PAGER ON-CALL SIMULATION FOR NEW JUNIOR DOCTORS

Practical experiences for new FY1 junior doctors

Dr Alexander Bell,
(Apologies - Dr B Kawa, Dr K Jack)
Brief Introduction

1. Why?
2. The simulation and participants
3. Results
4. Conclusions and suggestions
5. Questions
Why?

■ To aid the transition between medical school and clinical practice
  - Simulated on-call sessions have been shown to help prepare med students transition to junior docs (Lumley. Med Ed. 2013)
  - ‘Transition interventions’ are particularly important in supporting how prepared students are (GMC, 2014)

■ Give new doctors more confidence and help them feel prepared
  - Lack of hands-on experience can be reflected in med students perceived preparedness (Burford et al. BMC med ed. 2014)

■ Opportunity to experience the practical aspects of an on-call role
  - Answering bleeps, prioritisation, handover, orienteering, use of protocols
The Simulated On-Call for new FY1 doctors

- Small group briefing and introduction
- Each participant given an induction pack and bleep (pager)
  - Basic hospital map
  - How to use bleeps and senior bleep number
  - Required local and national guidelines
- Sessions lasted approximately 75 mins and were conducted just after the hospital day to avoid interfering with activities on the ward (5pm)
Scenarios and organisation

- 10 possible simulated patients to attend
  - *Complex scenarios requiring senior help*
  - *Data interpretation*
  - *Practical tasks*
- First 'patient’ allocated at base with real ward location to attend
- Participants bleeped with ‘patients’ to attend following this
- Pre-formed matrix used to delegate jobs
- Encouraged to contact ‘senior’ and use resources at their disposal
The Simulated Patient

Simulated patients ranged from those requiring simple tasks to triggering the need for senior support and complex plans.

Including:
- ABG interpretation, well’s score and PE
- ECG interpretation and ACS management
- Prescribing analgesia
- Prescription of IV fluid therapy (U&Es and fluid balance)
- Confirmation of death
- CXR interpretation and antibiotic prescription
Scenarios and organisation

- Emphasis on organisation and prioritisation
- Based much more around practical skills and application of knowledge than clinical knowledge itself
- Additional bleeps given not requiring attendance
- At each simulated patient; scenario brief, drug chart, observation chart, any relevant investigations, and notes to document and write plan
- Called back at end for an individual simulated handover
- Group debrief following completion of post-sim questionnaire
Participants

- New FY1 doctors at Princess Alexandra Hospital – Preparation for practice attachments or induction week
- All after completing final exams
- 20 in total – 4 sessions (19 included in results)
- Advertised via under/postgraduate education department, via email
- Optional attendance
- Feedback collected with consent
Results of feedback – Data collected

- Data collected by pre- and post-simulation questionnaires
- Used pre and post questionnaire items to assess participants confidence with aspects of being on call and for change in confidence
- Non-linear analogue scales were used, without graduations, to collect percentage agreement / confidence in relation to each statement
- Items selected using Tomorrow's Doctors GMC specification and anecdotally from experience
- Collected post-sim feedback on overall confidence being on-call and experience of the course
Results of feedback – Data collected

Overall feedback
1. Was the course a worthwhile learning experience?
2. Has this improved confidence undertaking a FY1 on-call?

<table>
<thead>
<tr>
<th>Item number</th>
<th>Questionnaire item</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>I FEEL CONFIDENT IN MY ABILITY TO RESPOND TO BLEEPs IN A TIMELY AND PROFESSIONAL MANNER</td>
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<td>2</td>
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<td>I FEEL CONFIDENT IN USING THE BNF TO LOOKUP INFORMATION NECESSARY TO CORRECTLY PRESCRIBE MEDICINES, INCLUDING DOSES, SIDE-EFFECTS AND CONTRAINDICATIONS</td>
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<tr>
<td>7</td>
<td>I FEEL CONFIDENT IN MY ABILITY TO USE NATIONAL AND LOCAL GUIDELINES OR PROTOCOLS TO INITIATE APPROPRIATE TREATMENT PLANS IN AN ON-CALL SITUATION</td>
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Results of feedback

![Bar chart showing post simulation evaluation of programme](chart)

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<tr>
<th>Mean % candidate agreement with statement</th>
<th>The simulated on-call was a worthwhile learning experience</th>
<th>I now feel more confident undertaking an 'on-call' as an FY1</th>
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<td>Mean statement agreement (%)</td>
<td>94</td>
<td>82</td>
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## Results of feedback

### Pre- and Post-simulation confidence questionnaire items

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Results of feedback

**Fig 2. Pre- and post-simulation confidence questionnaire data**

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<th>Pre-sim Mean confidence (%)</th>
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<tr>
<td>Q1</td>
<td>37</td>
<td>67</td>
</tr>
<tr>
<td>Q2</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>Q3</td>
<td>41</td>
<td>65</td>
</tr>
<tr>
<td>Q4</td>
<td>38</td>
<td>65</td>
</tr>
<tr>
<td>Q5</td>
<td>52</td>
<td>69</td>
</tr>
<tr>
<td>Q6</td>
<td>62</td>
<td>70</td>
</tr>
<tr>
<td>Q7</td>
<td>46</td>
<td>65</td>
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Important points

- Overall feedback was positive
- Lowest pre-simulation confidence in ability to answer pagers (item 1)
  - *Also largest increase in mean confidence – 37% to 67%*
- Other substantial increases in mean confidence of participants to handover tasks (item 4), maintain an organised list (item 3), prioritise duties (item 2) and use clinical protocols (item 7)
- Highest pre-simulation confidence related to using the BNF and prescribing
  - *Likely related to prescribing exams taken in final year in most medical schools, including Barts and the London*
Conclusions and suggestions

- Based much more around practical skills and application of knowledge than clinical knowledge itself
- Important aspects: handover, senior assistance, responding to bleeps, prioritising clinical tasks, hand-over, maintaining an organised jobs list and using clinical guidelines
- Induction to the hospital, orienteering, phone system, bleeps, drug charts
  - Using bleeps very new experience for participants
- Ideal to include as a compulsory part of junior doctors induction at FY1 level
- Opportunity to integrate high fidelity simulation
Thank you for your time!!

Questions ?