An inter-professional learning approach to enhance the clinical decision making skills of trainee pharmacists in the East of England

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Background

Current Model for Initial Education of Pharmacists

- 4 year MPharm Degree
- 1 Year Workplace Training (Trainee Pharmacist)
- Competency & GPhC Assessments
- Registration

Clinical Decision Making Skills???
The learning environment maximises inter-professional learning opportunities

- Promotes team working and a multi-professional approach to education & training, where appropriate
- Learners feel they are valued members of the healthcare team

80% of Hospital Pharmacy time is patient facing

**Drivers for inter-professional learning approach**

Health Education England (HEE) Quality Framework 2017/2018

What Is Inter-Professional Learning?

CAIPE Definition

“Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care”.

Centre for the Advancement of Interprofessional Education
Study Objectives

- **Set up and facilitate inter-professional learning environments within hospital settings:**
  - to provide opportunities for trainee pharmacists to make clinical decisions with other healthcare professionals

- **Evaluate attainment of learning outcomes through active participation**

- **Evaluate perspectives of trainee pharmacists and other learner groups on their learning experiences**
Inter-Professional Sessions

Writing of clinical case based scenarios & Facilitation

- Clinical case-based scenarios on Cardiology and Respiratory patients and model answers were written.
- Clinical educators from the 4 participating Hospital sites organised and facilitated the sessions.
- Facilitators provided feedback on the answers and addressed identified learning needs.
Evaluation Methodology

Questionnaires and Focus Groups

- **Pre-and Post-session questionnaires**
  All participants were asked to rate a range of statements and also provide written feedback and comments

- **Focus groups**
  Trainee Pharmacists only from all 4 hospital sites. Discussion was audio recorded, transcribed verbatim and thematically analysed*

## Results

### Pre-Session Questionnaires - Multi-Professional Feedback

<table>
<thead>
<tr>
<th>Statements</th>
<th>Trainee Pharmacists (n=17)</th>
<th>Year 5 Medical Students (n=7)</th>
<th>Foundation Year 1/2 Doctors (n=8)</th>
<th>Independent Nurse Prescribers (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine involvement in making clinical decisions</td>
<td>2.5 +/- 0.2</td>
<td>2.2 +/- 0.3</td>
<td>4.8 +/- 0.2</td>
<td>5.0 +/- 0.1</td>
</tr>
<tr>
<td>Routine contribution to clinical decision making</td>
<td>3.2 +/- 0.3</td>
<td>3.5 +/- 0.1</td>
<td>4.7 +/- 0.2</td>
<td>5.0 +/- 0.1</td>
</tr>
<tr>
<td>Involvement in the monitoring of treatment plans</td>
<td>3.6 +/- 0.6</td>
<td>2.7 +/- 0.2</td>
<td>4.8 +/- 0.1</td>
<td>4.7 +/- 0.1</td>
</tr>
<tr>
<td>Ability to recognise safe prescribing and adherence to national guidelines</td>
<td>3.9 +/- 0.2</td>
<td>3.3 +/- 0.3</td>
<td>3.8 +/- 0.3</td>
<td>4.3 +/- 0.1</td>
</tr>
<tr>
<td>Interact with other healthcare disciplines when making clinical decisions</td>
<td>4.0 +/- 0.1</td>
<td>3.4 +/- 0.1</td>
<td>4.5 +/- 0.1</td>
<td>4.3 +/- 0.1</td>
</tr>
</tbody>
</table>
## Results

### Post-Session Questionnaires - Multi-Professional Feedback

<table>
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<tr>
<th>Statements</th>
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<th>Year 5 Medical Students (n=7)</th>
<th>Foundation Year 1/2 Doctors (n=8)</th>
<th>Independent Nurse Prescribers (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The session enhanced my ability to make clinical decisions for Cardiology &amp; Respiratory patients</td>
<td>4.4 +/- 0.1</td>
<td>4.2 +/- 0.2</td>
<td>4.3 +/- 0.1</td>
<td>4.7 +/- 0.2</td>
</tr>
<tr>
<td>My learning has been enhanced by the interactions with other healthcare professionals</td>
<td>4.7 +/- 0.2</td>
<td>4.6 +/- 0.2</td>
<td>4.7 +/- 0.2</td>
<td>4.7 +/- 0.1</td>
</tr>
<tr>
<td>I have a clearer appreciation of how different healthcare professionals can contribute to clinical decision making</td>
<td>4.5 +/- 0.2</td>
<td>4.6 +/- 0.3</td>
<td>4.5 +/- 0.1</td>
<td>4.7 +/- 0.1</td>
</tr>
<tr>
<td>Multi-professional input can result in safer prescribing of medicines for patients</td>
<td>4.7 +/- 0.2</td>
<td>4.6 +/- 0.1</td>
<td>4.5 +/- 0.1</td>
<td>4.7 +/- 0.1</td>
</tr>
<tr>
<td>Inter-professional learning can enhance clinical decision making for the benefit of patients</td>
<td>4.7 +/- 0.3</td>
<td>4.7 +/- 0.3</td>
<td>4.5 +/- 0.1</td>
<td>4.7 +/- 0.1</td>
</tr>
<tr>
<td>How useful was this learning event? (Rated on a 1-5 Likert scale - 1 not useful to 5 extremely useful)</td>
<td>4.6 +/- 0.2</td>
<td>4.3 +/- 0.2</td>
<td>4.3 +/- 0.1</td>
<td>5.0 +/- 0.0</td>
</tr>
</tbody>
</table>
Results

Post-Session Questionnaires - Multi-Professional Feedback

Trainee Pharmacists
- “Helped me strengthen my inter-personal & communication skills”
- “Provided me with a better understanding of what other healthcare professionals know and how they work”

Foundation Doctors
- “Getting a pharmaceutical point of view from pharmacy colleagues - because they add a different perspective and highlight things you wouldn’t necessarily think of as a doctor”

Knowledge and Skills gained through Inter-Professional Learning

Year 5 Medical Students
- “Increased my appreciation of how much pharmacists contribute in ensuring patient safety.”
- “Helped to make prescribing more efficient and helped to answer each others’ questions”

Nurse Independent Prescribers
- “To continue to use a multi-disciplinary approach within my current prescribing practice”
- “To work more closely with pharmacy colleagues”
Post-Session Questionnaires – Multi-Professional Feedback

Would you recommend this session to other colleagues?

- All 17 Trainee Pharmacists
- All 7 Year 5 Medical Students
- All 8 Foundation Doctors
- All 3 Nurse Prescribers
Results

Post-Session Questionnaires - Multi-Professional Feedback

**Trainee Pharmacists**
- “You can learn a lot about how other healthcare professionals make clinical decisions for the benefit of patients”
- “The sessions help identify how knowledge and skills of other healthcare professionals can enhance my own learning”

**Foundation Doctors**
- “Excellent tool for understanding the multi-disciplinary team approach to problems/scenarios”
- “This is an excellent approach to teaching and learning. Sharing of knowledge base and skills enables safer clinical prescribing”

**Year 5 Medical Students**
- “Sharing of knowledge base in a learning environment enables safer clinical decision making”
- “A very useful way to learn more about safe prescribing as we don’t usually work or learn with pharmacists”

**Nurse Independent Prescribers**
- “A very good way for pulling multiple skill sets and knowledge together to achieve the common goal of making patients better!”
Post-Session - Themes from Focus Groups with Trainee Pharmacists

Gaining Mutual Respect

“We really liked the session, we thought it would be the doctors telling us everything but there was a lot of give and take”

“The junior doctors we learnt with, were quite impressed with our knowledge as well, so that was quite nice too.”
Learning about each others’ roles

“I think the doctor I worked with during the session, said to me that he wasn’t really sure what a pharmacist does or how much they know about medicines”

“The more interaction between medical students and pharmacy the better, because then they go into practice already knowing what the pharmacist is capable of and their roles”
Identifying each other's strengths

“We both identified areas of knowledge which we lacked. Medical students are more equipped with knowledge on acute conditions whereas we tend to know more about long term drug treatments, hence it was a real team effort.”
Results

Post-Session – Themes from Focus Groups with Trainee Pharmacists

Developing Inter-Professional relationships

“It was not just a fun teaching session. It also helped to develop the relationships between the pharmacists and the doctors, so I say hi to them now and I would happily go up to them with a query.”
Summary

- Inter-professional learning sessions between trainee pharmacists, medical students, junior doctors and nurse prescribers were well received.
- Participants felt that they learnt a lot and benefited from the interactions.
- All participants recommended that similar sessions, on a wider range of topics, should be offered to more learner groups.

Next Steps

- Develop more case-based scenarios and roll out similar sessions to all hospitals in the East of England.
- Undertake a comprehensive evaluation to guide further refinements of this learning approach.
Acknowledgements

We would like to thank:

- the FOUR clinical educators who facilitated the sessions at the 4 hospital sites
- All learner groups for their active participation during the session and providing feedback
- UEA PhD students who facilitated the focus groups
Thank You for listening

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ANY QUESTIONS?