



## **Pharmacy specialty residency programs in Canada : Present and future considerations**

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# Conflicts of interest

- Viiv HealthCare
- Jansenn
- Abbott
- Pfizer
- Merck



# Acknowledgements

- **Canadian Hospital Pharmacy Residency Board**
  - Barb Evans
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- **Association of Deans of Pharmacy of Canada**
  - Pierre Moreau
- **HIV Pharmacy Specialty Residency**
  - Alice Tseng
  - Michelle Foisy



# Objectives

1. Define specialty pharmacy residency programs;
2. Contrast general pharmacy residency programs versus specialty programs;
3. Describe key aspects and potential requirements for the development of specialty residency pharmacy programs;
4. Examine how faculties of pharmacy could further contribute to the development of specialty residency pharmacy programs.



# Definition

## Specialized **Pharmacy Practice** Residency

« A Specialized Pharmacy Practice Residency is an organized, directed, accredited program in a specific area of practice that builds upon the competencies established in a pharmacy practice residency or a pharmacy professional degree program beyond the entry level. The Specialized Pharmacy Practice Residency program increases the resident's depth of knowledge, skills, attitudes, and abilities to raise the resident's level of expertise in medication therapy management and clinical leadership in the area of focus. »

PGY1 = post-graduate year 1 residency

PGY2 = post-graduate year 2 residency

CSHP, Canadian Hospital Pharmacy Residency Board, January 2010

Adapted from ASHP PGY2 accreditation standard, 2005

Faculté de pharmacie

Université  
de Montréal



# Usual progression in clinical pharmacy training

## Specialty residencies, low uptake

- awareness
- few options
- salary / stipend
- fatigue
- no accreditation
- no university diploma

Fellow

Specialty  
Residency (PGY2)

PGY1, M.Sc pharmacy  
practice +/- graduate  
PharmD

B.Pharm or entry-level Pharm D

UofM

< 2%

≈ 20 %

100%



# Motivation for doing a specialty residency

## Purpose:

- ↑ specialized disease and medication knowledge
- Improve therapeutic thought process
- Offer pharmaceutical care to complex patients with complex medical or psycho-social problems
- Integrate knowledge and experience to find creative solutions to complex problems

## Added benefits:

- Exposure to a variety of practice settings
- Working with expert pharmacists and physicians in the field
- Multiple occasions for networking
- ↑ research skills
- Work independantly
- Gain experience with preceptoring students
- Develop leadership skills

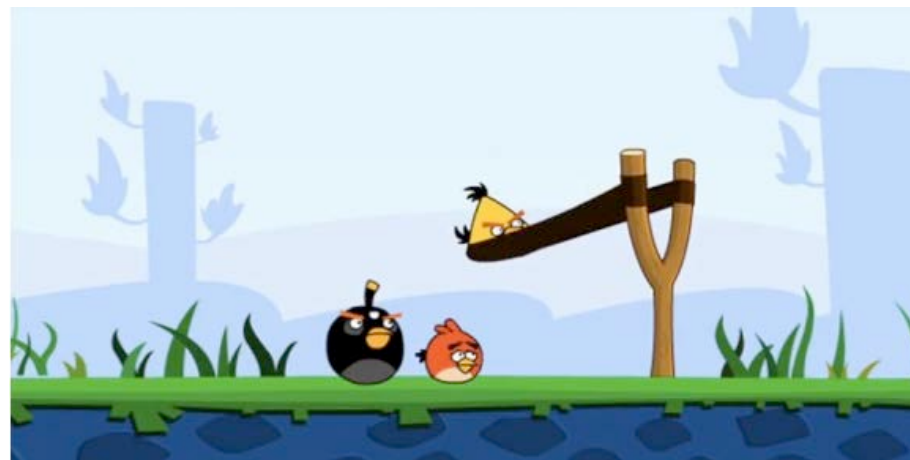


## Key characteristics of the pharmacist after the specialty residency program

Specialist  
Expert  
Leader  
Model  
Innovator



Diversified  
practice





Program	Site	Contact	Duration
Ambulatory	Sunnybrook, TO	B. Hardy	1 year
Primary Care	UHN, TO	K. Cameron	1 year
Drug Information	Ottawa Hospital	?	6 months
Community pharmacy	Ontario	?	1 year
<b>Cardiology</b>	Sacre-Cœur, Mtl	C. Pharand	1 year
<b>Critical Care</b>	Sacré-Coeur and MGH, Mtl	D. Williamson, M. Perreault	1 year
<b>Critical Care</b>	Toronto	H. Kertland / C. Chant	1 year
Gyneco-oncology	Ottawa Hospital	L. Rambout	?
<b>Geriatrics</b>	RVH, Mtl	L. Mallet	1 year
<b>HIV</b>	UHN, To and MCI, Mtl	A. Tseng / N. Sheehan	1 year
HIV	Providence HealthCare	Jack da Silva	1 year



## Example: Structure of HIV pharmacy specialty residency

HIV outpatient / retail pharmacy	2 weeks
Ambulatory HIV Care – TGH	8 weeks
Ambulatory HIV Care – MCI	8 weeks
HIV pediatrics – CHEO	4 weeks
Drug Information – Jansenn	2 weeks
Marketing – Viiv Healthcare	2 weeks
Inpatient HIV care	4 weeks
ARV TDM	4 weeks
Elective rotation 1 (ex: ID)	4 weeks
Elective rotation 2 (ex: HCV, IDU)	4 weeks
Research	8 weeks
Vacation time	2 weeks
Conference	



# Practice Standards, Levels and Ranges

**Provide direct patient care as a member of interprofessional teams**

**General residency (PGY1)      Specialty residency (PGY2)**

**Expected:\*** « manage simple DRPs in patients with uncomplicated medical problems or psychosocial needs with minimal supervision »

« for more complex DRPs, self-assess and identify supports required »

**Expected:** Offer pharmaceutical care to patients with complex medical problems, multiple comorbidities, polypharmacy and / or complex psycho-social needs with minimal supervision



# Practice Standards, Levels and Ranges

Manage and improve medication use systems

## General residency (PGY1)

**Expected:\*** « effectively explain aspects of drug distribution and medication use systems; applies knowledge of management tools to ensure safe and effective use of medications »

## Specialty residency (PGY2)

**Expected** = beyond expected level for PGY1  
« improves efficiency and effectiveness of health care delivery within a team-based context »\*  
« provides recommendations to prevent future incidents »\*

\*CSHP, Canadian Hospital Pharmacy Residency Board, August 2009



# Practice Standards, Levels and Ranges

## Exercise leadership

### General residency (PGY1)

**Expected:\*** « articulate alternatives and constructive proposals for change management »  
« enhance patient safety within a collaborative environment »

### Specialty residency (PGY2)

**Expected** = beyond expected level for PGY1  
« articulate a new vision of the future...advances the profession toward the goal »\*  
« initiate, galvanize support for, and bring to fruition initiatives with widespread effects »\*

\*CSHP, Canadian Hospital Pharmacy Residency Board, August 2009



# Practice Standards, Levels and Ranges

Exhibit ability to manage one's own practice of pharmacy

**General residency  
(PGY1)**

**Expected:\*** «self-access  
and respond to practice  
demands and practice-  
related learning needs »

« ...demonstrate effective  
time- and resource-  
management skills »

« ...balance multiple  
competing demands »

**Specialty residency  
(PGY2)**

**Expected** = same

\*CSHP, Canadian Hospital Pharmacy Residency Board, August 2009



# Practice Standards, Levels and Ranges

Provide medication and practice-related education

## General residency (PGY1)

**Expected:**\* «appropriately adapts method, mode or style of presentation to audience »

- « responds... to educational needs in general areas of practice »
- « provides coaching, facilitation, modeling and preceptorship to pharmacy students and professionals

## Specialty residency (PGY2)

**Expected** = beyond expected level for PGY1

- « able to present at specialty rounds »\*
- « invited to present at regional, national, international conferences »\*
- « respond...to educational needs in specialty areas of practice »\*
- « publishes work in peer reviewed journals »\*

\*CSHP, Canadian Hospital Pharmacy Residency Board, August 2009



# Practice Standards, Levels and Ranges

Demonstrate project management skills

## General residency (PGY1)

**Expected:**\* « identify a **practice – based** problem or issue, generate a research proposal, ..., demonstrate effective data gathering and analysis skills...complete a written report and defend all elements of the project»

## Specialty residency (PGY2)

**Expected** = similar to PGY1

- ↑ clinical research
- works independantly throughout the year on the research project
- ↑ statistical analyses



# Accreditation

- Not yet available for PGY2s in Canada
  - Eventually through the Canadian Hospital Pharmacy Residency Board
  - Prerequisites:
    - Board must develop practice standards and accreditation standards
    - Program directors will then have to apply for accreditation
- Meanwhile ???
  - PGY1 accreditation available



# Developing a specialty residency: steps

- **Program Director**
  - Single director even if multiple sites
  - Demonstrated expertise in the area
    - As per ASHP: completed PGY2, minimum 3 years experience, board certified (if applicable), maintains active practice in field
- **Sponsoring organization**
  - Maintains authority and responsibility for quality, coordination and administration of program
  - Contractual signed agreements with practice sites
  - On-site inspection of practice site



# Developing a specialty residency: steps

- **Residency Advisory Committee**
  - Strongly recommended (optional)
  - Role: advice the resident and the program director
  - Meetings: 3 to 4 times per year, and as needed
- **Members (example):**
  - Program director and co-directors
  - Head pharmacist
  - Physician
  - Faculty representative
  - Community representative



# Developing a specialty residency: steps

- **Residency Manual**
  - Program purpose → outcomes → educational goals → educational objectives
    - ASHP: provides generic set and specific sets of purpose / outcomes / goals / objectives for some fields
      - Critical care, drug information, geriatrics, oncology, primary care
  - Program structure, rotations, rotation descriptions, evaluation process, certification requirements, etc



# Developing a specialty residency: steps

- **Learning experiences / preceptors**
  - Exemplary environments conducive to learning
  - Must provide experiential learning that meet the goals and objectives
  - Sufficient patient population (# and variety of disease states)
  - Pharmacist integral part of interdisciplinary team
  - Collaborative practice with other providers
  - Active pharmacy service 12 months/year
  - Sufficient professional staff to supervise
  - Preceptors: qualified to provide effective training
    - PGY2 and 1 year experience in field or
    - Demonstrates expertise and  $\geq 3$  years experience
  - Rotation descriptions: practice site, objectives, activities



# Developing a specialty residency: steps

- Competency-based and criteria-based evaluation
- Focused on program and rotation goals / objectives
- Example: HIV specialty residency

Evaln.	Evaln done by:	Mid rotation, formative	End rotation, sommative	Mid - year	End-year
Self-assessment	Resident	X	X		
Resident	Preceptor		X		
Preceptor	Resident		X		
Rotation	Resident		X		
Program	Resident				X
Research	Director (s)				X
Other:	Director (s)			X	X



# Developing a specialty residency: steps

## Other

- Admission criteria / candidate selection
- Funding
  - Must offer « sufficient financial support » to resident
- Other logistics
  - Orientation
  - Provide work space, computer, opportunities to attend conferences
  - Policies and procedures : vacation / sick leave / failed rotations, etc
- Certification requirements



# Challenges

- **Recruitment**
- **Funding**
  - Hospital pharmacy departments ?
  - Hospital foundations ?
  - Industry ?
  - Research granting agencies ?
  - Health ministry ?
- **For Faculty members**



# Faculties of pharmacy as sponsoring organization ?

## Responsible for the quality, coordination and administration of the program

- Advantages for the resident

- University diploma
- May facilitate obtaining « specialist » title

- Advantages for the program director

- Work recognized from Faculty / university
- Time devoted to direction of program
- Administrative support
- ↑ sharing of tools / experience
- May ↑ funding options



# Faculties of pharmacy as sponsoring organization ?

- **Advantages for Faculties**
  - Credits and associated ↑ funding
  - Potential to hire more professors (clinical)
  - Train professionals for future academic careers
    - Clinical professors
    - Clinician scientists



# Faculties of pharmacy as sponsoring organization ?

## Degree ?

- **Specialized graduate diplomas**
  - (DESS: *dîplome d'étude supérieure spécialisée*)
  - 1 to 2 year program
  - A few classes
- **Clinical PhD**
  - 2.5 to 3 year program
  - ↑ research component
  - Some classes

## Canadian network of specialty residency programs

- Harmonize programs
- ↑ capacity for external elective rotations



## Conclusions – Specialized pharmacy residency programs

- Clear benefits for pharmacists to do these programs
  - Advanced pharmaceutical care, teaching, clinical research

### « *Orphan pharmacy programs* »

- Few programs actively recruiting residents
- Programs « left on their own »
  - No practice standards
  - No accreditation
  - Difficult / little funding

### University degree

- Benefits for resident, preceptor and Faculties of pharmacy

**Thank you for your attention !**

# Faculté de pharmacie

*Because drugs are complex*

- To train devoted, creative and open-minded professionals and specialists;
- To perform basic and applied research;
- To share knowledge and expertise;
- To contribute to the development of pharmacy practice and pharmaceutical sciences.

Mission

Research Themes

