AFPC Conference
May 31, 2014
Presented by: Lisa Bishop
CURRENT STATUS

• Early planning stages
• Anticipated enrollment date 2017
• Considering 4-year program (2-years pre)
• Class size 40 – 50
• Exploring Bridging Program
PROGRESS TO DATE

• Preliminary contact with government, pharmacy board
• Curriculum Planning and Development Committee
  • Mapping of curriculum against educational outcomes
CHALLENGES

• SPE sites
  • Development of sites in community, family medicine, international
  • Working closely with health authorities
  • Re-establishing other rotations (eg. research, DI, administration)

• Admissions

• Physical space

• Resources
NEXT STEPS

• Stakeholder meetings
  • Practicing pharmacists/alumni
  • Students
  • Faculty/staff
  • Health authorities
  • Provincial pharmacy organizations
  • Government
NEXT STEPS

- Design curriculum
  - Pre-requisites
  - Pharmacy curriculum
- Bridging Program
Dalhousie College of Pharmacy
2014 Pharm D status update
Prerequisites

Approved by Faculty:

- Chemistry, biology, social science, math, statistics, english
- Anatomy, microbiology, organic chemistry, biochemistry, genetics, electives
Curricular Design

Proposed but in further development

- 3 years of skills lab
- 2 and ½ years of Critical Appraisal Series
- Physiology, immunology, pharmacology
- Integrated pharmaceutical science course
- Social, behavioural and administrative modules each term
- Integrated PBL courses
- Nutrition, geriatrics, pediatrics, pregnancy and lactation
- Alternative health
- Interprofessional thread
PEP

- Final year – advanced PEP
- Introductory PEPs in first 3 years
- Exploring longitudinal early exposure
Approval Process

- Concept paper approved at Faculty level and Senate subcommittee – moving to next Senate level
- Simultaneously developing full proposal
- Initial and simultaneous consultation with government
- Planned implementation fall 2016
• MANITOBA
Pharmacy Education in Manitoba: A History

- **1986** – Academic review of the Faculty of Pharmacy Recommendations:
  - Relocation to medical campus should be investigated
  - Expand curriculum to 4 years
  - Preceptorship education program
  - Pharm. D. program development
  - We have been developing PharmD program for 28 years
21 practicing
14 Faculty at University of Manitoba
1 non-patient care
4 non-practicing

Registered Pharmacists (CPhM)

Practicing Pharmacists (CPhM)

Registered PharmDs

Practicing PharmDs

Oldest PharmD

Newest PharmD
University of Manitoba

Current

- 4 Year BSc(Pharm) program Full Accreditation 2013-2019
- 1 year prerequisites
- Will increase pre-requisites to 2 years

- Council of Post-Secondary Education Approval, University of Manitoba Senate and Board of Governors approval to proceed with full proposal granted 2014

- In Strategic Plan 2012-2017

- Early stages of PharmD in development
- E2P and bridging program 2020
University of Saskatchewan

Progress towards PharmD Curriculum

Yvonne M. Shevchuk
Progress towards PharmD

- Steering Committee established in 2013
  - Terms of reference approved at division
  - Organizational chart and structure established
- Full day faculty retreat in May 2013
  - established guiding principles
- In-depth discussion with U of T
Progress towards PharmD

- Admissions working group and curriculum development working group established
- Remainder of working groups – practice experiences, faculty development and support and bridging program working groups will be established soon
- A number of subgroups within the curriculum development working group to be established - teaching and learning methods, skills development, student assessment and program evaluation, content and themes
Progress towards PharmD

- Stakeholder consultations began Jan 2014
  - Ministries of Health, Advanced Education, and Economy and SASHN Board
  - Student town hall
  - Health regions, CSHP-SaskBranch, SCP,PAS, employers - continuing

- One page fact sheet developed for stakeholder consultations
Progress towards PharmD

- Notice of Intent to Planning and Priorities Committee of Council submitted April 7, 2014
- Meeting with PPC on June 4th
- Expected that all faculty will be involved through at least one working group
- Regular reports provided at Division meetings
PharmD: A Cross Country Update

Christine Hughes, BScPharm, PharmD, FCSHP
Associate Dean, Undergraduate Programs (Acting) & Associate Professor
Faculty of Pharmacy & Pharmaceutical Sciences
University of Alberta

2014 AFPC Canadian Pharmacy Education and Research Conference
The (Recent) Road Map to ELPD in Alberta...

• Post-Professional PharmD Program started in September 2013 (admitted 10 students in first class)

• New Curriculum Development Steering Committee for ELPD formed in September 2012 (recommenced work in late 2013)

• Target for implementation of entry level PharmD: Fall 2017
Entry-Level PharmD Development and Approval Timeline

- Curriculum Framework
- Stakeholder Support
- Evaluation Post-Professional PharmD, BScPharm Programs
- Proposal - Faculty Approval Early 2015
- University Approval
- Government Approval

e.g. Framework Components: Goals, Outcomes, Design Elements, Pre-Pharmacy requirements, Courses

*Target date to admit students is Fall 2017

*Pending Faculty, University and Government approval
Progress to date...

- Outline proposal strategy
  - Curriculum revision vs. re-development
  - Work with University administration
- Identify pre-pharmacy courses (2 years)
  - Environmental scan
  - Modified Delphi approach
  - Work with other Faculties (e.g. Campus Saint Jean)
- Curriculum Framework components (draft)
  - Program goal and outcomes
  - Curriculum design elements
  - Program overview
- Identify priority areas
  - e.g. Experiential Education
Next Steps...

• Curriculum Framework approval
• Formation of Working Groups
  • Develop course syllabi
What will position us for success....

- ‘Bumps’ along the way....learn from experiences and from others
  - Network with colleagues
  - Published literature on curriculum re-development
- Experience with post-professional PharmD
  - Evaluation plan
- Strengths of existing BScPharm program to build on vs. new curriculum
  - Integration
  - Re-development of skills courses in 2\textsuperscript{nd} and 3\textsuperscript{rd} year of program
- Evaluation of BScPharm program underway
- Committed faculty, staff, students, preceptors, stakeholders.....
- Practice environment in Alberta
- New hires (support)
  - Curriculum Development Manager (starts Aug 2014)
  - Program Administrator – Doctor of Pharmacy Program
- New space for teaching (e.g. Practice Skills Lab)
Challenges....

• Capacity for experiential rotations
  • ELPD
  • Concurrent post-professional PharmD / bridging programs
• Faculty members
  • Time for planning
  • Burnout
  • Support needed (faculty development)
• Implementation
  • Minimizing double teaching
• Unexpected roadblocks?
“There is nothing wrong with change, if it is in the right direction.”

........Winston Churchill
Waterloo PharmD: Preparing the Next Generation of Pharmacists

David Edwards, BScPhm, PharmD, MPH
Professor and Hallman Director
PharmD Approval and Implementation

- Approval to offer the entry-to-practice PharmD program received in January 2013
- PharmD Planning Committee organized and working groups established to revise previously approved PharmD curriculum
- Revised curriculum approved by Pharmacy Faculty Council in May 2013
- First class admitted to PharmD program in Jan 2014 (Class of 2017)
PharmD Transition

- 1st and 2nd year students (currently in 2nd and 3rd year) were given the option to transition into the PharmD program (Class of 2015 and Class of 2016)
- 100% of students in both classes elected to transition
- First PharmD graduates in 2015

- Primary difference between the BScPharm and PharmD programs is the experiential component
Experiential Education @ Waterloo

<table>
<thead>
<tr>
<th>BScPharm</th>
<th>PharmD</th>
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<tbody>
<tr>
<td>Community Service Learning</td>
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<tr>
<td>Co-op placements (16 months)</td>
<td>Co-op placements (12 months)</td>
</tr>
<tr>
<td>Clinical Capstone (assessment)</td>
<td>Clinical rotations (6 months)</td>
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Bridging PharmD

• Designed as a part-time program for Waterloo graduates only
• Key features include online courses, prior assessment of learning and clinical placements in local area where students are living and working
• May transition to a non-traditional PharmD program for graduates of other pharmacy programs
• First intake of students in January 2015
Faculty Update
University of Toronto
Leslie Dan Faculty of Pharmacy
CPERC Conference, May 31st, 2014
Saskatoon
PharmD Curriculum Update: 240 students

- Year 3 successfully implemented!
- May 5 to 9, 2014: Transition Week
- Students now in their Advanced Pharmacy Practice Experiences (APPE) – starting May 12th 2014, for 35 weeks
- All students to complete APPE by May 8th, 2015
PharmD Curriculum

- OCP has waived the 12-week internship requirements for our graduates
- Many elective offerings in year 3
- 7 new courses to be added for the 2014-15 academic year
- Total number of Selective and Elective courses in year 3: 28
- Modifications to year 1: Calculations and Pharmacology as courses
Other Faculty updates

• The Combined PharmD / MBA program to be offered to the class of 1T7 (students who will enter their 2\textsuperscript{nd} year); program to commence in the fall of 2015
  – 5 years + one term to obtain dual degrees
  – Last two years will be with the Rotman School of Management

• “PharmD for Pharmacists” program to start in January 2015, with admissions process underway shortly

• Clinician Scientists in Pharmacy Practice: now 7
New Faculty Research Centres

• Centre for Pharmaceutical Oncology
  – From drug discovery to early clinical trials
• Centre for Pharmacy Management and Innovation
  – Research and education with a focus on exploring the impact of new models of pharmacy care
• Centre for Collaborative Drug Research (jointly with Medicine)
  – 3 themes: neuroscience; personalized medicine and natural health products
University of Toronto

Leslie Dan Faculty of Pharmacy
Doctor of Pharmacy (Pharm.D.) Program Implementation: an Up-Date

Faculté de pharmacie
Université Laval
Québec, CANADA
Overview

- A 4-year entry-level Doctor of Pharmacy program
- A professionalization approach
  - Set of 5 professional competencies
  - Competency developing plan (with expected stage for each year)
- Learning Continuum
- Simulation Laboratory
5 professional competencies in Pharmacy

1) Implementation of medication therapy
2) Dissemination of pharmaceutical knowledge
3) Handling medication
4) Managing pharmacy operations
5) Commitment to professionalism
The progress map for learning

A scale developed and based on a 4-stage pathway:

- Beginner
- Novice
- Intermediate
- Competent
- Master
- Expert

Pharm D

Graduate studies
CE
Learning Continuum

- Theoretical
- Practical
- Simulation-based
- Professional experiential
- Review and Feedback

Evaluations – Assessment - Remédiations
What’s positive

- To move forward to a new approach
- To better integrate basic to clinical sciences
- Simulation enhances preparation for clerkship
What remains challenging

- A totally new approach – no model
- A 180° turn for the professors & teaching staff
- In-depth reorganization of the Faculty
Facts

- Fall 2014: 4th year of implementation
- From 158 to 170 to 192 students a year
- Bridging Bachelor-Pharm D Program
- Revise M Sc Hospital Pharmacy Program
Competencies: the foundation of our Pharm.D.
2001-2002: Needs assessment and Feasibility Study
2002-2003: Competency framework and Guiding principles
2004: Macro Components of the CBC (horizontal integration)
2005-2006: Course development and Assessment strategy (vertical integration)
2007: First class in a new Competency-based curriculum
2009-2013: Competency-driven adjustments
Advantage of a Competency-Based Approach

✦ Reverse Engineering

• In a Knowledge-based program, outcomes (competencies) are not measured during learning.

• Course’s learning objectives are mapped to determine if students are «prepared» for the expected outcomes.

✦ ...or Direct Engineering

• Expected outcomes are practiced and measured regularly, with different levels of expectations as students progress within the curriculum.

• Our choice: Develop a flexible CBA to prepare competent pharmacists for professional challenges.
Expanded Experiential Learning

- Rx & Man: 44%
- Rx & Society: 12%
- Labs: 10%
- Integration Activities: 10%
- Practice Experience: 24%
Assessing the Needs - Pharmacists should

✧ Engage deeper in our health care system
  • Goal: Learn to become more proactive first-line resources

✧ Focus more on patients, less on medicines
  • Goal: Learn to put the patient at the centre of interest

✧ Collaborate more efficiently with other HCP
  • Goal: Learn to engage in inter-professional collaboration

✧ Offer broader services to our society
  • Goal: Learn to develop community / public health services
POTENTIAL PATTERN

Innovating in Teaching Collaborative Practice with a Large Student Cohort at Université de Montréal

Marie-Claude Vanier, BPharm, MSc¹
Pierre-Yves Therriault, PhD²
Paule Lebel, MD, MSc³,⁵
France Nolin, MSc⁴
Hélène Lefebvre, PhD⁵
Isabelle Brault, PhD⁵
Eric Drouin, MD³
Nicolas Fernandez, PhD⁵
For the Interfaculty Operational Committee for Collaborative Practice Teaching at Université de Montréal*

Individual
On-line preparatory modules
4–6 hrs

Intraprofessional
Peer group preparatory activity
6–8 hrs

Interprofessional
Workshop
3-h duration

Figure 1. Interprofessional Education Continuum.
IPC Development Starts in Year 1

Figure 2. Three Stage Process of Progressive Competency Development.
Assessing the Needs - Pharmacists should

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✦ Offer broader services to our society
  • Goal: Learn to develop community / public health services
Community Service Projects

♦ Significant projects
  • 2 semester duration - 2 annual themes
♦ 40 teams of 10 students
  • 5 students of year-1 and year-2 per group
  • Obligation to team up with community stakeholders
♦ A lot of liberty to foster creativity
  • supervised by 2 professors and 3 pharmacists knowledgeable in public health
♦ Evaluation component
  • In third year