



# *From experience to expertise: evolution of pharmaceutical care in Canada*

Pharmaceutical Care Network Europe working conference  
Mechelen, Belgium  
February 6, 2015

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**Titulaire, Chaire sanofi aventis en soins pharmaceutiques ambulatoires**  
**Chercheur, Centre de recherche du CHUM**

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# Changing pharmacy practice, an urgent matter....

- Ageing of the population
  - High prevalence of chronic health problems
  - Therapeutic gaps in primary care
    - Low detection rate
    - Underuse of preventive pharmacotherapy
    - Suboptimal pharmacotherapy:
      - Patients not on target
      - Low adherence to pharmacotherapy
  - Economical constraints
  - High societal impacts
-



# Changing pharmacy practice, an urgent matter....

## Pharmacists are

highly accessible  
well trained  
appropriately organized

## Pharmaceutical care are

safe  
effective  
cost-effective

*Changing pharmacy practice is a long journey into the world of organizational change....*

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# In this presentation

- Pharmacy in Canada
- Pharmacy in Québec
  - New legislations
  - Current pharmacy practice
- Factors leading change
  - Driving forces
    - A vision for pharmacy
    - Information and communication technology
    - Education and continuing professional development
    - Pharmacy practice research
  - Constraints and obstacles
    - Remuneration
    - Infrastructures and re-organization of work
    - Interprofessionnel collaboration
- Conclusion





# Legislative changes

[www.cfpnet.ca](http://www.cfpnet.ca)

Updated october 2014



- Set health goals
- Monitor and manage medications
- Help patients better manage their medical conditions

- Annual patient care plans
- Medication reviews/Management
- Immunization
- Administration of drugs by injection
- Adaptation

Fefusals to fill	✓	✓	✓		✓	✓	✓	✓	✓	✓
Therapeutic substitutions	✓	✓				✓	✓	✓	✓	
Minor ailments		✓	✓	✓		✓	✓	✓	✓	✓
Initial-access prescribing or to manage ongoing therapy		✓		✓	✓	✓				
Pharmaceutical opinions		✓			✓	✓				
Trial prescriptions		✓								
Smoking cessation		✓	✓	✓	✓	✓				
Emergency prescription refills	✓	✓	✓	✓	✓		✓	✓	✓	✓

# Bill 41 - Québec

1. Extend a prescription
2. Adjust a prescription
  - Form, dosage, quantity, posology
  - Diabetes, dyslipidemia, hypertension, warfarine/nicoumalone
3. Order and interpret laboratory tests
4. Prescribe a drug for a minor condition when the diagnosis is known
  - e.g. Allergic rhinitis, urinary infection, exzema
5. Prescribe a medication for which no diagnosis is needed
  - e.g. nausea/vomiting in pregnant women, malaria prevention, traveller's diarrhea
6. Perform therapeutic substitution of a prescription drug in case of a supplying shortage
7. Administer medication to demonstrate proper use to a patient



# Bill 41 - Québec

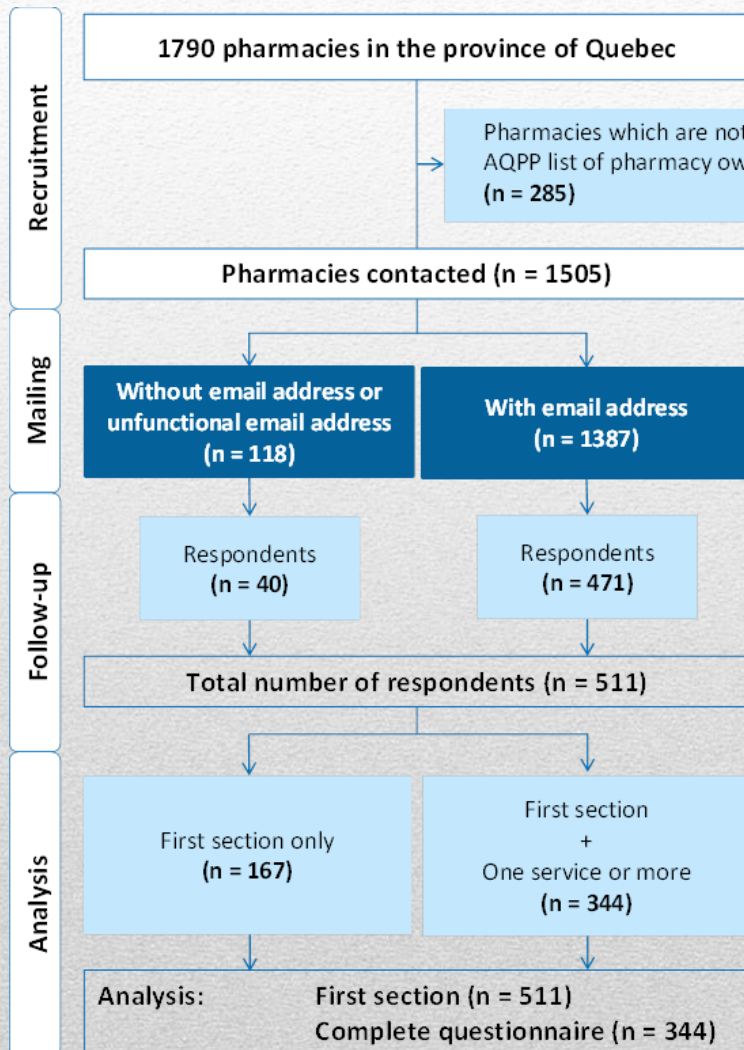
- Entry into force: 3 septembre 2013
- Postpone entry into force: 29 août 2014
- Bill 28 now under discussion
  - 3/7 pharmaceutical acts would be remunerated:

# Bill 41 - Québec

1. Extend a prescription
- ✓ 2. Adjust a prescription
  - Form, dosage, quantity, posology
  - Diabetes, dyslipidemia, hypertension, oral anticoagulant
3. Perform therapeutic substitution of a prescription drug in case of a supplying shortage
4. Administer medication to demonstrate proper use to a patient
5. Order and interpret laboratory tests
- ✓ 6. Prescribe a drug for a minor condition when the diagnosis is known
  - e.g. Allergic rhinitis, urinary infection, exzema
- ✓ 7. Prescribe a medication for which no diagnosis is needed
  - e.g. nausea/vomiting in pregnant women, malaria prevention, traveller's diarrhea



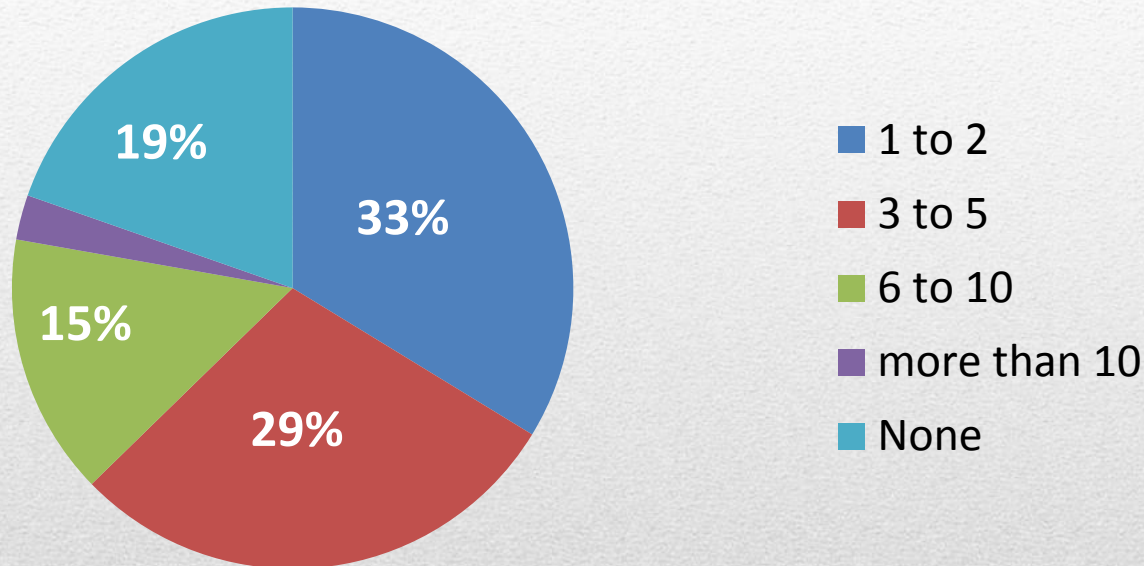
# Survey in Québec (2013)



Participation rate:  
34% (511/1505)

# Clinical services

Number of clinical services provided in the past year?



**Clinical services:** Structured and individualized programs for the management of pharmacotherapy, excluding distribution of drugs and the counselling of patients.

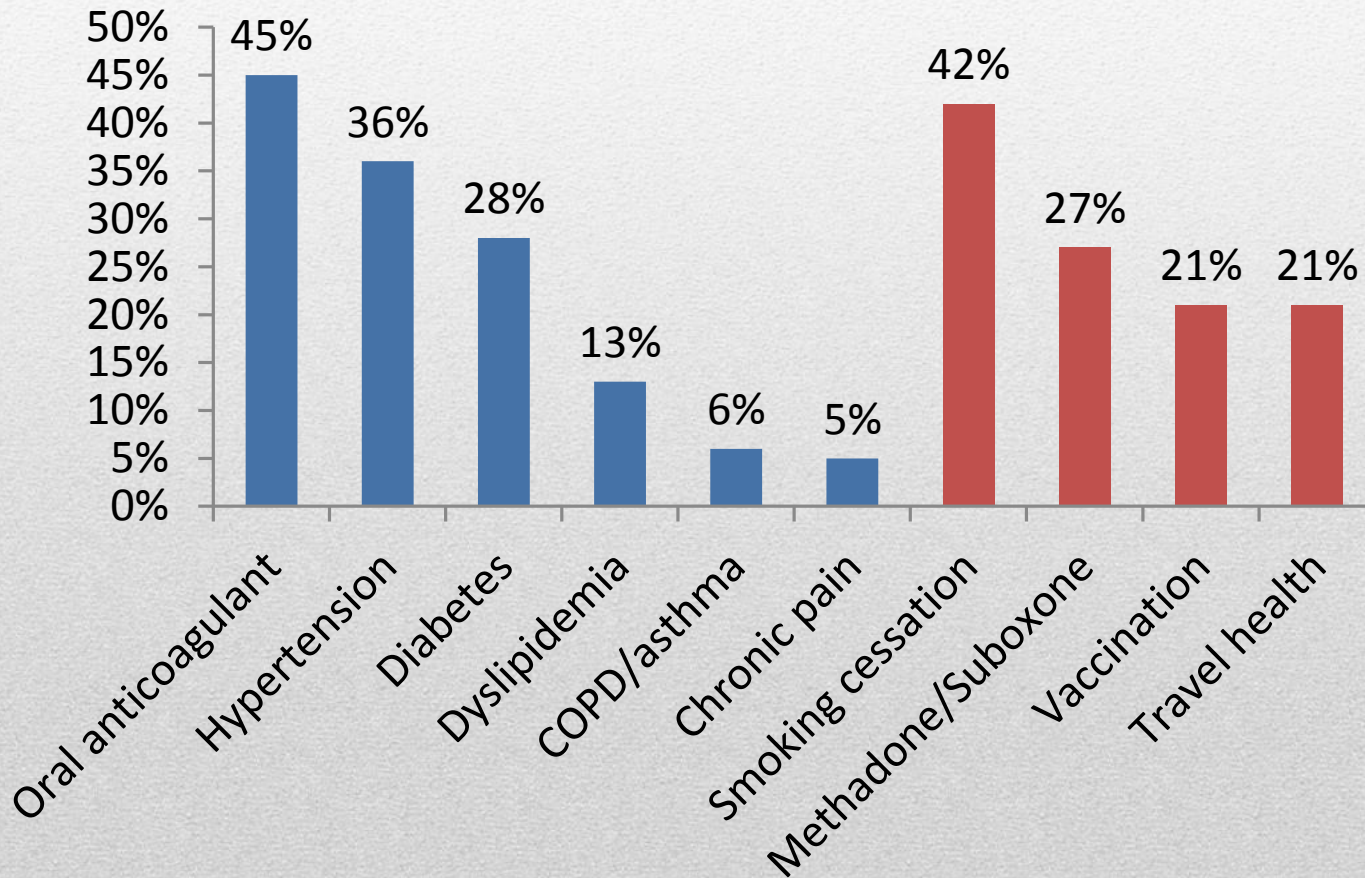
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# Most prevalent services

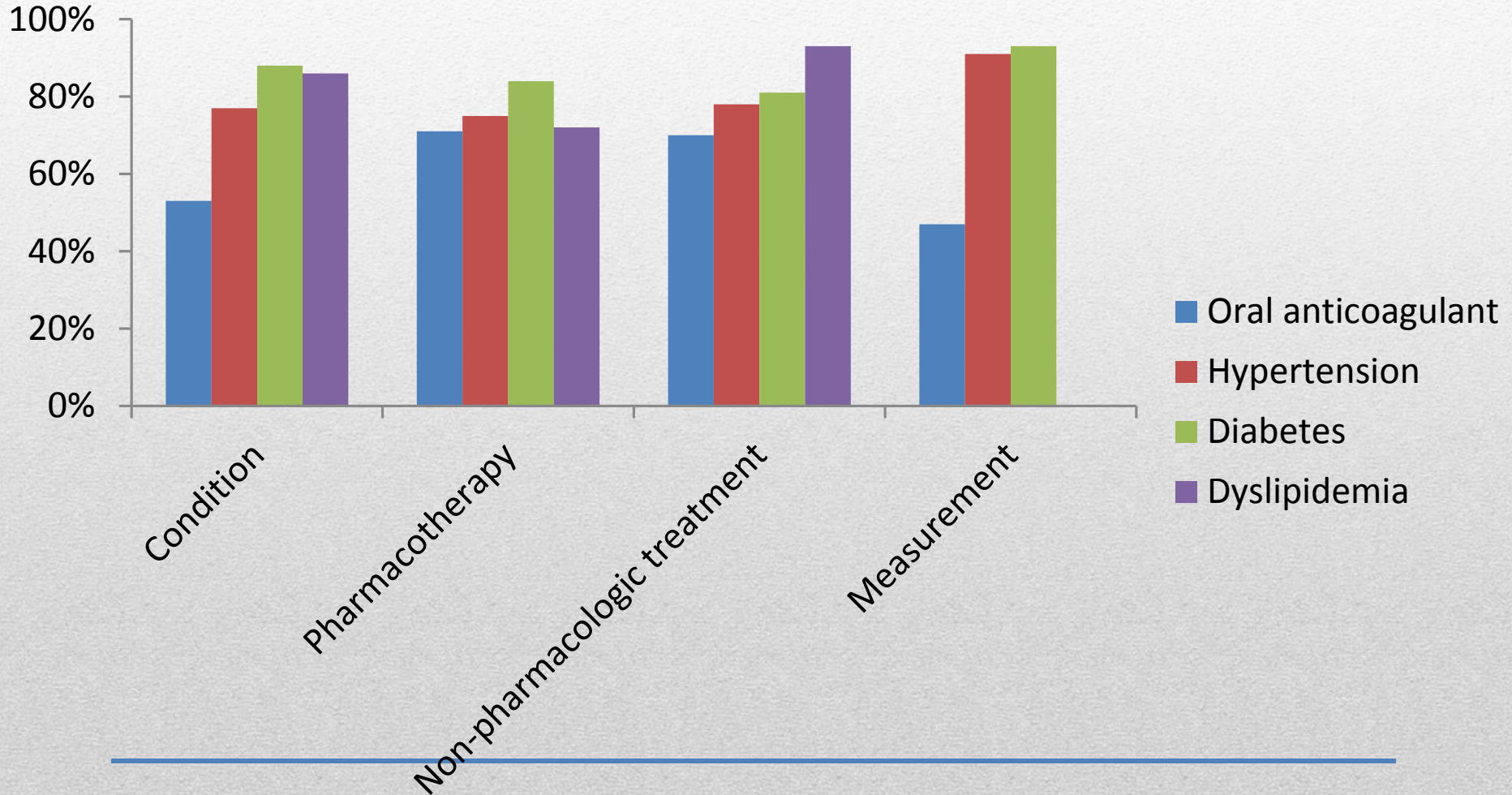
Chronic disease management

Specific conditions



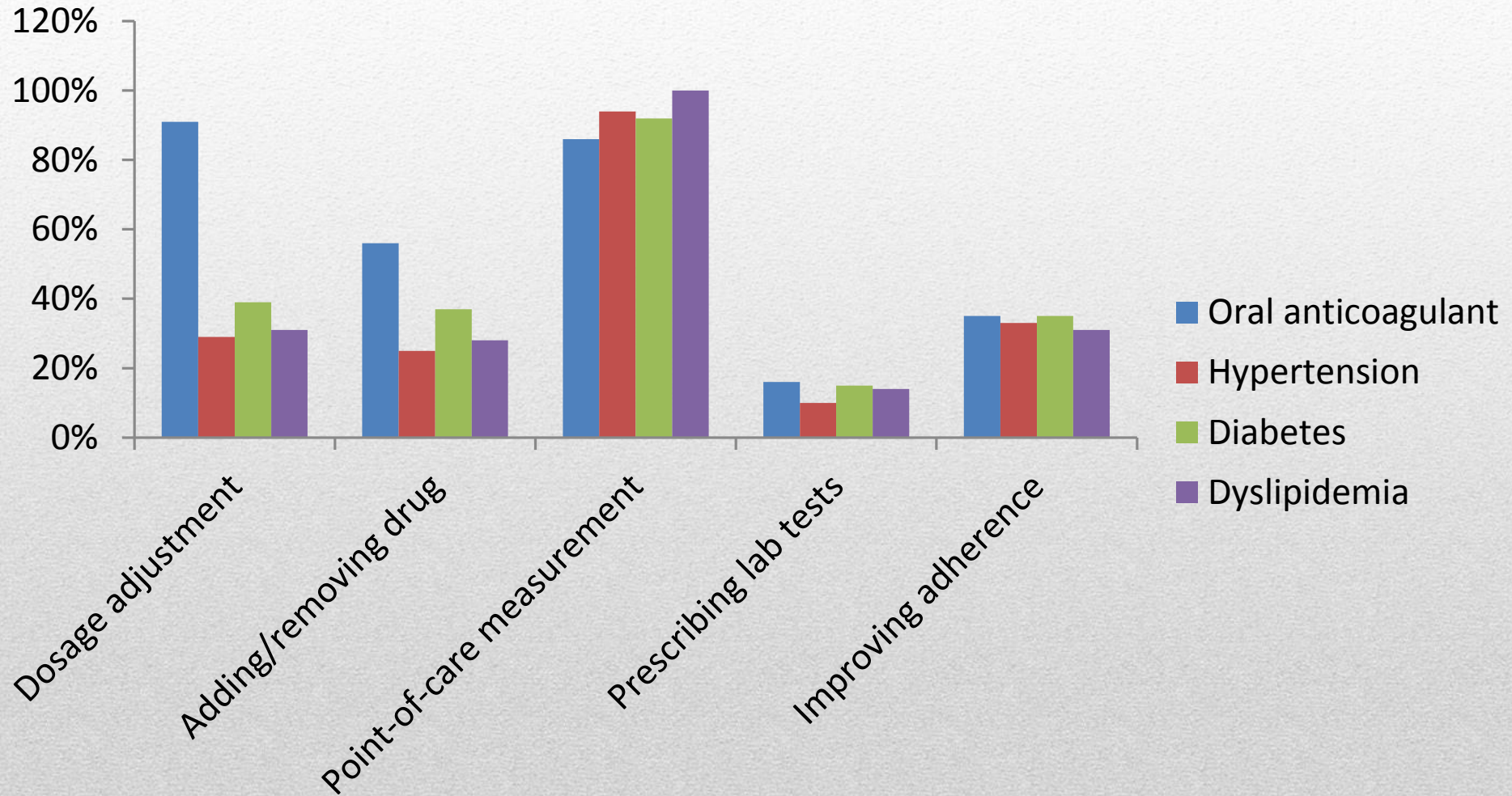
# Description of clinical services

Providing information about...





# Description of clinical services



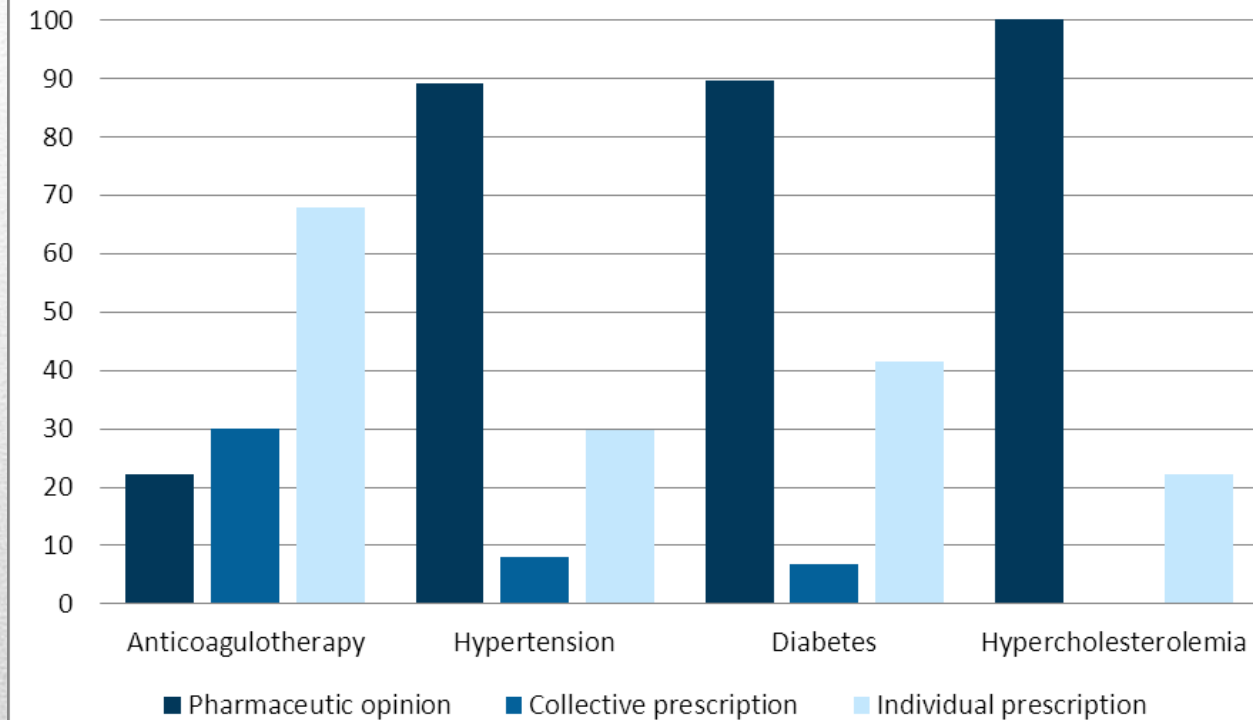
# Description of clinical services

	Oral anticoagulant	Hypertension	Diabetes	Dyslipidemia
Time since initiation of service (year)	<b>4.5</b>	<b>5.5</b>	<b>5.6</b>	<b>4.3</b>
Number of patients last year (n)	<b>22</b>	<b>60</b>	<b>54</b>	<b>63</b>
Length of consultation (min): mean				
Initial visit	<b>20</b>	<b>17</b>	<b>25</b>	<b>23</b>
Follow-up visit	<b>8</b>	<b>9</b>	<b>13</b>	<b>13</b>
Service paid by patient (yes)	<b>47%</b>	<b>14%</b>	<b>13%</b>	<b>59%</b>

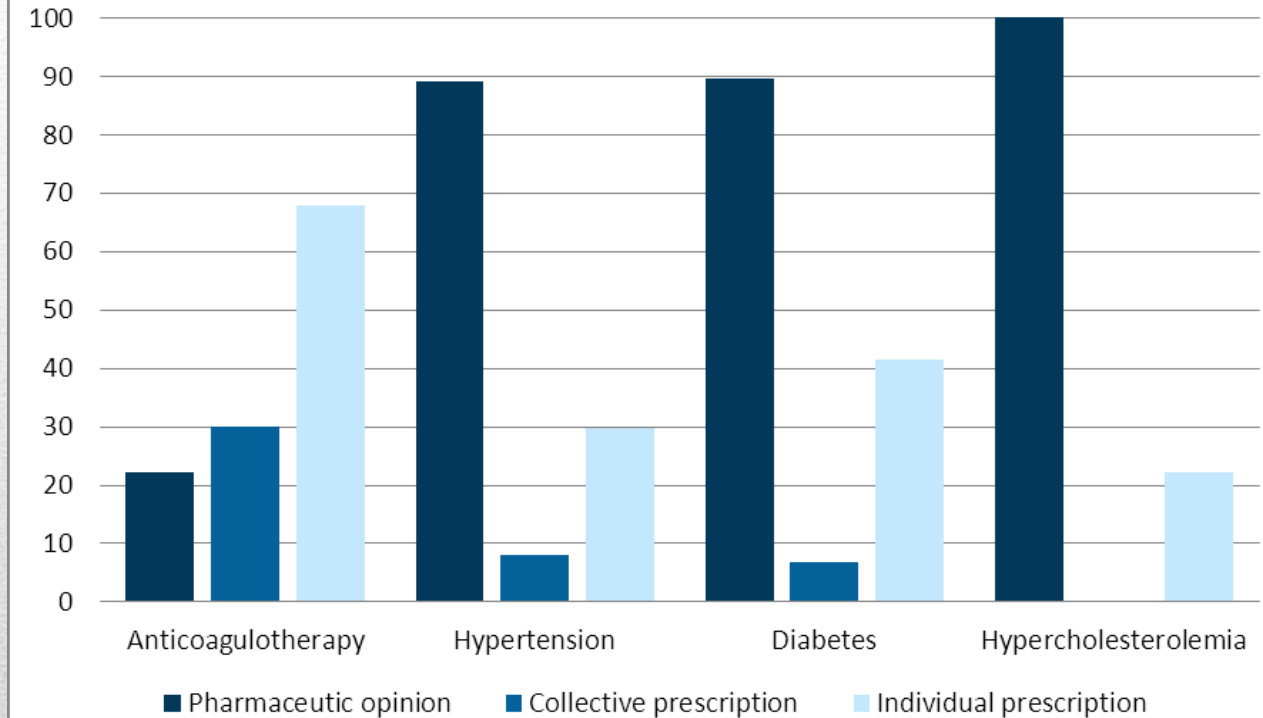
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## Strategies implemented to adjust medication dosage



## Strategies implemented to adjust medication dosage

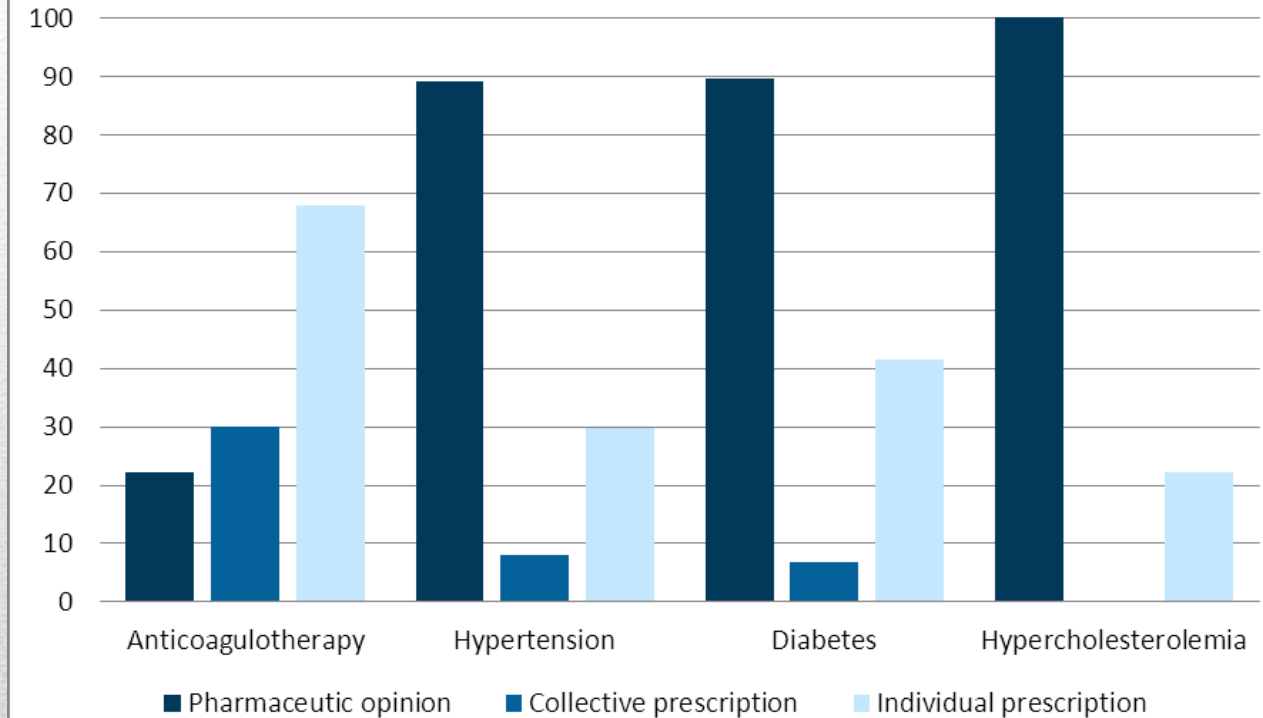


### Pharmaceutical opinion:

Identification by the pharmacist of a potential drug-related problem and recommendations to the prescriber.



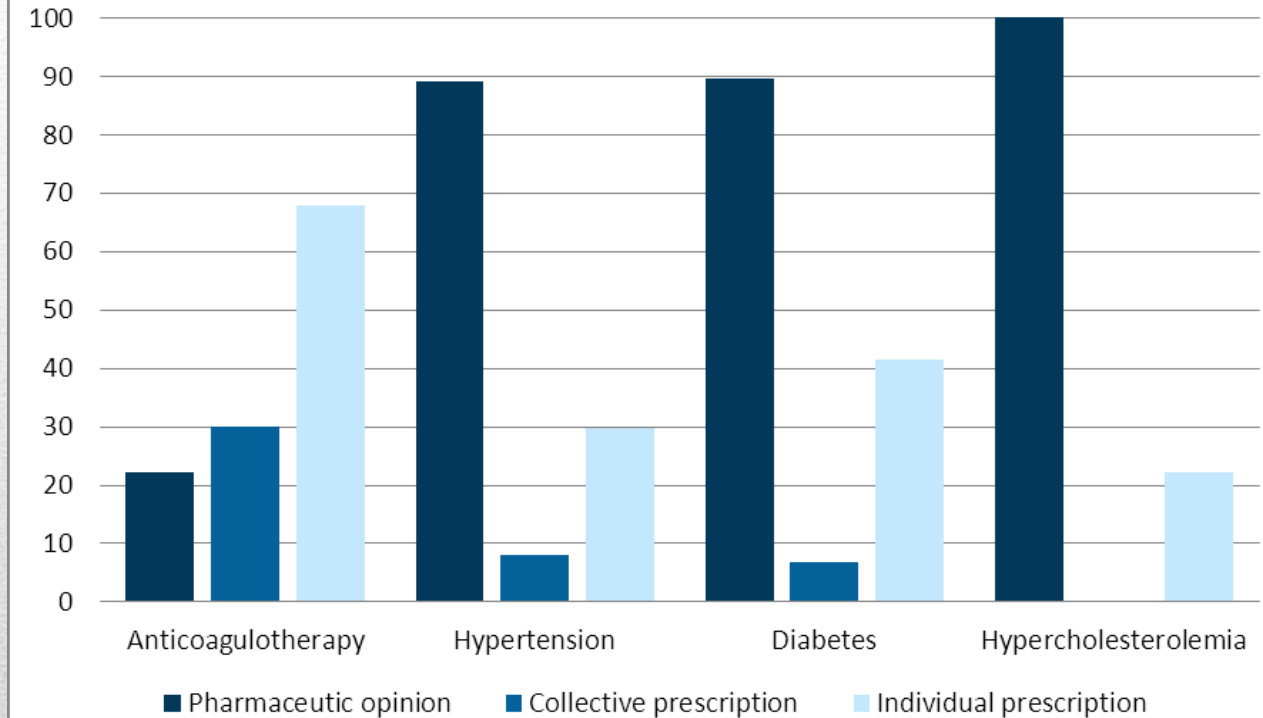
## Strategies implemented to adjust medication dosage



### Individual prescription:

A prescription given by a physician to a pharmacist regarding the provision of pharmacotherapy to an individual and specifying the therapeutic target (e.g. maintain INR between 2 and 3)

## Strategies implemented to adjust medication dosage

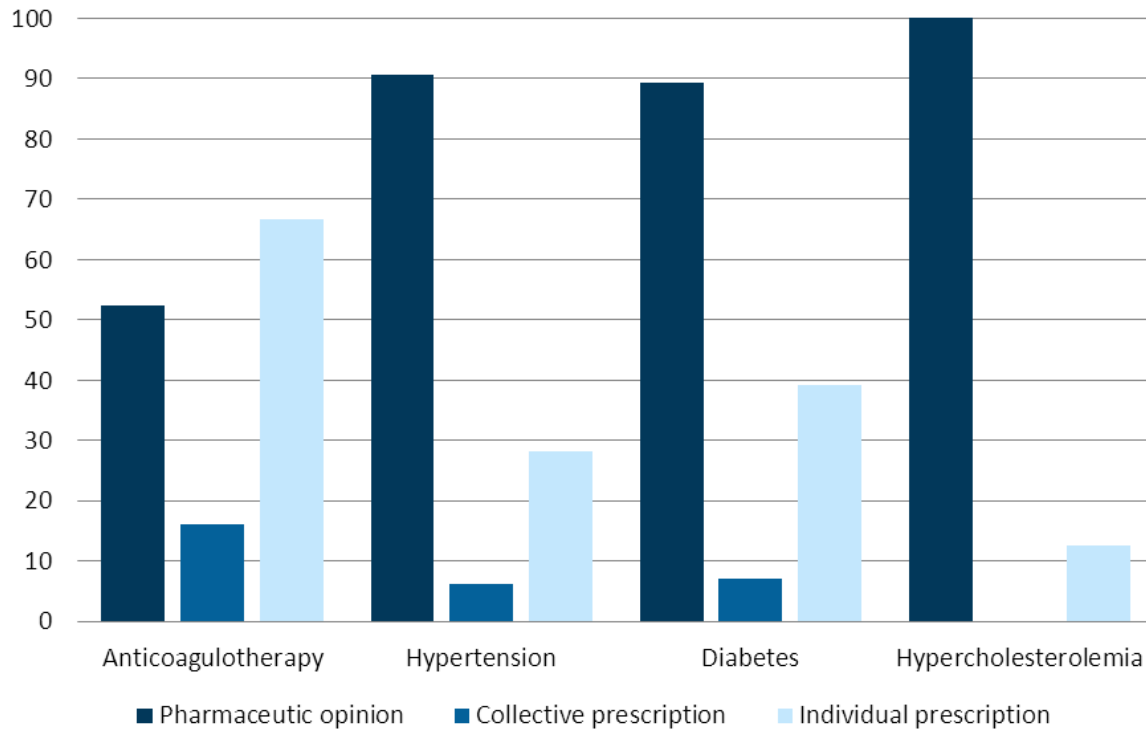


### Collective prescription:

A prescription given by a physician or a group of physicians to a pharmacist regarding the provision of pharmacotherapy to a group of people in predefined clinical circumstances.



## Strategies implemented for adding or interrupting a medication



To apply bill 41, significant change will need to happen

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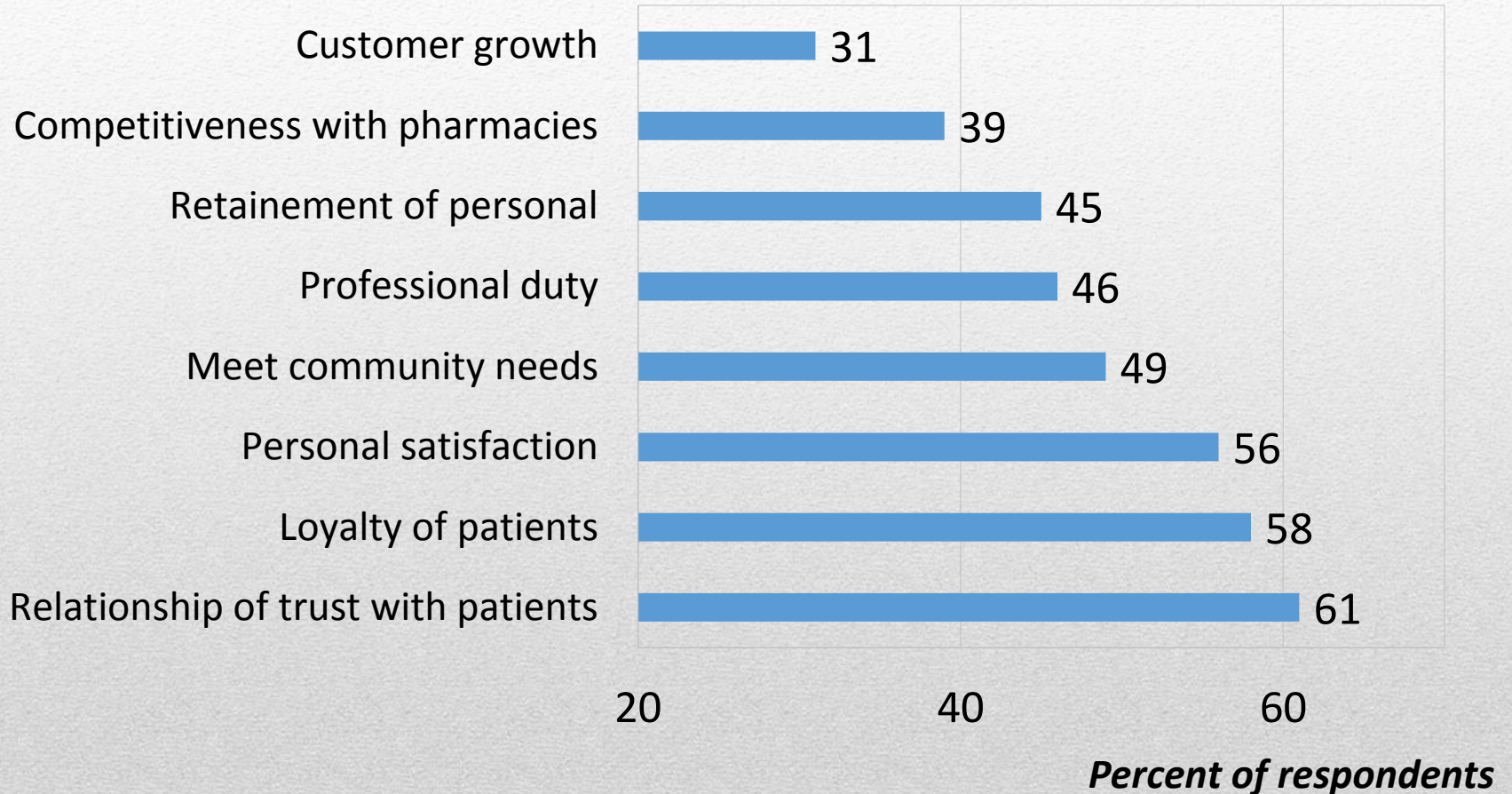


# Leading changes in pharmacy

## Driving forces

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# BENEFITS OF OFFERING CLINICAL SERVICES





# A vision for pharmacy



**The Vision for Pharmacy:** Optimal drug therapy outcomes for Canadians through **patient-centred care**

About

News

Resources

Key Projects

Policy Changes by Region

Fundraising Campaign



A message from Pfizer Canada  
— Champion Sponsor:

"We are proud to be a founding supporter of the Blueprint for Pharmacy as we believe this initiative is critical to advance the pharmacy profession as well as to respond to the demands of health care reform to continue delivering patient-centred care."

*Allen Van der Wee, General Manager, Primary Care Business Unit at Pfizer Canada*



Working together for a healthier world™

Resources:

- > [Key Blueprint Resources](#)
- > [Policy Papers and Reports](#)
- > [Environmental Scans](#)
- > [Student Resources](#)
- > [Tools and Education](#)



Secretariat for the Blueprint for Pharmacy National Coordinating Office

## Recent News



- > 22/01/2015 [Pharmacist-led antibiotic adherence program launched in Newfoundland and Labrador](#)
- > 16/01/2015 [Survey of Pharmacist Specialization in Canada](#)

## New Resources



- 05/2014 [Environmental Scan: Pharmacy Practice Legislation and Policy Changes across Canada](#)
- 03/2014 [BCPhA Policy Paper – Facing the Future Together](#)

## Policy Changes



Learn About Policy Changes by Region >

## VISION FOR PHARMACY

Optimal drug therapy outcomes for Canadians through patient-centered care

### IN OUR VISION FOR PHARMACY

#### Pharmacists and pharmacy technicians

- practice to the full extent of their knowledge and skills, and are integral to emerging health care models.
- protect the safety, security and integrity of the drug distribution system through the enhanced role of regulated pharmacy technicians and greater automation of dispensing.
- lead the development of and participate in medication safety and quality improvement initiatives.

#### Pharmacists

- manage drug therapy in collaboration with patients, caregivers and other health care providers.
- identify medication use issues, take responsibility for drug therapy decisions and monitor outcomes.

- initiate, modify and continue drug therapy (e.g., through collaborative agreements, delegated or prescriptive authority), and order tests.
- access and document relevant patient care information in health records, including test results and treatment indications (e.g., in electronic health records).
- empower patients in decision-making about their health, and play a prominent role in health promotion, disease prevention and chronic disease management.
- conduct practice research and contribute to evidence-based health care policy and best practices in patient care.

#### Pharmacists' services

- are compensated in a manner that relates to expertise and complexity of care.

**To realize the Vision, strategic action is needed in five key areas:**





# Information and communication technology

- Drug information system

- Dossier Santé Québec

- Pharmacists will have access to laboratory tests results, diagnostic imaging and medications

- Pharmacy chart

- Appropriate documentation of clinical data and pharmaceutical care

- Support patient self-management

- Decision support tools

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# Education and continuing professional development

- Doctor of Pharmacy (Pharm D)

  - Université de Montréal

  - Université Laval

  - University of Waterloo

  - University of Toronto

- Innovative CE programs to support practice changes

  - Conventional CE programs are insufficient to induce practice changes

  - Pharmacists need to be supported when implementing new practices

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# A Cluster Randomised Controlled Trial to Evaluate an Ambulatory Primary Care Management Program for Patients with Dyslipidemia: **TEAM Study**

## **Chercheurs :**

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**Faculté de pharmacie, Université de Montréal**

**Marie-Thérèse Lussier, Éveline Hudon**  
**Département de médecine familiale, Université de Montréal**

**Jacques Genest**  
**Faculté de médecine, Université McGill**

**Marc Fredette**  
**HEC, Université de Montréal**

## **Appuis:**

- Ordre des pharmaciens du Québec
- Association québécoise des pharmaciens propriétaires
- Collège des médecins du Québec
- Collège québécois des médecins de famille

## **Financement**

**Instituts de recherche en santé du Canada**

**Subventions sans contrainte de AstraZeneca Canada Inc., Merck Frosst Canada Ltd. Pfizer Canada Inc.**

# Pharmaceutical care with dosage adjustment of statin treatment

- Pharmacists were responsible for requesting appropriate laboratory tests and initiating and adjusting statin treatment

**ÉQUIPE DE CHERCHEURS**

**Chercheure principale**  
Lyne Lalonde,  
B.Pharm., Ph.D.


**Co-chercheure et coordonnatrice**  
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**Organisme subventionnaire**  
Instituts de recherche  
en santé du Canada

**Étude supportée par**  
Ordre des  
pharmaciens du  
Québec



**PROTOCOLE DE  
TRAITEMENT POUR LES  
PATIENTS DE L'ÉTUDE  
TEAM ASSIGNÉS AU  
GROUPE SOINS  
PHARMACEUTIQ  
INTÉGRÉ**

Protocole approuvé par le C...  
des médecins, dentistes  
pharmaciens du Centre de sa...  
de services sociaux de

Janvier :

**AIDE-MÉMOIRE**

Protocole de  
traitement  
pour les patients  
dyslipidémiques  
traités avec  
une statine



## Training program

- 2 day-training
- Clinical guide

## Clinical tools

Constant support of the  
research team





## Evaluating the impact of a training and communication network program in nephrology to facilitate the detection and management of drug-related problems by community pharmacists: a multicentre cluster randomized controlled trial

### **Néphrologues:**

Louise Corneille  
Louis Prudhomme  
Nathalie Langlois  
Martine Leblanc  
Michel Vallée

### **Pharmaciens, néphrologie:**

Robert Bell  
Alain Bergeron  
Valérie Clément  
Marie-Ève Legris  
Sara Letendre  
Anne Lord  
Marie Mouchbahani  
Nadine Tadros

### **Pharmacienne communautaire:**

Diane Lamarre

### **Chercheurs:**

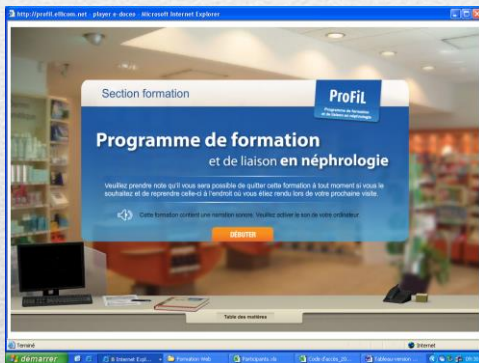
Lisa Dolovich  
Janusz Kaczorowski

### **Chercheure principale:**

Lyne Lalonde

# PRoFiL Program

- Nephrology Training-and-communication Program for community pharmacists



## Training Program

- Web-based training
- Clinical guide

## Communication Program

- Clinical summary
- Discussion Forum
- Consultation service with pharmacists in nephrology



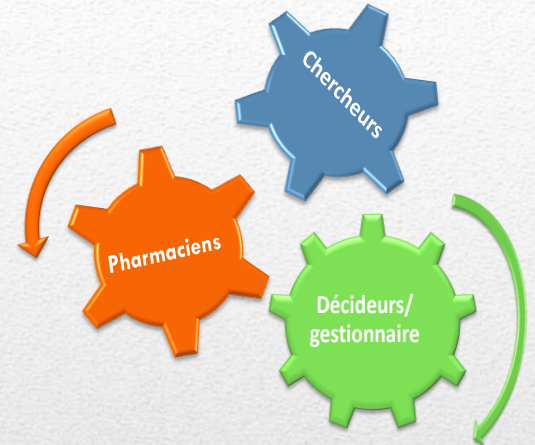
# Pharmacy practice research

- Improvement in the quality and number of research projects
  - Practice-based research network
-

# Practice-based research network

‘A group of ambulatory practices devoted principally to the primary care of patients and affiliated in their mission to investigate questions related to community-based practice and to improve the quality of primary care’.

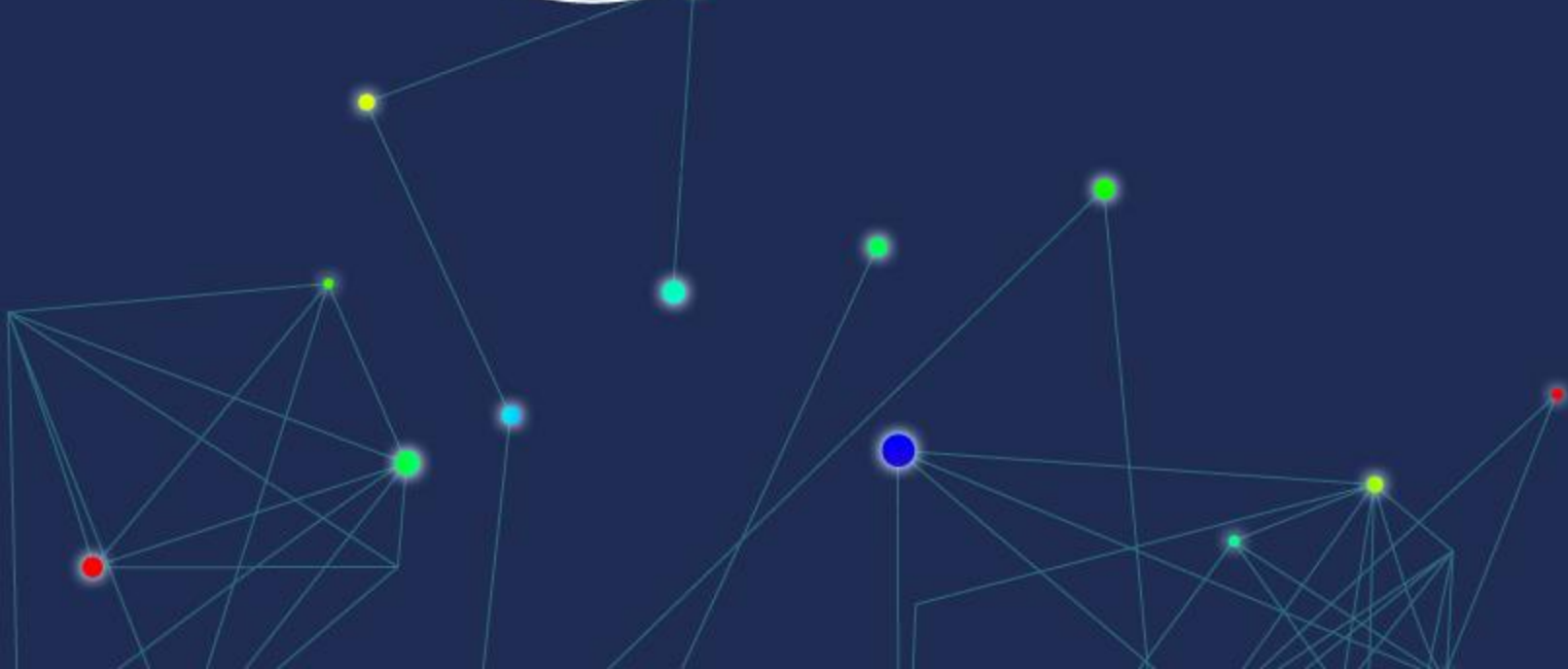
Agency for Healthcare Research and quality (AHRQ)







Soutien Technologique  
pour l'Application et  
le Transfert des pratiques  
novatrices en pharmacie



# WHAT IS THE STAT NETWORK?

- The first network and research infrastructure for community pharmacy
- Support the development, evaluation, and large-scale implementation of innovative, patient-centered, effective and economically sustainable clinical practices
- Facilitate the creation of communities of practice and partnership involving community pharmacists, other primary care actors, academia, and decision makers



# THE STAT NETWORK

The screenshot shows the homepage of Réseau STAT. The browser address bar displays [www.reseustat.ca/fr/homepage.php](http://www.reseustat.ca/fr/homepage.php). The page features a navigation menu with 'Accueil', 'Forum', 'Babillard', and 'Bibliothèque'. A 'Bienvenue' section is visible, along with a 'Programme ACO' and 'Programme ÉCO' section. A red diagonal banner is overlaid on the page with the text: **EVERYTHING NEEDED TO SUPPORT THE DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF NEW CLINICAL PRACTICES IN PHARMACY**. The right sidebar contains a list of articles and a 'TOP 5 LES PLUS POPULAIRES' section.



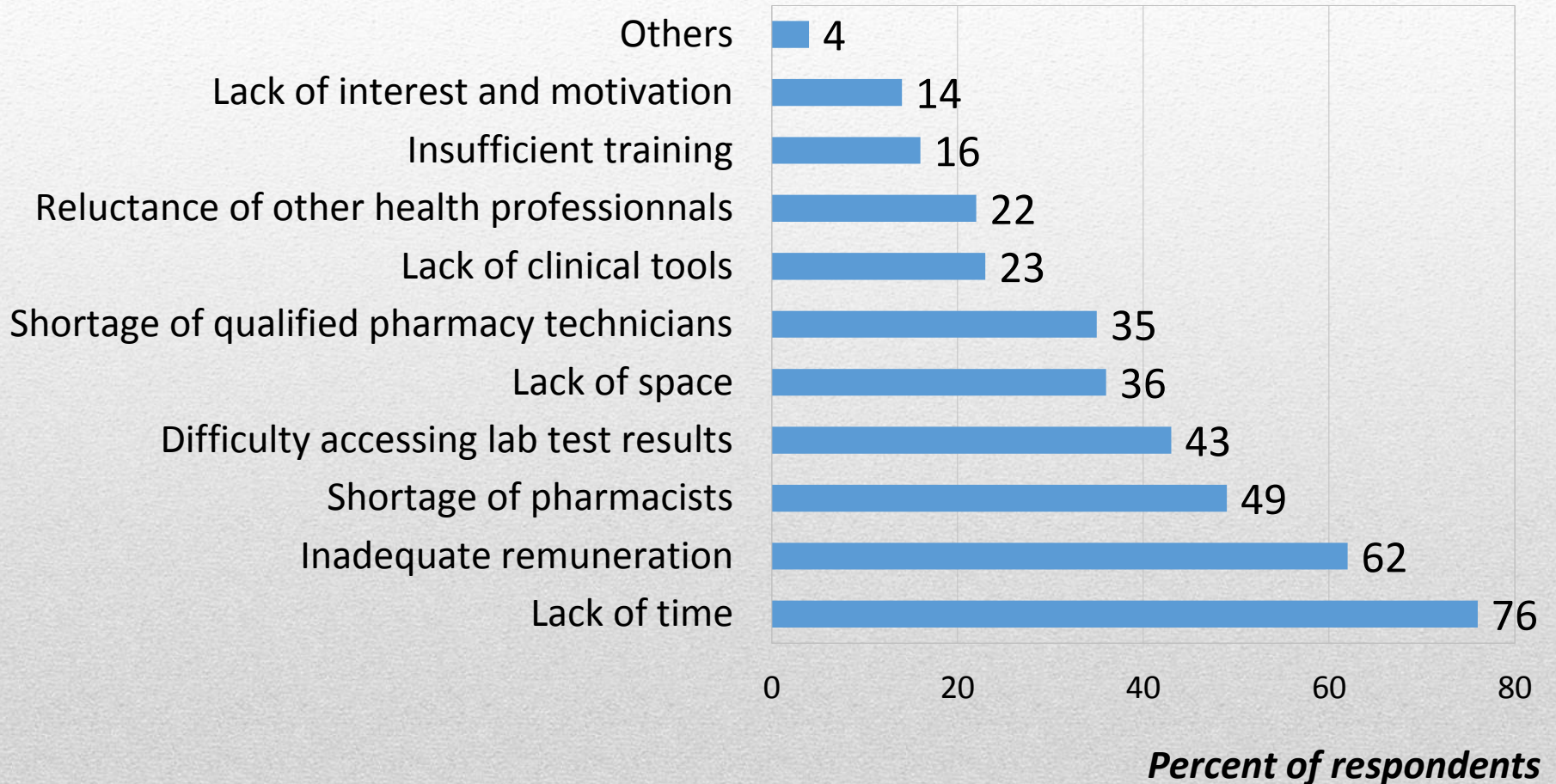
# Leading changes in pharmacy

Constraints and obstacles

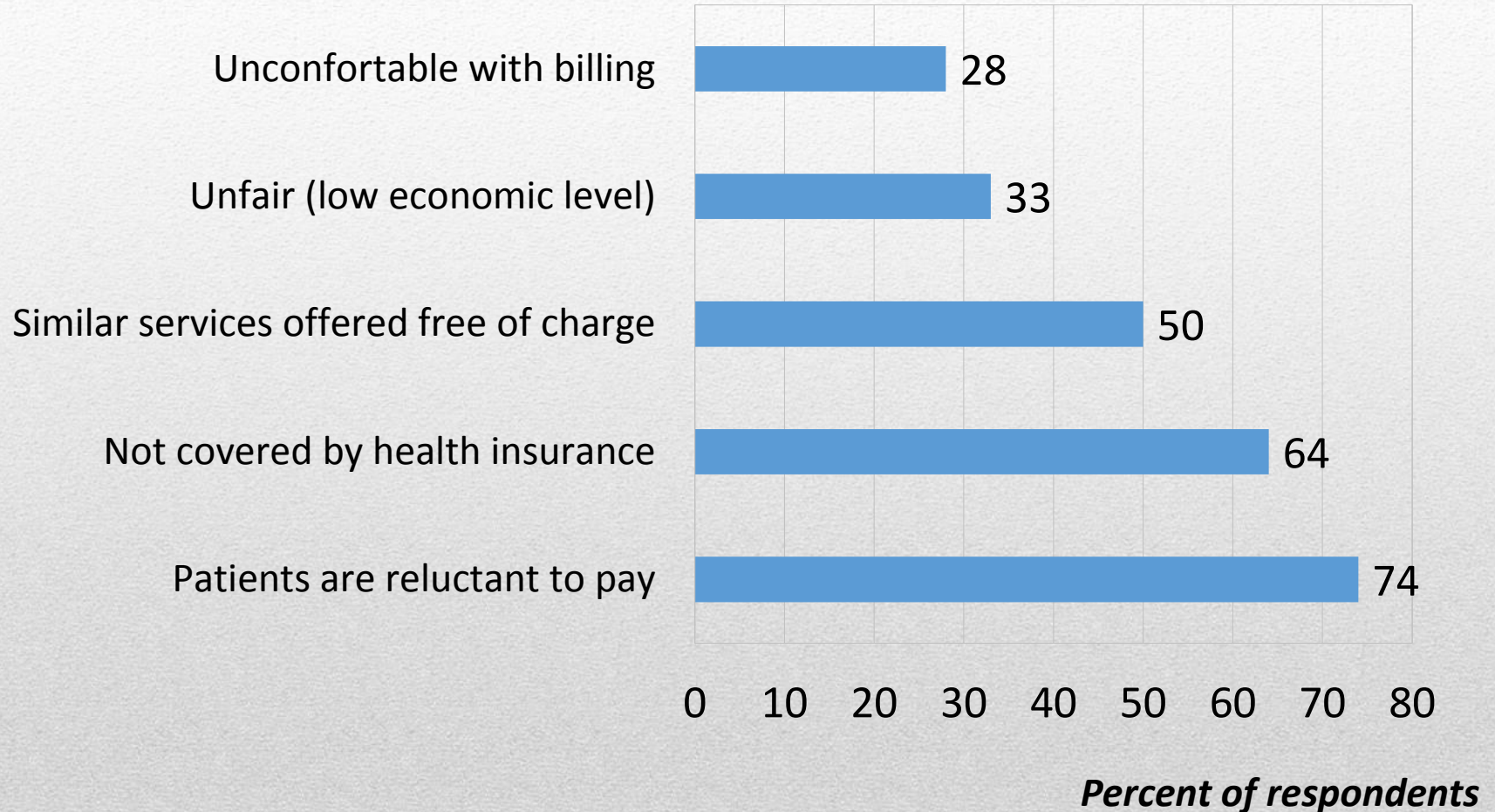
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# BARRIERS TO THE IMPLEMENTATION



# BARRIERS TO BILLING CLINICAL SERVICES





# Appropriate remuneration

- Remuneration taking into account the range of services offered in community pharmacy
  - In Quebec, 3 out of 7 new services could be paid
  - In many Canadian provinces, government provides remuneration for specific services
-

# Infrastructures and re-organization of work

From dispensing to provision of clinical services....

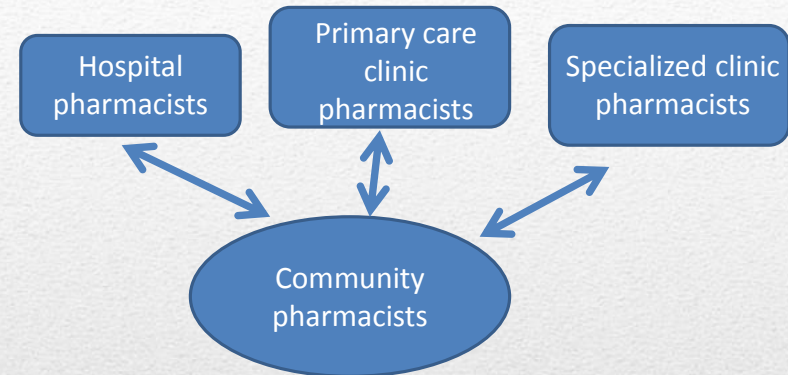
- Most pharmacies have a private office
- Accreditation process for pharmacy technicians in Canada





# Collaboration

- Intra-professional collaboration
- Inter-professional collaboration
  - Lack of proximity
  - Large number of pharmacists
  - No tradition



# Conclusion

- Pharmacy practice has changed and will continue to change in the next decade
- Change goes through a series of phases that usually require a considerable length of time



*John P. Kotter. Harvard Business Review 1995; reprint number 95204*

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# Conclusion

1. Establish a sense of urgency
2. Form a powerful guiding coalition
3. Create a vision for pharmacy practice
4. Communicate the vision
5. Remove obstacles to the new vision
6. Plan for and create some short-term wins
7. Consolidate improvements and produce more change
8. Institutionalize new approaches

*RT Tsuyuki and TJ Schindel. Leading change in pharmacy practice:  
fully engaging pharmacists in patient-oriented healthcare*

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