USING CURRICULUM MAPPING TO ASSESS INDIVIDUAL FACULTY INTEGRATION OF A NATIONAL INFORMATICS EDUCATION PROGRAM

Janet Cooper, Lisa Bishop, Marie Rocchi, Harold Lopatka, Seema Nayani

BACKGROUND

- An educator peer leader network was established with a goal to integrate informatics into Canadian pharmacy curricula.
- The “Informatics for Pharmacy Students” e-Resource was developed as an education tool for use by educators to help prepare graduates for work in technology-enabled environments.
- A curriculum mapping activity was undertaken to identify where informatics competencies were addressed.
- Experiences from other projects suggested likely courses where informatics was taught.

PHARMACY INFORMATICS COMPETENCIES

Three competencies with 31 indicators were derived from other frameworks.
1. Information and knowledge management
2. Professional and regulatory accountability
3. Information and communication technologies

“INFORMATICS FOR PHARMACY STUDENTS” E-RESOURCE

http://afpc-education.info/moodle/

METHODS

1. Obtain course outlines for 5 target courses
   - Experiential learning, Informatics, Pharmacy Practice, Pharmacy Skills, Social/Administrative
2. Identify course learning objectives that address informatics competencies
3. Determine if learning objective has an informatics focus
4. Align to one or more competencies
5. Determine performance level (novice, functional, competent)

RESULTS

- 6/10 schools participated
- Schools involved people such as: peer leaders, assessment specialists, students, coordinators, research assistants.
- Total number of course learning objectives by competency:
  - Informatics competency #1: 772
  - Informatics competency #2: 197
  - Informatics competency #3: 457

Types of Courses

- Experiential Learning: 17%
- Pharmacy Skills: 22%
- Pharm Practice/Therapeutics: 44%
- Social/Admin: 13%
- Informatics: 4%

Courses Per Year linked to competencies

- Year 4: 13%
- Year 3: 30%
- Year 2: 31%
- Year 1: 26%

Performance Levels (average number)

- Competent (28)
- Functional (43)
- Novice (65)

LESSONS LEARNED

Curriculum mapping process
- Helped bring awareness of informatics teaching at each school
- Helped with planning of new PharmD curriculum
- Learning objectives
  - Challenging to link to competencies, esp. when learning objectives vague
  - Learning objectives did not always link to activities within course
- Curriculum target areas
  - Not all courses delivered the same way
  - Some courses integrated with several target areas in one course
  - Only two schools with dedicated informatics course
- Informatics competencies
  - Competency #2 less frequently covered
  - Primarily in earlier years, so challenging to explore advanced informatics topics.
  - Some competencies not clear (e.g. not specific to informatics, vague)
- Performance levels
  - Assignment not straightforward retrospectively
  - Most tagged at novice or functional level

IMPLICATIONS

- Opportunity to review and update competencies
- Provide insight about strategies to improve uptake of informatics teaching

ACKNOWLEDGEMENTS

- The Association of Faculties of Pharmacy of Canada
- Canada Health Infoway
- All the peer leaders who contributed to the project