Pharmacists in Emergency Departments

Prof. Anthony Sinclair
The Plan

1. Background
2. West Midlands pilots
3. National project
Providers could also think of their workforce model more imaginatively, considering hybrid roles, diversity of expertise and new posts to establish a multidisciplinary skill-mix that matches the needs of the service into the future.
To provide the new types of healthcare required, there should be corresponding changes in the design, training, planning and deployment of the health and care workforce....... 

.....making better use of available clinical roles within MDTs and enhancing functions and responsibilities of advanced clinical practitioners, physician associates, pharmacists and paramedics

In the coming year we will work with our stakeholders to identify further new roles that could support service transformation, including women’s surgeons, prescribing pharmacists and orthopaedic physicians.
The Emergency Medicine Task force (2011) was established to address workforce issues in emergency medicine (DoH & College of Emergency Medicine).

Emergency Medicine Workforce Implementation Group (EMWIG)- Pharmacy (2013)

Emergency Medicine Pharmacy Development Group (2014)
Emergency Medicine Pharmacy Development Group

Pharmacists in A&E Results of Scoping Study

Sveta Alladi
Clinical Fellow
Co-Chair Pharmacy Subgroup EMWIG

www.hee.nhs.uk
The Plan

1. Background

2. West Midlands pilots

3. National project
HEWM project (2013)

Prof. Liz Hughes - Deanery
Matt Aiello – Project lead
Investigate the potential of Pharmacists working as part of the ED multi-disciplinary team (alongside other roles such as Advanced Practice Nurses and Physician Associates)
HEWM – W Midlands pilot

- HEFT, BCH & Worcester acute hospital trust
- Initial focus...
  - Pre-discharge medicines optimisation in the Emergency Department (ED) and Acute Medicine Units
  - Clinical Decision Teams in the undertaking of medicines-related and minor-focussed clinical duties.
The Approach

- **Three sites** (2 adult & 1 Paediatric)
- Emergency Departments at different locations.
- Demonstrating the viability of the role over a geographical and cultural cross section of the region.

- Additional training provided
  - Fast track prescribing courses with additional elements
  - Advanced Clinical Practice course (Warwick Medical School)
    - Clinical Examination Skills for Healthcare Professionals
    - Clinical Investigations and Diagnostics for Healthcare Professionals
# Clinical assessment training

<table>
<thead>
<tr>
<th>Coding</th>
<th>Clinical examination skills training needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chest examination-stethoscope, x-rays, wheeze/crackles, croup, bronchiolitis</td>
</tr>
<tr>
<td>2</td>
<td>Abdominal examination- UTI, constipation, colic, D&amp;V</td>
</tr>
<tr>
<td>3</td>
<td>Minor injuries training</td>
</tr>
<tr>
<td>4</td>
<td>ENT examination</td>
</tr>
<tr>
<td>5</td>
<td>Detailed neurological examination</td>
</tr>
<tr>
<td>6</td>
<td>Dermatology (minor)</td>
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</table>
## ACP Course Details

<table>
<thead>
<tr>
<th>Module 1:</th>
<th>Module 2:</th>
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<tbody>
<tr>
<td><strong>Clinical Examination Skills for Healthcare Professionals</strong>&lt;br&gt;(40 CATS points at Masters level)</td>
<td><strong>Clinical Investigations &amp; Diagnostics for Healthcare Professionals</strong>&lt;br&gt;(20 CATS points at Masters level)</td>
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</tbody>
</table>

**Aim:** To provide the theoretical underpinning and practice base to enable the health care professional to deliver safe and effective autonomous care. This will include patients presenting with undifferentiated and undiagnosed primary and secondary care conditions across the age and acuity spectrum.

**Assessment:**
- Assessed Essay/course work 4000 words
- Four observed structured clinical examinations (OSCE)
- Portfolio of evidence from own clinical practice

**Aim:** to complement the clinical examination module to provide the student with the theoretical underpinning for the acquisition of a range of skills and knowledge to support safe autonomous practice when requesting and interpreting clinical investigations for a wide clinical spectrum of conditions.

**Assessment:**
- Assessed Essay/course work 2000 words
- Two observed structured clinical examinations (OSCE)
- Portfolio of evidence from own clinical practice

**CATS points = Credit Accumulation and Transfer Scheme**
BCH-Phase 2 of the Pilot

Amended Aim (BCH)

Working with an ANP or Doctor to assess patients and take a view as to which might be managed by one of four categories of Professional Ability to Manage. (PAM)
BCH approach

- The pilot operated for 4 weeks, working a variable shift pattern to encompass changes in patient throughput throughout the day (diurnal).
- Each patient was coded according to a perceived professional ability to manage (PAM) that patient.
The PAM* Codes

- By a community pharmacist – A&E attendance unnecessary [CP]
- By an Independent Prescriber pharmacist in ED – no additional skills training (with training pathway as per existing GPhC accredited non-medical prescribing pathway) [IPP]
- By an Independent Prescriber pharmacist in ED with advanced clinical skills training (aligned to the non-medical Advanced Practice pathway) [IPT]
- By a Doctor only – unsuitable for pharmacist intervention [MT]

*PAM= Professional ability to manage
Results

The potential for pharmacist management (CP, IP or IPT) of all (combined) Emergency Department attenders is 48.2%. The groups of categorisers gave the following opinions:

- 53.4% (hospital pharmacists’ opinion – primary categorisation)
- 39.1% (community pharmacists’ opinion)
- 50.5% (medical staff opinion)
A chart demonstrating the number of patients that could be dealt with by each of the PAM categories

Numbers of cases
A chart showing the % for type of training required for the IP caseload

- Minor Injuries
- Clinical Examination and diagnostics

% of cases
HEWM Pilot - Summary

- Across 3 sites
- Data capture – 5 weeks
- 782 presentations (episodes)
  - 1st Categorisation
    - CP, IP, IPT & M
  - 2nd Categorisation
    - Data reviewed by Community Pharmacists (3)
    - Consultant ED (2)
  - Impact index calculation

Impact Index = What Specialty did someone present with x likelihood that a Pharmacist could manage it.
The Impact Factor

\[ I(i) = w \times a \]

where \( w \) = workload of a particular speciality and \( a \) = pharmacist’s \textit{potential} ability to manage that group of patients

<table>
<thead>
<tr>
<th>Orthopaedic group</th>
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<tbody>
<tr>
<td>196 Records</td>
</tr>
<tr>
<td>157 Suitable for pharmacist management (CP, IP or IPT)</td>
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</table>

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Minor trauma - ankle / foot</td>
<td>40</td>
</tr>
<tr>
<td>Minor trauma - hand/wrist</td>
<td>34</td>
</tr>
<tr>
<td>Minor trauma - arm</td>
<td>22</td>
</tr>
<tr>
<td>Minor Trauma - knee / leg</td>
<td>19</td>
</tr>
<tr>
<td>Fall - other</td>
<td>9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>General (medicine) group</th>
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</thead>
<tbody>
<tr>
<td>180 Records</td>
</tr>
<tr>
<td>115 Suitable for pharmacist management (CP, IP or IPT)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Pyrexia</td>
<td>25</td>
</tr>
<tr>
<td>Cough +/- vomiting +/- pyrexia</td>
<td>19</td>
</tr>
<tr>
<td>Eye - minor trauma / foreign body etc</td>
<td>9</td>
</tr>
<tr>
<td>Diarrhoea (&amp;vomiting)</td>
<td>8</td>
</tr>
<tr>
<td>Allergy / Rash</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
<tr>
<td>Bite / sting</td>
<td>6</td>
</tr>
<tr>
<td>Vomiting</td>
<td>6</td>
</tr>
</tbody>
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The Plan

1. Background
2. West Midlands pilot
3. National project
Local Pilot to National Project

53 pharmacist independent prescribers (IP) were attached to a cross-section of national Emergency Departments (one per ED), for a five week period, to conduct a service improvement study.
The pharmacist will categorise patients with regard to whether that patient could be managed (as a part of the multi-professional ED team) by a pharmacist with additional training, and if so, what kind of additional training.

The pharmacist, with adequate medical and non-medical support, will evaluate a locally chosen sample (to ensure a suitable representation) of 400 ED patient presentations, over the five week period.
HEE Project - Summary

- 48 sites across the UK
- 400 presentations per site
- March (2015) for 4 weeks
- Additional task
  - What additional training would it take for an IP → IPT?
- 1st Categorisation planned for April
- 2nd Categorisation planned for May
- Pharmacist IPs, Nurse (ANP) & ED Consultant (From each site)
- Invited to review 800 data sets
- 18,229 presentations were observed
Results – 1st Categorisation

HEWM

- Community Pharmacist: 51.8%
- Independent Prescriber (IPP): 3.2%
- Advanced Clinical Practice Pharmacist: 5.1%
- Medical teams only: 39.8%

England

- Community Pharmacist: 55%
- Independent Prescriber (IPP): 4%
- Advanced Clinical Practice Pharmacist: 9%
- Medical teams only: 32%
Results - 2^ND Categorisation

- Pharmacist IPs, Nurse & ED Consultant (From each site)
- Invited to review 800 data sets – (400 patient presentations from two other hospital sites)
- 18,000+ data sets
Thank you for listening

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