from the first week of September, the median time to analgesia for all the data points is below our pre-PGD average median time. The average median time post PGD was 30 minutes (Figure 3.1).

![Figure 3.1: Median time to analgesia](image)

The red line shows the pre PGD average median.

Figure 3.2 shows a run chart for percentages of patients receiving analgesia within 60 minutes of arrival to ED. 57% of patients (median) received analgesia within 60 minutes before the intervention. After the introduction of PGD 72% (median) patients received analgesia within 60 minutes. Apart from one data point in September, all data points are above the pre-PGD median percentage, highlighting a trend towards a decrease in time to analgesia at 60 minutes.

Overall, the percentage of all patients’ pre and post PGD analgesia time at 60 minutes was also calculated. Pre PGD 55% patients received analgesia within 60 minutes of arrival which increased to 73% post PGD.
Figure 3.2: Percentage of patients receiving analgesia within 60 minutes of arrival to ED

Figure 3.3 shows a run chart for percentages of patients receiving analgesia within 20 minutes of arrival to ED. 29% of patients (median) received analgesia within 20 minutes before the intervention. After the introduction of PGD 36% (median) patients received analgesia within 60 minutes. Overall pre and post PGD data also shows an improvement from 29% to 34%.

Figure 3.3: Percentage of patients receiving analgesia within 20 minutes of arrival to ED

Our results show an increase in percentage of patients who received analgesia within 60 minutes of arrival. Unfortunately, despite some improvement at 20 minutes analgesia time, there is no shift or trend towards improvement. This could be due to the long waiting times to triage, influencing the results.
Out of 132 patients who were reviewed post PGD, 72 patients (59%) received co-dyramol and the rest either received paracetamol or oral NSAID. Some of the drug cards clearly say PGD (Figure 2.4) but the exact number of prescription through PGD may have been higher as nurses mentioned that they do not always write PGD on the drug cards. 28 drug cards (21%) were identified with PGD for co-dyramol

4. Discussion

RCEM clinical standards 2014 set standards for timing of analgesia and states that 100% patients should receive analgesia within 60 minutes of arrival to ED (5). This quality improvement project has definitely made a positive impact as the percentage of patients receiving analgesia within 60 minutes of arrival to ED has increased from 55% to 73%. We have observed that the improvement in 20 minutes analgesia time is not as significant as 60 minutes analgesia time. One possible explanation to this is the variability in triage time. Also, even if the analgesia was not given at triage, ENPs could prescribe and administer analgesia promptly after they have seen the patient which would affect more on 60 minutes analgesia time rather than 20 minutes. This project did not have any impact on the triage time. As seen in our flow chart (Figure 2.1) there could be a delay before triage and that is the area where improvement is required, as shorter triage means we would have an early opportunity to administer analgesia at the triage room.

The improvement in time to analgesia is possibly due to multiple factors including consultant triage and the communication with the doctors inspiring them to be more proactive. PGD has definitely played a part as we saw 21% of patients received analgesia through PGD of co-dyramol.
The improvement due to introduction of PGD should be a permanent change as the PGD is always there for new nurses to sign and use. The ED matron has taken a lead and promised to introduce the PGD to all new nurses who would join the department in future. To ensure the continuity of the project, the department QIP lead had kindly agreed to include this in yearly audit data base and would assign the audit to junior doctors on yearly basis. Feedback from nurses is positive as they feel they are making a huge difference to patients’ experience who presents with pain to ED.

There is evidence that ED overcrowding is associated with poor quality of care for patients with severe pain. A retrospective cohort study undertaken in a single centre in North America reviewed the notes of all patients in a 12 month period complaining of severe pain at triage (over 13,000 patients). Multivariate analysis demonstrated that the times of departmental overcrowding were significantly associated with either a lack of analgesia or long delays in the delivery of analgesia (7). Overcrowding will affect the triage time and ultimately would lead to a delay in the provision of analgesia as we recognised that there was not much difference in our 20 minutes KPI. Projects focusing on decreeing triage waiting times would help improving in reducing the time to analgesia.

5. Limitations

A limitation of our data is that we reviewed a relatively low number of patient charts that met criteria each month. 11 patient charts were reviewed each week that met criteria. The relatively low number of patient charts reviewed each week could have contributed to the variability in the data from week to week. Other factors which possibly contributed towards variability, especially 20 minutes analgesia time, was the triage time as it could vary widely depending on the number of patients and availability of staff.
We only reviewed the drug cards where analgesia was prescribed and given. We did not look into the medical notes to see if the pain score was calculated and if the right analgesia was given. Our data only shows the results of those patients where analgesia was prescribed and given and does not reflect on to those patients where analgesia was required and not given. Therefore, this study cannot reflect on whether the correct analgesia was prescribed and administered.

Our intervention is a single centre study; the culture among providers, patient population, and barriers to change may be different in other settings and may limit the effectiveness of this particular interventions. This study was not blinded or randomized and could be subject to bias.

6. Conclusion

Introduction of PGD for co-dyramol for band 6 and above nurses in our ED has shown an improvement in the median time of analgesia. This is sustainable as once nurses sign for it they can use it in all areas of ED. There are various PGDs currently in use in EDs but there is a possibility to extend this to other areas e.g. intravenous antibiotics for sepsis.

We have identified that a reduction in the triage time could play a significant part in reducing the time to analgesia and the next step would be to develop a quality improvement project to decrease the triage time.

7. Funding

No funding was used for this quality improvement project.
Appendix 1

Audit presentation certificate

The audit findings were presented to the departmental monthly audit and educational meeting
Research & Audit Open Day  
Tuesday 12th December  
Lecture Theatre 14.00 – 17.00  
Chaired by Prof Bhaskar Dasgupta

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presentation/Chair</th>
</tr>
</thead>
</table>
| 14.00 – 14.15 | Introduction  
Patient Involvement Presentation from National Institute of Health Research | Prof B Dasgupta  
Graham Reeder/Christine Menzies |
| 14.15 – 14.35 | Adherence to NICE Recommendations on Secondary Prevention in Patients admitted for Stable/Unstable CAD at time of Discharge from hospital | Uzma Sajjad  
(Audit) |
| 14.35 – 14.55 | Initiation of Continuous Subcutaneous Insulin Infusion (CSII) services for children and young people (0-19 years) in Southend and improvements achieved in this service during the first year. | Suzie Williams  
(QI) |
(Research) |
| 15.15 – 15.35 | TEA BREAK                                                                 |                              |
| 15.35 – 15.55 | Audit of Group and Save Practice in Emergency Laparoscopic Surgery | John Whitaker  
(Alex Stone award) |
| 15.55 – 16.15 | Management of pain in minor ED dept – Introduction of PGD for Co-dydramol | Abdul Qadeer Khan  
(QI) |
| 16.15 – 16.35 | The Role of Per-Cutaneous Tibial Nerve Stimulation (PTNS) in Faecal Incontinence | Nur Rahman  
(Audit) |
| 16.35 – 16.50 | Prize giving                                                              | Mr B Praveen/Prof B Dasgupta |
| 16.50     | Closing summary                                                          | Prof B Dasgupta              |

Date for your 2018 Diary – Tuesday 26th June 2018
Please note that the Research and Audit/Quality Improvement open day will move to June from 2018

Program for oral presentation at the trust annual research/audit/QIP day
This is to certify that

Abdul Qadeer Khan

was awarded Runner up in the Quality Improvement category at the Research and Audit/Quality Improvement Open Day on 12th December 2017 for the poster presentation

“Management of pain in minor ED department – Introduction of PGD for Co-dydramol”

Signature: Nick Irwin
Clinical Audit Manager
Audit Department

Date: 12th December 2017
Appendix2

From: Richmond, Jacqueline
Sent: 24 May 2017 12:26
To: Joseph, Kerry
Subject: Pain problems in ED

Hi Kerry,

Our team were asked to look into delays in analgesia administration. By Yvonne Blachar, and we found from looking at a years’ worth of patient complaints and data forms that ED had one of the highest rates. However, it wasn’t very many complaints at all considering the number of people who come through your department. In fact, out of 14 pain-related complaints, there were only 2 for ED and we found that of 593 data reports only 34 appeared to be analgesic delays and of those 9 were related to ED and BAMS.

So when looked into it doesn’t appear to be awful at all but we needed to let you know as it has been highlighted. Is there anything we can help the department with?

We are always available to try and help but in the past, this hasn’t happened for a number of reasons. Feel free to call me/email whichever if you want to discuss further options.

Thanks,

Jackie

Jackie Richmond
Associate Clinical Nurse Specialist
Acute Pain Service
Southend University Hospital NHS Foundation Trust

Email 1: Email highlighting the complaints regarding administration of analgesia in ED

From: Smith, Paul
Sent: 28 June 2017 14:29
To: Khos, Abdul
Cc: Joseph, Kerry; Willis, Claire
Subject: RE: PGD

Hi Abdul,

The PGD has now been reviewed by the Medicines Optimisation Committee, and no further comments have been forthcoming. It is therefore approved.

Can you please print the attached final PGD document, and sign as the author.

Claire, could you please sign as clinical lead, and once you have both signed, can someone return the document to me via the Pharmacy dispensary so that I can arrange for collection of the remaining signatures.

I will let you know when it is published on Staffnet and finally available for use.

Many thanks,

Paul

Email 2: Email from pharmacist regarding approval of PGD from the hospital medicine optimisation committee
Email 3: Fist email to all the nurses and consultants regarding the approval of PGD and request to use that.
Email 4: Email to all the nurses from the ED lead consultant as a part of third PDSA cycle
Appendix 3

24th February 2017

In attendance:

Kerry Joseph, Jane Ralph, Hazel Stacey, Cheryl Rumsby, Caroline Diggin, Lucy Russell, Karen Flack, Sarah Eccleston, Jacqui Berry (on floor) Greg Keane (on Floor)

1 Apologies

Caroline Howard, Jenny Frost, Matt Osborne (on floor)

Training/Guest Speaker

Abdul Khan- ST4, gave a presentation on Pain management, Quality improvement Audit that he completed in the department. All patients should be assessed/receive analgesia within 20 minutes of arrival. Patients in severe pain should have the effectiveness of analgesia re-evaluated within 30 minutes of receiving the first dose of analgesia.

Abdul has spoken to the doctors to ensure that instead of writing the word STAT on the charts that they complete a time. This will then show any time delay in administering medication. 50% of drug charts audited, did not have a time written.

Abdul also informed the group that he is developing a PGD for bands 6’s & 7’s for Co-dydramol. It is currently with Pharmacy. However KJ has been tasked with the roll out of this by the 31/03/17.

A suggestion of using magnets to depict that a patient requires medication was made. ACTION - SE will liaise with C Wiggett to order.

Abdul was concerned that drug charts were being left in the drug box resulting in the medications not being given. Abdul then suggested a box with dividers for each of the areas, which could be coloured. CR then suggested that the board could be colour coded to represent each area. ACTION- SE will liaise with C Wiggett to order.

LP stated that staff working in area 14 R1 have no working station. A discussion then took place to rectify.

Minutes from monthly departmental meeting held in February 2017.

(Only the relevant part is shown in the picture)
Appendix 4

Copy of PGD

<table>
<thead>
<tr>
<th>REF NO:</th>
<th>PGD186</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISSUE:</td>
<td>1</td>
</tr>
<tr>
<td>DATE:</td>
<td>July 2017</td>
</tr>
<tr>
<td>SHEET:</td>
<td>1 of 7</td>
</tr>
<tr>
<td>REVIEW DATE:</td>
<td>July 2018</td>
</tr>
<tr>
<td>AUTHOR:</td>
<td>Dr Abdul Khan</td>
</tr>
<tr>
<td>DEPARTMENT:</td>
<td>Emergency Department</td>
</tr>
</tbody>
</table>

**PATIENT GROUP DIRECTION**

Name of specific Patient Group Direction (To include name of drug, indication and professional group using PGD):

Co-dydramol 10/500mg tablets for mild to moderate pain in adults in Emergency Department, by Nursing Staff (band 6 and above)

Clinical Department/Service:

Emergency Department (ED)

Patient Group Direction developed and supported by

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGD author</td>
<td>Dr Abdul Qadeer Khan</td>
<td>[Signature]</td>
<td>20/6/17</td>
</tr>
<tr>
<td>Clinical Director or Consultant</td>
<td>Dr Claire Willis</td>
<td>[Signature]</td>
<td>28/6/17</td>
</tr>
<tr>
<td>Directorate Pharmacist</td>
<td>Paul Smith</td>
<td>[Signature]</td>
<td>29/6/17</td>
</tr>
<tr>
<td>Associate Director of Nursing, or lead professional if nurses not involved</td>
<td>[Signature]</td>
<td>5/1/17</td>
<td></td>
</tr>
<tr>
<td>Director of Pharmacy or nominated deputy (On behalf of South Essex Medicines Management Committee)</td>
<td>[Signature]</td>
<td>19/1/17</td>
<td></td>
</tr>
</tbody>
</table>

Review Date: (Maximum of 2 years) July 2019

Job title of person responsible for reviewing: ED Practice Development Nurse
1. Clinical Condition

<table>
<thead>
<tr>
<th>1.1</th>
<th>Define situation/condition</th>
<th>Adults patients presented to the Emergency Department with moderate pain (4-6) and documented, and have one of the following conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- Pain from Abscesses and Local Infections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Assault</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Back Pain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Bites &amp; Stings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Burns &amp; Scalds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Chest Region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Dental Problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Ear Problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Facial Problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Foreign Body</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Limb Problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from fractures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Neck Pain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Rashes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Sexually acquired Infection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Sore Throat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Testicular Region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Torso Injury</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain indicated from Unwell Adult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from Wounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Pain from abdominal conditions</td>
</tr>
</tbody>
</table>

| 1.2 | Criteria for inclusion | Patients over 16 years of age with moderate pain score (4-6) who have not taken paracetamol and/or codeine/dihydrocodeine over last 4 hours and no more than 6 tablets of either of them within last 24 hours |

| 1.3 | Criteria for exclusion | 1. Children under 16 years of age |
### 2. Characteristics of staff

<table>
<thead>
<tr>
<th>2.1</th>
<th>Class of Health Professional for whom PGD is applicable</th>
<th>Band 6 and above nurses in the Emergency Department can provide stat dose.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2</td>
<td>Additional requirements considered relevant to the medicines used in the protocol</td>
<td>None.</td>
</tr>
<tr>
<td>2.3</td>
<td>Continued training requirements</td>
<td>It is the responsibility of the individual nurse to remain continuously updated.</td>
</tr>
</tbody>
</table>
It is the individual nurse's responsibility to act within accordance with the NMC Code of Professional Conduct may 2015.

### 3. Description of Treatment

<table>
<thead>
<tr>
<th></th>
<th>Generic Name of Medicine and Form e.g. tablets</th>
<th>Co-dydramol 10/500mg tablets</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Legal status Prescription Only Medicine (POM)/Pharmacy Only(P)/General Sales List</td>
<td>Prescription only</td>
</tr>
<tr>
<td>3.2</td>
<td>Licensed or unlicensed (state rationale for use)</td>
<td>Licenced</td>
</tr>
<tr>
<td>3.3</td>
<td>Dose(s) (Where a range is applicable include criteria for deciding on a dose)</td>
<td>2 tablets can be given as single dose in adult patients irrespective of age.</td>
</tr>
<tr>
<td>3.4</td>
<td>Route/Method of Administration</td>
<td>Oral</td>
</tr>
<tr>
<td>3.5</td>
<td>Frequency of Administration</td>
<td>1 to 2 tablets as a single dose</td>
</tr>
<tr>
<td>3.6</td>
<td>Total dose and number of times treatment can be administered over what time.</td>
<td>1 to 2 tablets as a single dose (Maximum 8 tablets in 24 hours)</td>
</tr>
<tr>
<td>3.7</td>
<td>Side effects of drugs (to include potential adverse reactions) and any monitoring required.</td>
<td>Constipation, Respiratory depression in high doses, Confusion, drowsiness, dizziness, Nausea and vomiting, Hypersensitivity is rare</td>
</tr>
<tr>
<td>3.8</td>
<td>Procedure for reporting Adverse Drug Reactions (ADRs) to Doctor.</td>
<td>Any adverse drug reaction must be documented in patient's medical notes and reported to the A&amp;E/Medical Doctor immediately.</td>
</tr>
<tr>
<td>REF NO: PGD185</td>
<td>ISSUE: 1</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>DATE: July 2017</td>
<td>SHEET: 5 of 7</td>
<td></td>
</tr>
<tr>
<td>AUTHORISED: South Essex Medicines Optimisation Committee</td>
<td>REVIEW DATE: July 2019</td>
<td></td>
</tr>
<tr>
<td>AUTHOR: Dr Abdul Khan</td>
<td>DEPARTMENT: Emergency Department</td>
<td></td>
</tr>
</tbody>
</table>

3.10 Information on follow up treatment if needed

If new drug or severe adverse reaction: Complete Yellow card report and submit to MHRA [https://yellowcard.mhra.gov.uk/yellowcards/reportmediator/](https://yellowcard.mhra.gov.uk/yellowcards/reportmediator/)

Pain will be reassessed for those patients who remain in the A&E Department for a period of longer than one hour.

If their pain is unrelieved then the patient will be referred to the doctor.

Patients who have been discharged home are advised to seek medical advice if their pain is unrelieved.

The views and wishes of parents and carers will be taken into consideration and documented.

3.11 Written/verbal advice for patient/carer before/after treatment. Product information leaflet should be given to the patient.

Patient information leaflet is to be issued prior to administration.

All patients should be asked to give informed verbal consent prior to administration. This must be documented in the medical notes.

3.12 Specify method of recording supply/administration, names of health professionals, patient identifiers, sufficient to enable audit trail.

Written record on Southend Hospital NHS Trust Drug Prescription & Administration Sheet.

Sign dose as given on Drug Prescription & Administration sheet according to PGD185.

Document in patient's medical notes.
4. Management of Patient Group Directions

Acceptance by Individual

- The direction must be read, agreed to and signed by each professional who works within it.
- This signed copy should be retained by the individual. The department/service in which the PGD operates should use the appendix overleaf to keep a master list of authorised users.
- All professions must act within their appropriate Code of Professional Conduct.

*I have read the PGD and agree to work within its parameters:*

Name of professional: .................................................................

Title of professional: .................................................................

Signature for professional: ...........................................................

Date: ..........................
References


6. Patient Group Directions. NICE. March 2017. Available at
https://www.nice.org.uk/guidance/mpg2/chapter/Recommendations

7. Pines JM, Hollander JE. Emergency department crowding is associated with poor