An innovative approach to integrate health informatics into pharmacy curriculum

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Presentation Outline

- Context / Background

- Pharmacy Educator Peer Leader Network
  - Project overview
  - Evaluation results
  - Recommendations

- AFPC ongoing framework

- References

Context - Pharmacy

- 38,737 licensed pharmacists, 9,842 licensed pharmacies

- ¾ work in community pharmacy, 1/5 work in institutional pharmacy

- Legitimized distributor of prescription and scheduled drugs

- Recent regulatory change to expand scope of practice (prescribing, adapting, injections, medication management)

- All community and institutional pharmacies are computerized (and have been from early 80s)
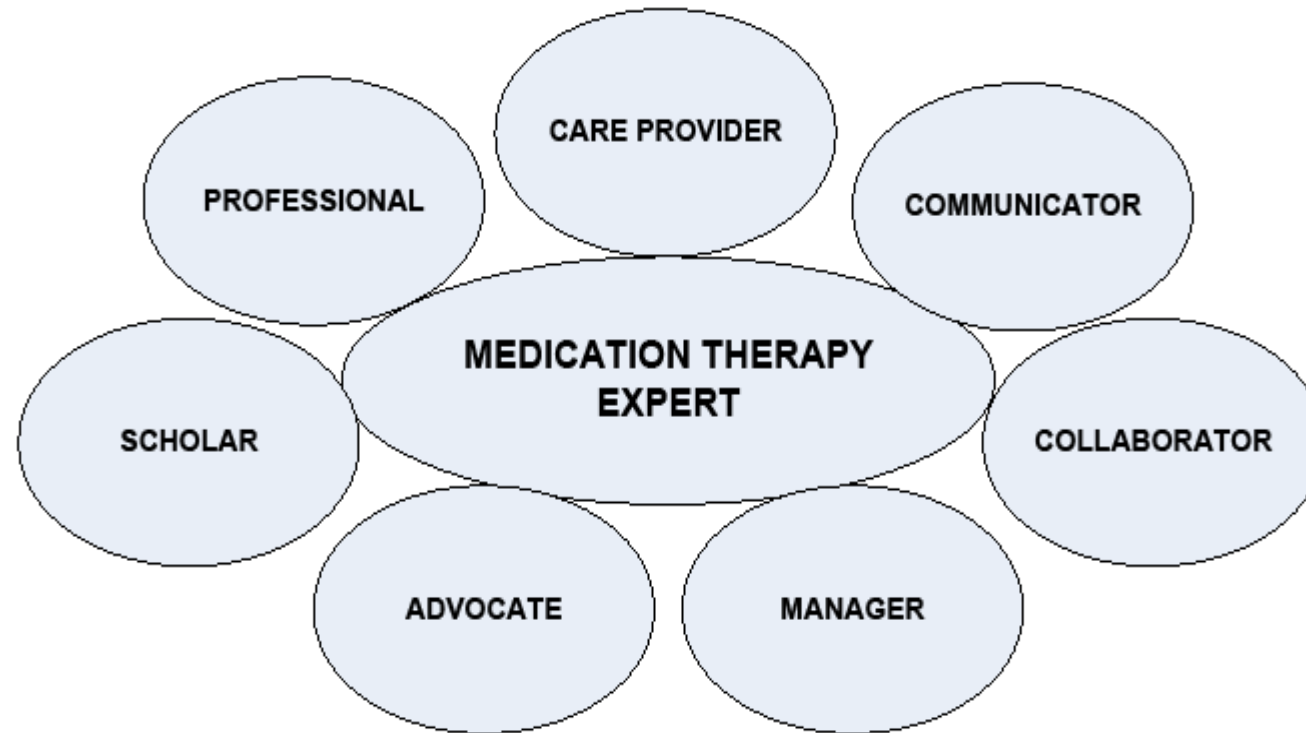
Context - Education

- 10 faculties / schools of pharmacy in Canada
- 550 faculty, 5000 pharmacy students in training
- AFPC provides collective leadership, expertise and advocacy, and effective partnerships
- Typical pharmacist education takes 6 or more years to be trained (2 years foundational courses, 4 years pharmacy courses including experiential training)
- Curriculum change challenges
  - Norm is for curriculum to be based on integrated designs
  - Curricula are overfilled with content
  - Lead time for revision (minor or major)
  - Small number of faculty with interest and expertise in IT
  - Subjects such as use of information and technology tend to be embedded into courses with a different focus (IT is an enabler for pharmacist to become more effective and / or efficient).

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Pharmacy Education

AFPC EDUCATIONAL OUTCOMES
FIRST PROFESSIONAL DEGREE PROGRAMS IN PHARMACY

CARE PROVIDER

PROFESSIONAL

COMMUNICATOR

MEDICATION THERAPY EXPERT

SCHOLAR

COLLABORATOR

ADVOCATE

MANAGER

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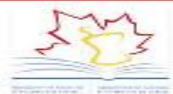
Pharmacy Educator Peer Leader Network (PEPLN)

Purpose

- Build on the success of development of the   Informatics for Pharmacy Students e-Resource

- Facilitate integration of the e-Resource into pharmacy undergraduate curriculum
  - support integration of Infoway's Consumer Health priorities (e.g. e-visits, e-refills)

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Pharmacy INFORMATICS

Entry-to-Practice COMPETENCIES for PHARMACISTS

Canada Health Infoway   Inforoute Santé du Canada

www.afpc.info

Association of Faculties of Pharmacy of Canada

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

Pharmacy Educator Peer Leader Network (PEPLN) – Project structure

- 1 peer leader identified from each faculty (10 faculties)

- Financial assistance – up to $10K per faculty

- Support team – peer leader mentor / coach, e resource coach, project manager

- Communications – regular emails, e-resource discussion boards, telephone consults, group webinars, 2 face to face workshops

PEPLN Results

- Eight peer leaders (from 8/10 faculties) participated in the full project.

- Over one half of the pharmacy students enrolled in faculties used the e-resource.

- The network, PEPLN, created conditions considered essential to produce a collective impact.

- Thirty four local integration projects were conducted in a 1 year period.

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of e-Resource enrollments by month (period June 2014 to June 2015)

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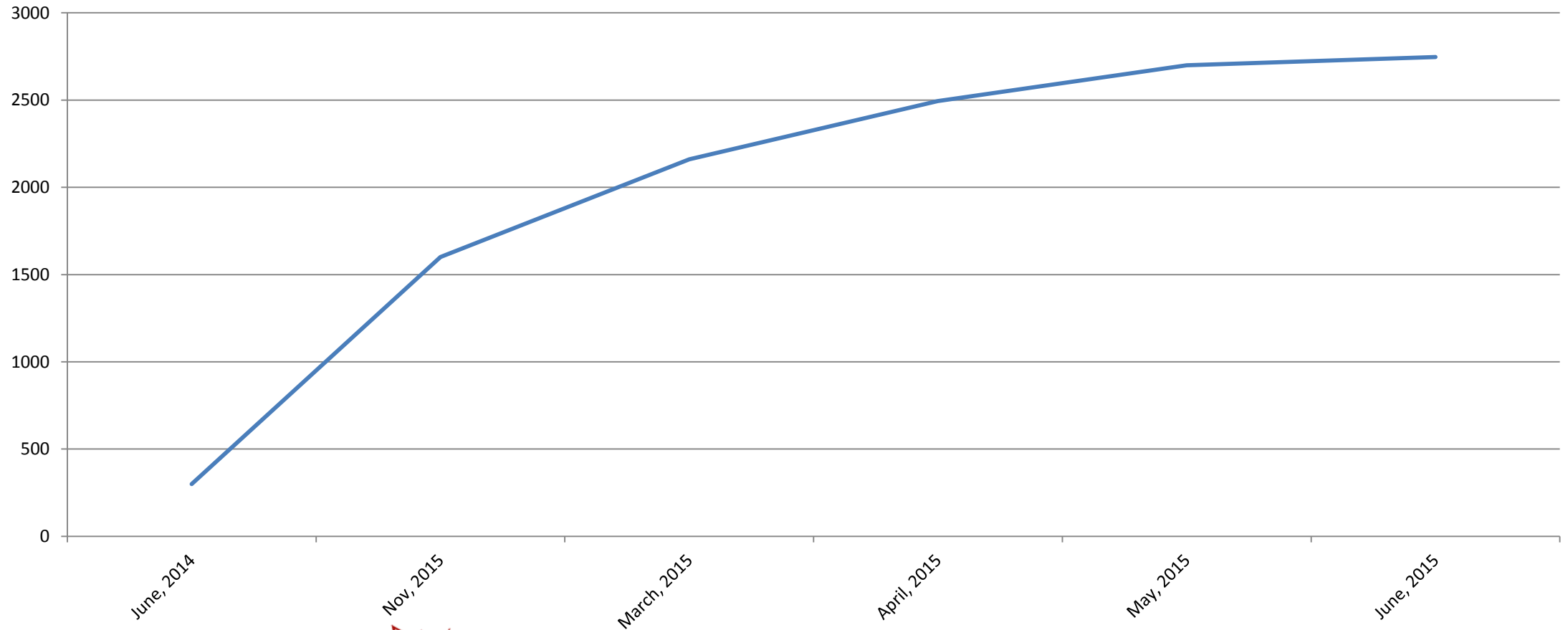
PEPLN Results (cont'd)

- Integration activities were conducted in seven different types of courses with pharmacy skills labs being the most frequent.

- The most common learning activity was pre-reading for labs or lectures.

- A number of non-course integration activities occurred.

- Twenty integration best practices were identified.

Examples of best practices

- Make completion mandatory or include evaluation questions on the exam – this emphasizes the importance of the material.

- The e-resource is effective when specific assignments are used to reinforce concepts already taught.

- Successful integration requires familiarity with the curriculum and content of the e-resource. Establishing an integration team helped with the success of the project.

- Adaption of the e-resource using student and faculty feedback is an important factor in keeping the e-resource relevant.

PEPLN Results (Cont'd)

- Overall results illustrated that version 1 of the e-resource was a useful and valuable tool for integrating important concepts and principles about digital and e-health into pharmacy curricula.

- Twelve major and ten minor changes to version 1 of the resource were made to improve access / use, navigation / layout, and specific learning / teaching activities.

- Version 2 of the e-resource available May 2016.

Curriculum Example

- You are a manager of a small, independent community pharmacy, practicing with APA. You have a regular patient in your community pharmacy, Mr. Alfred McPherson (63 year old male). Mr. McPherson is a very proactive, technologically advanced patient. He has developed a personal electronic health record and is happy to provide you with the information he has from his doctor's office and your pharmacy. The information below reflects what you have been able to collect from these sources, along with the provincial EHR. He has just emailed you that he needs refills on his amlodipine, HCTZ and simvastatin.

Example (cont'd)

- Is it appropriate Mr. MacPherson emails you his prescription refills? Why or why not?

- In what ways could your pharmacy help meet Mr. MacPherson's eHealth needs?

- Describe the main patient related concerns regarding eHealth and in particular EHRs?
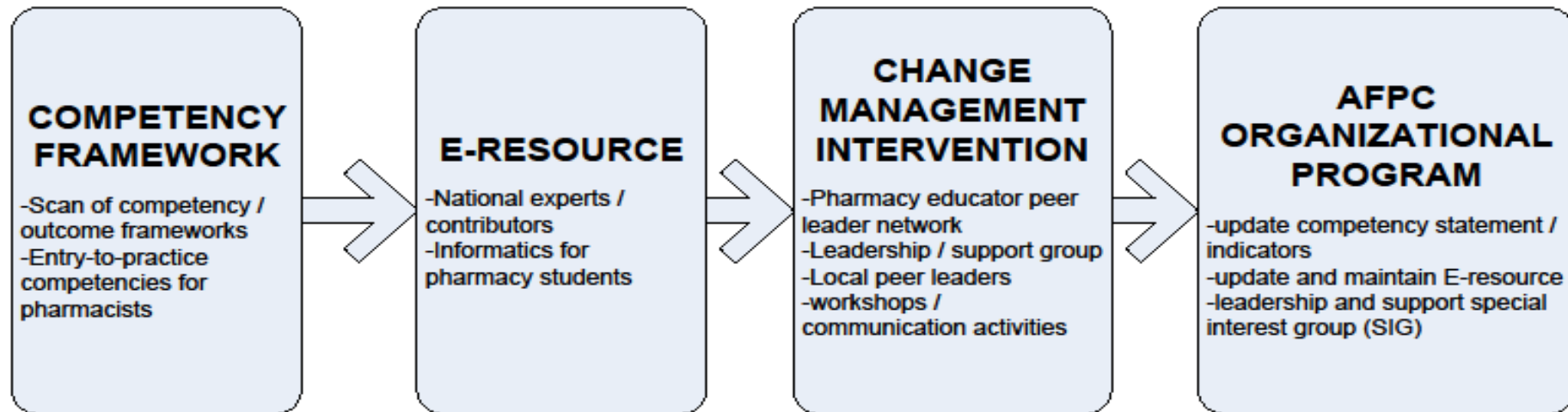
PEPLN Recommendations

- A peer leader skills development boot camp / workshop should be conducted...

- A targeted approach ... The focus should be peer leaders and faculty with teaching interests in pharmacy skills labs, experiential education, pharmacy practice, and informatics ...

- Current pharmacy curricula should be mapped against the AFPC informatics competencies (gap analysis)...

- Initiate a process for e-Resource content revisions. Continued focus should occur on practical / hands on learning approaches...

- Modifications ... for use in pharmacy technician training programs ...

- ...translate 2 or 3 sections of the e-Resource into French (e.g., documentation, consumer health informatics, privacy/security/confidentiality).

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INFORMATICS EDUCATIONAL PROGRAM

COMPETENCY FRAMEWORK

-Scan of competency / outcome frameworks
-Entry-to-practice competencies for pharmacists

E-RESOURCE

-National experts / contributors
-Informatics for pharmacy students

CHANGE MANAGEMENT INTERVENTION

-Pharmacy educator peer leader network
-Leadership / support group
-Local peer leaders
-workshops / communication activities

AFPC ORGANIZATIONAL PROGRAM

-update competency statement / indicators
-update and maintain E-resource
-leadership and support special interest group (SIG)

Reports / Publications / Presentations

- 2016 Pharmacy educator peer leader network (PEPLN) internal evaluation report http://afpc.info/content/pepln-evaluation-report

- Pharmacy Educator Peer Leader Network (PEPLN): Informatics for Pharmacy Students e-Resource - e-poster presentation https://www.infoway-inforoute.ca/index.php/en/component/edocman/resources/reports/clinical-adoption/3040-pharmacy-educator-peer-leader-network-pepln-informatics-for-pharmacy-students-e-resource?Itemid=101

- PEPLN newsletters http://afpc.info/content/pepln-newsletters

- E-safety through a national program for educating pharmacists-in-training - presentation http://www.coachorg.com/en/newsandevents/resources/esafety_summit/presentations/3_harold_lopatka_oct_27_esafety_presentation_-_afpc_lopatka.pdf

- Pharmacy Informatics entry-to-practice competencies for pharmacists http://afpc.info/system/files/public/AFPC%20ICT%20Informatics%20Brochure%20In%20house1[1].pdf

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