Thinking outside the library: being embedded in a professional practice lab

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Presented at the Ontario Library Association Super Conference, January 31, 2014
We’ll Discuss:

• The course, PHARM 131
• Drug information (DI) station
• Student questions & feedback
• Benefits & challenges
• Other approaches
• Questions
The Course: PHARM 131

• 1st year course
  – 1st professional practice laboratory course
  – Introduction to community pharmacy practice
  – Enrols ~120 students

• Prerequisites: Pharm 129, Pharm 130

Knowledge acquired from PHARM 129 will be applied to simulated pharmacy situations and patient case scenarios. This will provide the opportunity for students to demonstrate technical skills and clinical knowledge in a practical context.
PHARM 131 gives the students the skills required to be a technically competent pharmacy student for the first co-op work term and is a building block for the skills necessary to become a practicing pharmacist.
5 Lab ‘Stations’

Medication Dispensing (Pharmacy Technician)

Sterile Compounding (Pharmacy Technician)

Patient Counselling (Pharmacists)
- Information Gathering
- Non-Prescription Aisle

Drug Information Requests (Librarian)
Lab Day: Hands-On

2 hour lab repeated 3 times

Medication Dispensing:
8 Students

Sterile Compounding:
8 Students

Patient Counselling + Info Gathering
8 Students + 8 Students

Drug Information Requests:
8 Students
<table>
<thead>
<tr>
<th>Part I (MCQ)</th>
<th>Part II (OSCE)</th>
<th>COMPETENCIES</th>
<th>Parts I and II Overall %</th>
</tr>
</thead>
</table>
| 7%          | 5%             | **Competency #4:** Drug, Therapeutic and Practice Information  
Pharmacists assume responsibility for accessing, retrieving, evaluating and exchanging relevant information to ensure safe and effective patient care. |
|             | ✓              | **4.1 Clearly define the question(s) to be researched.**  
• Clarify requests for information.  
• Identify key targets (audiences). |
| ✓           | ✓              | **4.2 Identify appropriate sources of relevant information, using evidence-informed approaches where possible.**  
• Name major sources of information.  
• Discuss the appropriateness of these sources.  
• Assess the value of the sources. |
|             | ✓              | **4.3 Retrieve information from relevant sources.**  
• Use a variety of retrieval techniques to access relevant information.  
• Assess the suitability and reliability of these techniques. |
| ✓           | ✓              | **4.4 Evaluate scientific information.**  
• Assess the adequacy of research design (e.g., ethics, methodology, etc).  
• Assess the relevance, applicability, accuracy, reliability, validity, and generalizability of information. |
The PPL Team

Nardine Nakhla: Course Coordinator; Adjunct Clinical Assistant Professor, Community Pharmacist

Lisa McLean: Regulated Pharmacy Technician, Senior Lab Demonstrator Professional Practice

Elaine Magowan: Regulated Pharmacy Technician

Shannon Gordon: Pharmacy Liaison Librarian

Other TAs as required
<table>
<thead>
<tr>
<th>DATES</th>
<th>GROUP 1</th>
<th>GROUP 2</th>
<th>GROUP 3</th>
<th>GROUP 4</th>
<th>GROUP 5</th>
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</thead>
<tbody>
<tr>
<td>May 9</td>
<td>ORIENTATION</td>
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<tr>
<td>May 16</td>
<td>Dispensing Part 1 Kroll</td>
<td>Group Consult - Non-Rx Aisle</td>
<td>DI Request Part 1</td>
<td>Sterile Compounding Part 1</td>
<td>Group Consult – Information Gathering</td>
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<td>May 23</td>
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<td>Group Consult Non-Rx Aisle</td>
<td>DI Request Part 1</td>
<td>Sterile Compounding Part 1</td>
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<td>Dispensing Part 1 Kroll</td>
<td>Group Consult - Non-Rx Aisle</td>
<td>DI Request Part 1</td>
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<td>June 6</td>
<td>DI Request Part 1</td>
<td>Sterile Compounding Part 1</td>
<td>Group Consult – Information Gathering</td>
<td>Dispensing Part 1 Kroll</td>
<td>Group Consult - Non-Rx Aisle</td>
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<tr>
<td>June 13</td>
<td>Group Consult - Non-Rx Aisle</td>
<td>DI Request Part 1</td>
<td>Sterile Compounding Part 1</td>
<td>Group Consult – Information Gathering</td>
<td>Dispensing Part 1 Kroll</td>
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<td>June 20</td>
<td>NO LAB THIS WEEK DUE TO THE OPA CONFERENCE</td>
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<td>June 27</td>
<td>Dispensing Practical - Kroll</td>
<td>Consult Room &amp; NonRx Practical</td>
<td>DI Request Part 2</td>
<td>Sterile Compounding Part 2</td>
<td>Dispensing Part 2 Nexxsy</td>
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<tr>
<td>July 4</td>
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<td>Dispensing Practical - Kroll</td>
<td>Consult Room &amp; NonRx Practical</td>
<td>DI Request Part 2</td>
<td>Sterile Compounding Part 2</td>
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<td>July 11</td>
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<td>Dispensing Part 2 Nexxsy</td>
<td>Dispensing Practical - Kroll</td>
<td>Consult Room &amp; NonRx Practical</td>
<td>DI Request Part 2</td>
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<td>DI Request Part 2</td>
<td>Sterile Compounding Part 2</td>
<td>Dispensing Part 2 Nexxsy</td>
<td>Dispensing Practical - Kroll</td>
<td>Consult Room &amp; NonRx Practical</td>
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<td>July 25</td>
<td>Consult Room &amp; NonRx Practical</td>
<td>DI Request Part 2</td>
<td>Sterile Compounding Part 2</td>
<td>Dispensing Part 2 Nexxsy</td>
<td>Dispensing Practical - Kroll</td>
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Winter 2013
- Invitation
- Planning meetings
- Review DI cases & resources

Spring 2013
- Course orientation
- 10 week lab: 60 hour total
Lab Day

Overview of DI cases & DI resources
~ 5-10 minutes

In-lab DI seeking support
~ 2 hours

Collection of completed DI requests
Weeks 1-5

**Assessment**
- Feedback focused; not graded

**Objective**
- Develop and expand DI skillset

**4 DI requests**
- Case 1: print or online DI sources
- Cases 2-4: only use print DI sources
Weeks 6-10

**Assessment**
- Worth 10% of final grade (/50)
- Average = 43/50 or 86%

**Objective**
- Assess DI knowledge

**5 DI requests**
- Could use online or print DI sources
Sample DI Request

UIW Professional Practice Lab 1
Drug Information Documentation Form

Date: ________________
Name: ________________

Question Set #: 4
Total Score: _____ / 10 Points

4. Susan has recently found out that she is lactose intolerant. She is very upset and has come to the pharmacy to buy Lactaid. She doesn’t know much about the product and was hoping you could tell her something about Lactaid. Susan would also like to know if any of her medications contain lactose. Susan currently takes Glucophage, Stressless, and Lisinopril (Apothelex brand). Please provide your answers like you would in practice.

Part 1: Patient information for DI request (point form)  [_____ / 2 Points]
[1 Point] Patient Name:
[1 Point] Relevant background information:

Part 2: Evidence gathering for DI request  [_____ / 2 Points]
[1 Point] What was your search strategy for answering this request?

[1 Point] What source(s) answered this request? Indicate the title of the resource, section where you found the answer, and if it is online or print. Example: CPS 2013/product monographs section/print version.

Part 3: Your answer for DI request (point form)  [_____ / 6 Points]
Patient Information

Identify patient name

Provide relevant background information

/2 points
Answer for DI request

What would you do in practice?

/6 points
Evidence Gathering

What was your search strategy for answering this request?

What source(s) answered this request?

/2 points
Search Strategy

How did students determine where to search?

What was their search ‘thought process’?

For example:

special population or group,
geographic focus,
keywords, etc.
DI Resources

- e-Therapeutics (e-CPS)
- Lexicomp
- Micromedex
- Natural Standard
- Access Pharmacy
- Canadian Pharmaceuticals & Specialties (CPS)
- Therapeutic Choices
- Martindale
- Drugs in Pregnancy and Lactation
- Pediatric Dosage Handbook
Do lisinopril and Glucophage® contain lactose?

What pharmacological and non-pharmacological therapeutic options exist for smoking cessation?

Are Quinolone antibiotics safe to use during pregnancy?

Is it okay to crush/open phenytoin and Colace® capsules?

Should isotretinoin be prescribed for a woman in her 2nd trimester who is experiencing severe acne?
What do the risk categories mean in the Briggs text?

Does a certain drug interact with grapefruit juice?

How do you use the Martindale? What do certain symbols mean?

How do I know what a drug is called in another country?

What company manufacturers drug X in another country?
RQs in the Lab

Week 1: 45
Week 2: unavailable (away)
Week 3: 30
Week 4: 38
Week 5: 41
Student Thoughts

• Appreciated lab’s hands-on nature
• DI cases were challenging yet doable
• Using print DI resources was challenging!
• Unsure how much detail to provide in their answers
• Overall, a positive learning experience
“I felt that it was a great idea to have the first 5 weeks unmarked to give us practice”

“The DI request station is too difficult for students with no therapeutic knowledge of the drugs”
“Information we learn during this lab is SO IMPORTANT for us, especially going out for our first co-op in the fall”

“I believe the lab fulfilled its purpose of introducing us to the main features of working in a pharmacy setting”
Making Connections

- Working with 1st year students
- Strengthening relationships with instructors
Supporting Teaching & Learning

- Marketing librarian skillset
- Support at a point of need
- Insight into UG curriculum
Challenges

• Technology
  – The server died!
  – Internet connectivity

• Confusion with wording of some cases

• 6 hours of reference support
Our experience

- Very positive collaboration
- Opportunity to share our experience
- Possibility for future involvement

What happens elsewhere?
Librarian-led small group DI tutorials¹
Herbs and neutraceuticals course

Drug information and literature evaluation course
Drug information skills program\textsuperscript{4}
You!

• Have you provided information seeking support within a lab environment?

• How do you support students seeking drug information?
Our 3rd Speaker,

Lisa McLean
Questions?

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Works Cited


